



University of Colorado **Denver**

2010-11 Catalog

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Office of Communications

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Catalog Home

2010-2011 Denver Campus Catalog



Denver Campus

Auraria Campus

Speer Boulevard at Larimer Street

www.ucdenver.edu

303-556-2704

Fax: 303-556-4838

admissions@ucdenver.edu

Information/Admissions

Office Location

1250 West 14th Street—Annex

Denver, Colorado

Mailing Address

UC Denver Office of Admissions

Campus Box 167, P.O. Box 173364

Denver, CO 80217-3364

International Admissions

303-315-2230

Office Location

1380 Lawrence Street, 9th Floor, Suite 932
Denver, CO 80204-2029

Mailing Address

University of Colorado Denver
International Admissions
P.O. Box 173364, Campus Box 185
Denver, CO 80217-3364
USA

Alternative format available upon request by calling the Office of Integrated University Communications

303-315-3716

TTY 303-556-4766

The 2010-2011 Denver Campus Catalog is considered the source for academic and programmatic requirements for students entering programs during the summer 2010, fall 2010 and spring 2011 semesters. Although this catalog was prepared using the best information available at the time, all information is subject to change without notice or obligation. The university claims no responsibility for errors that may have occurred during the typesetting or production of this catalog. For current calendars, tuition rates, requirements, deadlines, etc., students should refer to the bursar's office and registrar's office websites, www.ucdenver.edu/bursar and www.ucdenver.edu/registrar, for the semester in which they intend to enroll.

The courses listed in this catalog are intended as a general indication of the University of Colorado Denver curricula on the Denver Campus. Courses and programs are subject to modification at any time. Not all courses are offered every semester, and faculty teaching particular courses or programs may vary from time to time. The content of a course or program may be altered to meet particular class needs.

Previous editions of this catalog are available online.

The University of Colorado Denver is an affirmative action/equal opportunity employer and educator committed to excellence through inclusiveness.

Welcome



Welcome to a university for the 21st century.

The University of Colorado Denver plays a critical role in the development and well-being of the state and its citizens. With a core business of education and health, UC Denver is the region's premier research university.

By combining the excellence of our academic programs at the Denver campus with the extensive research and teaching of the Anschutz Medical Campus in Aurora, we provide a unique option in the University of Colorado system. Here you will benefit from:

Academic choices—more than 119 degree programs in 13 schools and colleges

A spirit of collaboration—the synergy of combining disciplines to create courses of study like public health administration, computational bioscience or health and behavioral sciences

Outstanding location—the Denver Campus gives access to a vibrant, safe urban lifestyle, alongside opportunities to gain experience in projects and internships at businesses and corporations

New facilities—the initial development phase of the 227-acre Anschutz Medical Campus is now complete, providing students with state-of-the-art educational and research facilities in Aurora

Each fall, we serve more than 14,000 students on our Denver Campus plus more than 3,000 students in health sciences programs.

This institution is committed to providing you the opportunities you need to achieve your educational goals. You will meet faculty who are dedicated to excellence in the classroom and research laboratory and fellow students who are diverse, goal-oriented and energetic. Whether you engage in undergraduate or graduate studies, you are assured that the University of Colorado Denver degree has global respect and that you will have been well-prepared for the next stage of your work or academic life.

It's a privilege to have you join us.



M. Roy Wilson, MD, MS
Chancellor
University of Colorado Denver

UC Denver Executive Team

M. Roy Wilson

Chancellor
MD, Harvard University
MS, University of California at Los Angeles

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Interim Vice Chancellor for Administration and Finance
BS, Western State College

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MD, New York University

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Vice Chancellor for Academic and Student Affairs and Provost
BSc, University of Strathclyde (Scotland)
PhD, University of London (England)

Richard Traystman

Vice Chancellor for Research
MS, Long Island University
PhD, The Johns Hopkins University

The University

The University of Colorado Denver was formed July 1, 2004 by the consolidation of two established universities in the University of Colorado System. UC Denver joins the strengths of a comprehensive campus in downtown Denver with the research and advanced health care programs on the Anschutz Medical Campus in Aurora. Educating more than 14,000 students on our Denver Campus plus more than 3,000 students in health sciences programs from 50 states and 128 nations, the consolidated university is one of the nation's top public urban research universities.

The University of Colorado Denver offers a unique experience for students. Its Denver Campus is in the heart of the city—the business, cultural and political capital of the West. Its Anschutz Medical Campus in nearby Aurora is the nation's newest health sciences campus, where discoveries in the lab and in the clinic transform medical treatments into cures.

More and more undergraduates are discovering the value of classes in the city taught by professors who are connected with top companies—often advising the same CEOs who are hiring our graduates. New on-campus housing, easy commuting by light rail and discounts to cultural and sporting events give students many options for immersion in vibrant city life. In addition, affiliations with research labs and hospitals at Anschutz Medical Campus make UC Denver an excellent place to start a health care career.

UC Denver awards more graduate degrees than any other university in Colorado. It is known for its programs in urban sustainability, criminal justice, business, education, applied science and engineering, film and music industry as well as a full array of health professional programs at the Anschutz Medical Campus. The graduate student population is a diverse mix of ages and ethnicities, creating a rich environment for learning and networking.

Other reasons why students choose the University of Colorado Denver:

- **Small class sizes:** average undergraduate student-to-teacher ratio is 15:1.
- **The Denver vibe:** Colorado has always attracted the adventurous. It is one of the healthiest in the country, with an extensive network of bike trails and quick access to mountain sports. The Denver Campus is adjacent to a thriving arts district.
- **Collaborative culture:** Cross-disciplinary learning and research is a core value at UC Denver. Programs blend technology with health care, business with public policy, behavioral health with architecture and public health with health providers.
- **Choices:** With 13 schools and colleges offering more than 119 degree programs, UC Denver is a major university for the coming century.

Denver Campus

With a solid academic reputation and award-winning faculty, the Denver Campus offers bachelor's, master's and doctoral programs through seven distinct academic units:

- College of Architecture and Planning
- College of Arts & Media
- Business School
- School of Education & Human Development
- College of Engineering and Applied Science
- College of Liberal Arts and Sciences
- School of Public Affairs

Anschutz Medical Campus—Aurora

In achieving its mission of education, research, patient care and community service, the Anschutz Medical Campus offers degree programs through six schools and colleges:

- School of Dental Medicine
- Graduate School
- School of Medicine
- College of Nursing
- School of Pharmacy
- Colorado School of Public Health

An overview of programs offered on the Anschutz Medical Campus is located in the Health Professions chapter of this catalog. Contact the individual school or program coordinator for details.

Mission, Vision and Values

In 2007-2008, the University of Colorado Denver completed a strategic planning process which resulted in the following guiding statements:

Mission

UC Denver is a diverse teaching and learning community that creates, discovers and applies knowledge to improve the health and well-being of Colorado and the world.

Vision

By 2020, UC Denver will be a leading public university with a global reputation for excellence in learning, research and creativity, community engagement and clinical care.

Values

To be a university greater than the sum of its parts, UC Denver embraces excellence in:

Learning and Scholarship

UC Denver respects academic freedom and the rigorous quest for knowledge and understanding. We share knowledge and foster student success through a continuous process of inquiry, critical thinking, reflection, collaboration and application.

Discovery and Innovation

UC Denver fosters an energetic, collaborative and creative environment where we develop and employ new ideas and technologies. Our entrepreneurial culture enables us to expand the frontiers of knowledge and human experience.

Health and Care of Mind, Body and Community

UC Denver enriches the well-being and sustainability of communities and our cultural, living and natural environments. We promote healthy lifestyles, prevent, diagnose and treat disease and deliver high-quality and compassionate health care.

Diversity, Respect and Inclusiveness

UC Denver seeks the richness that an increasing diversity of our communities brings to our learning, research and service endeavors. Our common humanity leads us to create an inclusive and respectful ethos characterized by caring, empathy, compassion, nurturing, collegiality and mentoring.

Citizenship and Leadership

UC Denver serves Colorado and the world as a recognized source of talent, knowledge, informed judgment, exemplary health care and professional practice. We are responsible stewards of the resources entrusted to us and utilize them with integrity for the betterment of our community.

Details about the mission, vision, values and strategic plan for the university is available online at www.ucdenver.edu/admin/upac.

University of Colorado System

The University of Colorado is system of three universities located in Boulder, Colorado Springs and Denver/Aurora. With combined total enrollments of more than 52,000 students, the University of Colorado system consistently ranks in the top 15 among public universities and colleges in overall research expenditures and seventh among public universities in federally funded research. Awards for research within the system total more than \$660 million, with funding provided by federal agencies, appropriations from the state of Colorado and private foundations and donors.

Board of Regents

Tilman “Tillie” Bishop, Vice Chair

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term expires 2013

Steve Bosley, Chair

At Large
term expires 2011

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term expires 2011

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term expires 2011

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At Large
term expires 2013

Monisha Merchant

District 7
term expires 2015

Joe Neguse

District 2
term expires 2015

History and Evolution of UC Denver

1876 Legislature founds the University of Colorado

1883 Medical department opens with two students

1898 CU establishes School of Nursing 1912 CU organizes the Department of Correspondence and Extension in Denver

- 1913 CU establishes School of Pharmacy
- 1925 CU dedicates 9th and Colorado Blvd. medical center
- 1956 Regents purchase Tramway Building for Extension Division
- 1965 Regents change extension name to University of Colorado-Denver Center
- 1972 CU-Denver Center changes name to University of Colorado at Denver
- 1973 School of Dentistry enrolls its first class; state begins building Auraria Campus
- 1974 CU reorganizes as a four-campus system
- 1988 CU-Denver moves into the 257,000 square-foot North Classroom Building on the Auraria Campus
- 1992 School of Pharmacy moves from Boulder to Health Sciences Center
- 1995 Government conveys 217 acres at Fitzsimons to CU for modern health sciences facility
- 2000 First new and remodeled facilities open at Fitzsimons
- 2004 Regents consolidate CU-Denver and Health Sciences Center to form the University of Colorado at Denver and Health Sciences Center
- 2006 Fitzsimons campus renamed Anschutz Medical Campus
- 2007 Regents approve shortened version of the name: University of Colorado Denver
- 2008 Medical, dental, pharmacy and nursing students start classes, Colorado School of Public Health enrolls first students on the Anschutz Medical Campus

Accreditation

The Denver Campus of the University of Colorado Denver is institutionally accredited by the Higher Learning Commission of North Central Association of Colleges and Schools.

The commission can be contacted at:

30 N. LaSalle Street, Suite 2400
Chicago, IL 60602-2504
Telephone: 1-800-621-7440
Web site: www.ncacihe.org

Many professional organizations have also granted accreditation to programs, colleges and schools at the Denver Campus, including:

- Accreditation Board for Engineering and Technology
- Association for the Advancement of Collegiate Schools of Business—International
- American Chemical Society
- Colorado State Board of Education
- Commission on Accreditation of Healthcare Management Education
- Council for Accreditation of Counseling and Related Educational Programs
- Landscape Architecture Accreditation Board
- National Architectural Accrediting Board
- National Association of Schools of Music
- National Association of School Psychologists
- National Association of Schools of Public Affairs and Administration
- National Council for the Accreditation of Teacher Education
- Planning Accreditation Board

Academic Programs

The Denver Campus of UC Denver is devoted to the needs of the residents of the city and the region. A solid foundation of academic and general education is assured through a comprehensive core curriculum. Students may pursue graduate education through all of the campus' colleges and schools. Pre-professional training in the fields of education, law, journalism and health careers is also available. Complete listings of areas of study available on the Denver Campus are available in the Programs section of the catalog.

The colleges and schools sections of this catalog provide information on bachelor's, master's and doctoral degree programs, policies on requirements for graduation, course requirements, course-load policies, course descriptions and similar information.

Continuing and Professional Education

The Division of Continuing and Professional Education at the Denver Campus offers complete degree programs, certificate/certification courses, professional development programs, precollegiate outreach programs and personal enrichment courses across the state of Colorado. Courses are offered in a variety of formats, including traditional on-campus, off-campus, online, hybrid, weekend, evening, short and condensed courses and many others.

Registration and tuition varies by school or college. Contact the specific school or college to learn about current program and course offerings, or contact the Academic Technology and Extended Learning office at 303-556-2040 or visit our Web site at www.ucdenver.edu/academics/continuing-education/Pages/index.aspx.

About Our Students

The diversity of our student body is a source of deep pride. Ethnic minority students make up 23 percent of the student population. Classes include traditional students who have elected to pursue college degrees immediately after high school, transfer students, students who have delayed college entry and professionals who seek to strengthen their base of skills or broaden their appreciation of the world.

With students' ages ranging between 16 and 74, the average undergraduate student age on the Denver Campus is 24, while our graduate students average 33. They represent a distinctive mix of ages and backgrounds. Around 80 percent of our students are employed, and 44 percent attend part-time. 38 percent are enrolled in graduate-level courses. All take advantage of the convenience of course offerings at times that meet their schedules, enjoying an enviable student-to-faculty ratio of 15:1.

Related Organizations

Alumni Association

Mailing Address: Campus Box 189, P.O. Box 173364, Denver, CO 80217

Telephone: 303-556-2549

Fax: 303-556-6545

E-mail: ucdalumni@ucdenver.edu

The University of Colorado Denver Alumni Association provides programs and services of mutual benefit to graduates and the university. Founded in 1976, the Denver Campus association is governed by a board of alumni representing all schools and colleges. Students automatically become Alumni Association members upon graduation and receive the *UC Denver on the Horizon* newsletter, published twice a year. Alumni are invited to volunteer on committees, which include recognizing 4.0 students through the Academic Athlete program, providing financial assistance to students through a scholarship fund and bestowing Alumni Association awards to worthy graduates and community leaders. The association also invites alumni to attend periodic seminars and events.

University of Colorado Foundation

Mailing Address: 1380 Lawrence Street, Suite 1325, Denver, CO 80204

Telephone: 303-315-3601

Fax: 303-315-2096

Web site: www.cufund.org

Established in 1967, the University of Colorado Foundation is a privately governed nonprofit corporation whose mission is to support the University of Colorado. The

Denver office of the CU Foundation was established to advance the campus goal to become one of the nation's premier urban research institutions.

The CU Foundation raises and manages private funds that endow scholarships and professorships, further research, enrich academic programs, upgrade and construct facilities and support projects that benefit students, faculty and the community.

The university's academic leadership establishes priorities for private support, and gifts are directed to the specific schools, program or purpose that the donor designates. Professional fundraisers identify and/or generate interest in the university, assist donors in gift planning and solicit gifts in collaboration with academic partners and leaders.

UC Denver Quick Facts

Locations

Denver Campus (Auraria)	Denver Campus Attributes	Anschutz Medical Campus Attributes
	Enrollment	Enrollment
Anschutz Medical Campus (Aurora)	14,119*	3,159*
Total Enrollment	9,181 Undergraduate* (47% male, 53% female)	Undergraduate: 416* (14% male, 86% female)
17,278 students enrolled in fall 2009*		Graduate: 1,158* (26% male, 74% female)
56% undergraduate	4,938 Graduate* (44% male, 56% female)	First Professional: 1,585 (44% male, 56% female)
35% graduate	Student-Faculty Ratio	
9% first professional	15:1‡	
65% full time	Incoming	Diverse Population
11% out-of-state residents	Freshmen: 1094	18% ethnic minority
4% international students		Average Age
Degrees	Transfers: 1273	Undergraduate: 30
Bachelor's, master's, doctoral, first- professional	Graduate Students: 1024	Graduate: 32
	Diverse Population	First Professional: 27
Programs		Bragging Rights
119 degree programs	24% ethnic minority	<i>U.S. News & World Report, America's Best Graduate Schools, 2009</i>
Schools and Colleges	Undergraduate: 29%	

Denver Campus	Graduate: 13%	(If otherwise noted, it is the most recent year ranked)
College of Architecture and Planning	Average age: 27	Health Disciplines
College of Arts & Media	Undergraduate: 23	Clinical nurse specialist, adult/medical-surgical—6
Business School	Graduate: 32	Nurse-midwifery (2007)—12
School of Education & Human Development	Student Body	Nurse practitioner:
College of Engineering and Applied Science	From 50 states and 128 countries‡	adult—8
College of Liberal Arts and Sciences	Bragging Rights	family—5
School of Public Affairs	<i>U.S. News & World Report America's Best Graduate Schools, 2009</i>	pediatric—3
Anschutz Medical Campus	School of Public Affairs, Top Schools #32	Nursing, MS (2007)—15
School of Dental Medicine	<i>The Princeton Review, 2008 America's Best Value Colleges</i>	Pharmacy, PharmD (2008)—23
School of Medicine	Best Western Colleges, Best in the West	Physician Assistant, MS, PhD (2007)—8
College of Nursing	<i>Modern Healthcare, 2007</i>	Schools of Medicine
School of Pharmacy	Top Business Graduate Schools for Physician-Executives #5	Primary care—4
Colorado School of Public Health	Additional bragging rights for schools and colleges on this campus are available in their sections of this catalog.	Research—27
Graduate School		Specialties:
Research Funding		Family medicine—6
More than \$364.1 million in sponsored research		Pediatrics—11
Alumni		AIDS—18
99,709 (66% live in Colorado)		The Sciences
		Biological sciences: Graduate School, Anschutz Campus (2007)—48
		Additional bragging rights for schools and colleges on this campus are available in the Health Professions section .

*Fall 2009 census and end-of-term

‡Fiscal Year 2008-2009 data

Information for Undergraduate Students

At UC Denver, five undergraduate schools and colleges (College of Arts & Media, Business School, College of Engineering and Applied Science, College of Liberal Arts and Sciences and School of Public Affairs) provide a diverse array of baccalaureate majors, minors, certificates and teacher licensure to meet the ever-challenging demands of a global society. Your undergraduate education consists of a core curriculum (general education), a major and elective courses (most areas of study). The campuswide core curriculum develops proficiency in writing and mathematics, cultivates a breadth of knowledge, promotes critical thinking, allows you the flexibility to meet your career goals and helps you develop sensitivity to cultural diversity and international perspectives.

A list of all our undergraduate programs, including minors and online programs, is available in the [academics section](#) of the UC Denver Web site.

Undergraduate Admissions

Assistant Vice Chancellor for Enrollment Management: Barbara Edwards

Office: 1250 West 14th Street—Annex

Telephone: 303-556-2704

Fax: 303-556-4838

E-mail: admissions@ucdenver.edu

Web site: www.ucdenver.edu/admissions

The Denver Campus of the University of Colorado Denver seeks to identify applicants who are likely to be successful in a rigorous academic program of study. Admission decisions are based on many factors, the most important being:

- level of previous academic performance
- evidence of academic ability and accomplishment as indicated by scores on national aptitude tests
- evidence of maturity, motivation and potential for academic success

UC Denver may deny admission to new applicants or readmission to former students whose credentials indicate an inability to assume obligations of performance and behavior deemed essential by the university.

After completing the application process, official notification of one's admission status as an undergraduate, graduate or nondegree student is provided by the Office of Admissions. Letters from various schools and colleges indicating acceptance into a particular program are pending, subject to official notification of admission to the institution by the admissions office.

Students who are admitted pending receipt of additional documents or with unofficial documents will be permitted one term to submit the documents. If temporarily waived official documents are not received by the end of the initial term of attendance, registration for subsequent terms will be denied. If at any time additional credentials are received that affect the student's qualifications, the university reserves the right to change the admission decision.

Applicants who have not decided upon a major field of study will be considered for admission to the College of Liberal Arts and Sciences as undetermined majors. Students admitted as undetermined majors should declare a major as quickly as possible and no later than the end of their sophomore year.

All questions about admission to the Denver Campus and requests for application forms should be directed to 303-556-2704 or admissions@ucdenver.edu. Send correspondence to:

Office of Admissions
University of Colorado Denver
Campus Box 167, P.O. Box 173364
Denver, CO 80217-3364

Application Deadlines

The university may change document/credential deadlines in accordance with enrollment demands. For the best scholarship and registration time considerations, applicants should apply and be admitted as early as possible. Admission to the university does not assure availability of specific courses. For an applicant to be considered for a specific term, all documents required for admission must be received in the Office of Admissions by the deadline for that term. Applicants who are unable to meet the deadline may elect to be considered for a later term. Transfer students are reminded that they should allow sufficient time to have transcripts sent from institutions they have previously attended.

Advanced planning and early application are necessary for the timely admission of international students. International students are advised that it usually takes 60 days for

credentials to reach admissions in the Office of International Affairs from international locations. See the [Information for International Students](#) section for more information.

Application Deadline for Priority Consideration (excluding BA/BS-MD and music applicants)

Fall: July 22

Spring: December 1

Summer: May 3

Early application is strongly encouraged. Admission to the university does not assure specific course availability.

Minimum Academic Preparation Standards (MAPS)

Students entering the University of Colorado who graduated from high school in 1988 or later are required to meet the following minimum academic preparation standards:

COLLEGE OF ARTS & MEDIA	<i>Years</i>
English (literature, composition, grammar), one year of speech/debate strongly recommended	4
Mathematics (excluding business and consumer mathematics)	3
Natural science	3
Social science	2
Foreign language (all units must be in a single language)	2
Academic elective or arts course	1
Total	15
BUSINESS SCHOOL	
English (one year of speech/debate and two years of composition are strongly recommended)	4
Mathematics (including at least two years of algebra and one year of geometry)	4
Natural science (including two years of laboratory science)	3

Social science (including history)	2
Foreign language (all units must be in a single language)	2
Academic electives (additional courses in English, foreign language, mathematics, natural or social science, not to include business courses)	1
Total	16

COLLEGE OF ENGINEERING AND APPLIED SCIENCE

English (literature, composition, grammar), one year of speech/debate strongly recommended	4
Mathematics distributed as follows:	
Algebra	2
Geometry	1
Trigonometry and analytical geometry	1
Natural sciences (to include one unit physics and one unit chemistry; also to include two units of laboratory science)	3
Foreign language	2
Social science	2
Electives	1
Total	16

COLLEGE OF LIBERAL ARTS AND SCIENCES

English (literature, composition, grammar) one year of speech/debate strongly recommended	4
Mathematics (excluding business and consumer mathematics)	3
Natural science	3

Social science	2
Foreign language (all units must be in a single language)	2
Academic elective	1
Total	15

SCHOOL OF PUBLIC AFFAIRS

English (literature, composition, grammar) one year of speech/debate strongly recommended	4
Mathematics (excluding business and consumer mathematics)	3
Natural science	3
Social science	2
Foreign language (all units must be in a single language)	2
Academic elective	1
Total	15

Students with MAPS deficiencies may be admitted to the university provided they meet the other admission standards (e.g., test scores, rank in high school class, GPA) and provided they make up any deficiencies prior to graduation from the university. Students may make up MAPS deficiencies by successful completion of:

1. courses taken at CU
2. courses taken at other institutions of higher education
3. additional high school credits
4. credit-by-examination programs
5. other requirements as approved by each school or college on the Denver Campus

Admission Requirements for Freshman Students

Freshman admission standards define the level of success and achievement necessary to be admitted to UC Denver and include factors that predict academic success such as scores on the ACT or SAT, high school course work and GPA. Both the subjects the student has studied and how the student has performed will be factors that determine admission to the university.

New freshmen may apply for admission to the Colleges of Arts & Media, Engineering and Applied Science, Liberal Arts and Sciences, the School of Public Affairs and the Business School.

Applicants must be high school graduates or have been awarded a High School Equivalency Certificate by completing the General Education Development (GED) test.

Freshman applicants who graduated from high school in spring of 2008 or later must meet the state of Colorado Higher Education Admission Requirements (HEAR).

For students who graduated in 2008 or 2009, the following minimum high school courses (units) are required:

English	4 years (units)
Mathematics	3 years (units)
Natural Science	3 years (units), 2 of which must be lab-based
Social Studies	3 years (units), 1 of which must be United States or world history
Academic Electives	2 years (units)

For students who graduate in 2010 or later, the following minimum high school courses (units) are required:

English	4 years (units)
Mathematics	4 years (units)
Natural Science	3 years (units), 2 of which must be lab-based
Social Studies	3 years (units), 1 of which must be United States or world history
Foreign Language	1 year (unit), must be in a single language
Academic Electives	2 years (units)

Admission Consideration

Priority consideration for general admission is given to applicants who have fulfilled all HEAR requirements if applicable, rank in the top 30 percent of their high school graduating class and present a composite score of 21 or higher on the ACT or a combined score of 950 or higher on the SAT. Applicants must have an admission index score of at least 93.

Bachelor of Arts or Science to Medical Doctor (BA/BS-MD) applicants must apply for freshman admission as outlined below AND complete a supplemental application form and submit all required fees, documents and credentials by the published deadline date. Intended for highly qualified students from diverse backgrounds, the BA/BS-MD program offers a limited number of "reserved" positions at the University of Colorado School of Medicine. For additional information, visit <http://babsmd.ucdenver.edu>.

Business applicants will receive priority consideration if they graduated in the top 25 percent of their high school class and achieved a composite score of at least 26 on the ACT or 1100 on the SAT. Applicants who do not meet the admission requirements for direct admission to the Business School will be automatically considered for admission as prebusiness majors in the College of Liberal Arts and Sciences. For business admission, applicants must have an admission index score of 103.

Engineering applicants will receive priority consideration if they graduated in the top 25 percent of their high school class and achieved a composite score of at least 26 on the ACT with 28 on the mathematics section, or 1100 total on the SAT with 600 on the mathematics section. Applicants who do not meet the admissions requirements for direct admission to the College of Engineering will be automatically considered for admission as preengineering majors in the College of Liberal Arts and Sciences. For engineering admission, applicants must have an admission index score of 103.

Music applicants in the College of Arts & Media (except music industry studies) are expected to have had previous experience in an applied music area. An audition is required, but can be deferred for students in the MIS track. In addition, students may apply only for fall semester and other application requirements as outlined on the [music department Web site](#) should be completed as quickly as possible and no later than the published deadline date. Admission to the music major is selective, and qualified applicants are pooled and reviewed by an admissions committee. Interested students should contact the Department of Music at 303-556-3480 for audition and other application information.

Applicants for all departments who do not satisfy the requirements for priority consideration are reviewed on an individual basis.

How to Apply

1. Students are encouraged to apply online at www.ucdenver.edu/admissions or obtain an application for undergraduate admission from a Colorado high school counselor, from the Denver Campus Office of Admissions in-person or by calling 303-556-2704, or at www.ucdenver.edu/admissions.
2. The application must be completed and sent to the Office of Admissions with a \$50 (subject to change) nonrefundable fee (check or money order only). For applicants who are granted admission but are unable to enroll for that term, the \$50 application fee will remain valid for 12 months, provided the Office of

Admissions is informed of the intent to enroll for a later term and the student does not enroll at another college or university.

3. Students are required to have their high school send an official transcript of their high school grades, including class rank if available, to the Office of Admissions. Official transcripts are those sent by the issuing institution directly to: Office of Admissions, University of Colorado Denver, Campus Box 167, P.O. Box 173364, Denver, CO 80217-3364. *Hand-carried or faxed copies are not official.*
4. Students who did not graduate from high school are required to have a copy of their GED test scores and GED certificate sent directly from the certifying agency to the Denver Campus Office of Admissions. Official high school transcripts must also be submitted but are not the basis of an admission decision.
5. Students are required to take either the ACT or the SAT and request that test scores be sent to the Denver Campus (ACT code 0533, SAT code 4875). High school students may obtain ACT and SAT test dates and locations from their counselors. Students who took one of these tests while in high school may use the test scores reported on their official high school transcripts as an official test score report. Applicants who took one of these tests and did not designate UC Denver as the recipient of the scores must notify the testing agency to send scores to the Denver Campus. A request for additional score reports may be requested from any of the offices listed below.

American College Testing Program (ACT)

P.O. Box 168

Iowa City, Iowa 52243

319-337-1270

www.ACT.org school code: 0533

The College Board (SAT)

P.O. Box 025505

Miami, FL 331022

866-756-7346

www.collegeboard.com school code: 4875

6. Students who completed college course work while in high school must submit an official transcript from each college or university attended.
7. International students must submit an international student application for admission, \$75.00 application fee, and provide additional documentation (see the [Information for International Students](#) section of this catalog for more information).

Freshmen Housing Requirement

First-time freshmen under age 20 not living at home with parents or otherwise receiving a housing exemption are required to live in Campus Village Apartments. See [Student Housing](#) in the Campus Life section of this catalog for additional information.

After Admission - Advising and Enrollment

Several months before the start of each semester, freshmen accepted for admission to the university will receive information about activating their official University of Colorado Denver e-mail accounts, receiving required academic advising, attending freshmen orientation and timelines and procedures for course registration. For best course availability, students should attend orientation/and or advising sessions to receive required advisor approval and register for courses as early as possible.

Applicants Not Granted Admission

An applicant who is not granted admission as an entering freshman may wish to consider transferring to the university after successful study elsewhere. To be considered for transfer student admission, such students must complete from one full semester (13 minimum semester hours) to one year (30 minimum semester hours) of college-level course work at another college or university. Students should select courses that will provide sound academic preparation for future transfer.

Freshman students who are not admissible will be encouraged to participate in a partners program that UC Denver has established with Colorado community colleges.

All credentials presented for admission become the property of the University of Colorado and must remain on file.

Students who knowingly falsify transcripts or test scores or who fail to indicate all previously attended institutions will be denied admission to, or will be disenrolled from, the university.

Admission Requirements for Transfer Students

Applicants are considered as transfer students for admission purposes if they have completed any number of college courses since graduating from high school or earning a GED. Applicants with any number of college courses taken only prior to high school graduation are considered as freshmen for admission purposes and should consult the [Admission Requirements for Freshmen](#) section. College courses taken before high school graduation can be considered for transfer to the Denver Campus.

Students with 12 or fewer semester hours of completed college-level course work* at the time of application are considered for admission based on high school GPA, high school courses/units completed, rank in class, ACT or SAT scores and college or university GPA.

Students with 13 to 29 semester hours of completed college-level course work* at the time of application are considered for admission based primarily upon performance in college courses, but high school transcripts are still required. ACT or SAT scores are desirable, but not required. Students who graduated from high school in 2008 are later are subject to HEAR requirements as outlined in the [Admission Requirements for Freshmen](#) section. HEAR unit deficiencies may be made up with certain college courses.

Students with 30 or more semester hours of completed college-level course work* at the time of application are considered for admission based upon college course work alone and are not subject to HEAR requirements. High school records and ACT or SAT scores are not required.

**Includes only semester credit hours completed after graduation from high school or completion of a GED.*

Admission Criteria by Academic Program

College of Arts & Media, College of Liberal Arts and Sciences and School of Public Affairs (Criminal Justice). A minimum 2.4 cumulative GPA is required, but anyone with at least a 2.0 cumulative GPA may be considered. Music majors are considered for fall semester only, have a required audition (applicants for music industry studies may request a deferment), and additional application requirements which must be completed by the Department of Music deadline. (Visit <http://cam.ucdenver.edu/meis>.) Admission to the music major is selective and qualified applicants are pooled and reviewed by an admissions committee.

Business School. Students must have a 3.0 cumulative GPA on at least 24 semester hours that apply to the business degree program, or a 3.0 in the 24 most recent semester hours that apply to the business degree program. Students with at least a 2.6 cumulative GPA are considered on an individual basis. Students with fewer than 80 college credits who are not offered admission to the Business School will be automatically considered for prebusiness admission in the College of Liberal Arts and Sciences.

College of Engineering and Applied Sciences. A full year of college calculus and calculus-based physics or calculus-based physics I and general college chemistry I must be completed with B or better grades. Grades of B are required in all other math and science courses and the cumulative GPA must be at least 2.75. Students meeting most, but not all of these standards are fully considered. Students with fewer than 80 college credits who are not offered admission to the College of Engineering and Applied Science will be automatically considered for preengineering admission in the College of Liberal Arts and Sciences.

All Students. The cumulative GPA is calculated as or converted to a 4.0 scale and will include all college or university course work attempted at any regionally accredited institution of higher education or comparable foreign institution.

How to Apply

1. Submit the online application for undergraduate admission, available at www.ucdenver.edu/admissions (preferred), or obtain a paper application for admission form from the Office of Admissions at 303-556-2704 or admissions@ucdenver.edu.
2. Complete and return the application along with the required nonrefundable \$50 application fee (check or money order only). If applying online, mail the application fee directly to the Office of Admissions according to Web instructions.
3. Request that one official transcript be sent directly from each college or university attended, including foreign institutions, directly to the Denver Campus Office of Admissions. Transcripts are considered official only if received in this manner. If not in English, a certified English translation must accompany each official transcript. Official transcripts should be sent to:

Office of Admissions
University of Colorado Denver
Campus Box 167
P.O. Box 173364
Denver, CO 80217-3364

4. If you have completed fewer than 13 college-level semester hours at the time of application, also submit official high school transcripts, GED scores if applicable and ACT or SAT scores. ACT or SAT scores recorded on the high school transcript are considered official.
5. If you have completed between 13 and 29 college-level semester hours at the time of application, also submit official high school transcripts and GED scores if applicable.

If a student is enrolled at a college or university at the time of application, official transcripts showing course work completed to date should be sent as indicated above. One official final transcript must also be requested by the student and sent directly to the Office of Admissions when grades are recorded after the student's final semester.

All credentials presented for admission consideration become the property of the University of Colorado and will not be copied for or returned to the student.

The University of Colorado Denver reserves the right to deny admission to transfer students not deemed to have completed college-level course work at the sending institution and/or those who are not eligible to return to their previous college or university campuses.

Students who knowingly falsify transcripts or test scores or who fail to indicate all previously attended institutions will be denied admission to, or will be disenrolled from, the university.

After Admission - Advising and Enrollment

Accepted transfer students who have submitted official transcripts will receive a credit evaluation which will include advising office contact information. Students should schedule an advising appointment or contact their advisor for assistance with applying transfer credits to degree requirements. Advisor approval is required for new students prior to registering for UC Denver courses.

Several months before classes begin, additional enrollment information will be provided. For best course availability, students are encouraged to register for courses as early as possible. If admitted for fall or spring semester, students will receive an invitation for the new student welcome program from the orientation office.

Transfer of College-Level Credit

Courses are considered for transfer on the basis of having similar content to those offered by UC Denver. State of Colorado guaranteed transfer courses (gtPATHWAYS) are always accepted and apply to requirements. Developmental, remedial, vocational, technical, religious doctrinal, orientation, independent study, special topics and cooperative education courses are not accepted. Only courses in which a grade of C- or better (1.7) was earned are considered for transfer. Courses in which a grade of Pass (P) was earned are considered for transfer only if a grade of Pass at the sending institution is defined as a C- or better. Students wishing to appeal transfer credit decisions should contact their academic department.

After all official transcripts have been received and the student is admitted as a degree-seeking student, the Office of Admissions will prepare a transfer credit report indicating which courses have been accepted in transfer by UC Denver. A copy of this report is provided to the student as well as to the student's academic department on the Denver Campus. Upon receipt of this transfer credit report, students should contact their academic department to meet with an advisor, who will determine how transferred credit applies to specific degree requirements. Transfer credit evaluations are valid only for programs offered entirely at the Denver Campus.

The Office of Admissions considers course work for transfer regardless of the age of the academic credit. State guaranteed general education courses will be accepted in transfer and applied to graduation requirements for a period of at least 10 years after course completion. Individual departments, however, may have specific guidelines and policies about age of credit for courses not listed as "state guaranteed" and make the final decision about application of credit toward a degree program. Students are expected to have current working knowledge of prerequisite courses, regardless of when prerequisite courses were taken.

The Business School generally limits its transfer of business course credits to those that are offered as lower-division courses at the Denver Campus. Students who have taken upper-division business courses from an American Assembly of Collegiate Schools of Business accredited business program may request review of these courses for possible transfer by contacting the Business School advising office. All courses taken in the business area of emphasis must be completed at the Denver Campus.

The College of Engineering and Applied Science, in general, requires that engineering course transfer credit must come from an Accreditation Board for Engineering and Technology accredited engineering program to be acceptable for degree purposes. Engineering technology courses are not considered equivalent to engineering courses.

A maximum of 60 semester hours is acceptable in transfer from community or junior colleges. A maximum of 90 semester hours is acceptable from four-year institutions or a combination of two- and four-year institutions.

Colorado Community College Transfer

In compliance with Colorado's Statewide Transfer Policy, students may transfer credit from a Colorado community college on a course-by-course basis or by completing an associate of arts (AA) or associate of science (AS) degree. Students who complete an AA/AS degree may be guaranteed full transfer of the associate degree (60 credits maximum).

The guaranteed transfer program applies only to students who began Colorado community college studies in fall 2003 or later and who meet the following requirements:

- complete an AA/AS degree, which includes 31 credits of state-guaranteed general education courses
- earn credit only at Colorado community colleges within the last 10 years
- earn a grade of C- or better in each course

Statewide articulation agreements are in place governing transfer of students from Colorado community colleges into programs in the Business School, the College of Engineering and Applied Science and the elementary education teacher licensure program.

Transfer advising plans for Colorado Community College students are available from the Office of Admissions and at www.ucdenver.edu/admissions. In addition, an admissions representative can assist students with planning a transfer program. Representatives regularly visit Colorado community colleges. Call the Office of Admissions at 303-556-2704 or e-mail admissions@ucdenver.edu for additional information.

Advanced Placement Program

The Advanced Placement Program of the College Entrance Examination Board (CEEB) allows students to take advanced work while in high school and then be examined for credit at the college level. Students who take advanced placement courses and

subsequently receive scores of 4 or 5 on the CEEB Advanced Placement Examination are generally given college credit for lower-level courses in which they have demonstrated proficiency. Credit is also granted for scores of 3 plus a course grade of A or A- in the corresponding subject. For more information, contact your academic advisor and click on the following chart. Original, official score reports are required for credit award consideration.

[Advanced Placement Program Requirements \(AP\) chart](#)

Advanced Placement (AP)

Credit award and course equivalency information listed in this table applies only to degree programs completed entirely at the Downtown Campus. Health programs at the Anschutz Medical Campus have different credit award policies; visit www.ucdenver.edu and/or contact the program office directly for additional information.

Subject Area	Examination Title*	Minimum Score	Credit Hours Awarded	UC Denver Equivalent Course
Art	Art History	5, 4, 3 (See Note 1)	6	FINE 2600, FINE 2610
	Studio Art – Drawing Portfolio	5, 4, 3 (See Note 1)	3	FINE 1100
	Studio Art – 2-D Design Portfolio	5, 4, 3 (See Note 1)	3	FINE 1400
	Studio Art – 3-D Design Portfolio	5, 4, 3 (See Note 1)	3	FINE 1500
Biology	Biology – Exam only (See Note 2)	5, 4	6	BIOL 2051, BIOL 2061
	Biology – Exam and full-year AP course (See Note 3)	5, 4, 3 (See Note 1)	8	BIOL 2051, BIOL 2061,

				BIOL 2071, BIOL 2081
Chinese	Chinese Language and Culture	5	6	CHIN 2120, None
	Chinese Language and Culture	4	6	CHIN 2110, CHIN 2120
	Chinese Language and Culture	3 (See note 1)	3	CHIN 2110
Chemistry	Chemistry – Exam only (See Note 2)	5, 4	6	CHEM 2031, CHEM 2061
	Chemistry – Exam and full-year AP course (See Note 3)	5, 4, 3 (See Note 1)	9	CHEM 2031, CHEM 2038,
				CHEM 2061, CHEM 2068
Computer Science	Computer Science A	5, 4, 3 (See Note 1)	3	(See Note 4)
	Computer Science A, B	5, 4, 3 (See Note 1)	6	(See Note 5)
English	Composition/Literature	5, 4, 3 (See Note 1)	6	ENGL 1020, None
	Language/Composition	5, 4, 3 (See Note 1)	6	ENGL 1020, None
Economics	Economics: Macro	5, 4, 3 (See Note 1)	3	ECON 2012

	Economics: Micro	5, 4, 3 (See Note 1)	3	ECON 2022
Environmental Science	Environmental Science – Exam only	5, 4	3	None
	Environmental Science – Exam and full-year AP course	5, 4, 3 (See Note 1)	4	ENVS 1042
French	French Language	5	6	FREN 2120, None
	French Language	4	6	FREN 2110, FR 2120
	French Language	3 (See Note 1)	3	FREN 2110
	French Literature	5	6	None
	French Literature	4	3	None
	French Literature	3 (See Note 1)	3	FREN 2120
Geography	Human Geography	5, 4, 3 (See Note 1)	3	GEOG 1302
German	German Language	5	6	GRMN 2120, None
	German Language	4	6	GRMN 2110, GRMN 2120
	German Language	3 (See Note 1)	3	GRMN 2110

Government – (Political Science)	Government and Politics (US)	5, 4, 3 (See Note 1)	3	PSCI 1101
	Government and Politics (Comparative)	5, 4, 3 (See Note 1)	3	PSCI 1001
History	American History	5, 4, 3 (See Note 1)	6	HIST 1361, HIST 1362
	European History	5, 4, 3 (See Note 1)	6	HIST 1211, HIST 1212
	World History	5, 4, 3 (See Note 1)	6	HIST 1016, HIST 1026
Italian	Italian Language and Culture	5,4	6	None
	Italian Language and Culture	3 (See Note 1)	3	None
Japanese	Japanese Language and Culture	5,4	6	None
	Japanese Language and Culture	3 (See Note 1)	3	None
Latin/Classics	Latin Vergil	5, 4	6	LATN 2010, LATN 2020
	Latin Vergil	3 (See Note 1)	3	LATN 2010
	Latin Catullus Horace	5, 4	6	None
	Latin Catullus Horace	3 (See Note 1)	3	None

Math-Calculus	Calculus AB	5, 4, 3 (See Note 1)	4	MATH 1401
	Calculus (EN) AB	5, 4, 3 (See Note 1)	4	MATH 1401
	Calculus BC	5, 4, 3 (See Note 1)	8	MATH 1401, MATH 2411
	Calculus (EN) BC	5, 4, 3 (See Note 1)	8	MATH 1401, MATH 2411
Music	Music Theory	5, 4, 3 (See Note 1)	3	PMUS 1100 (See Note 6)
Physics	Physics B – Exam only (See Note 2)	5, 4	8	PHYS 2010, PHYS 2020
	Physics C – Exam only (Mechanics) (See Note 2)	5, 4	4	PHYS 2311
	Physics C – Exam only (Elec/Mag) (See Note 2)	5, 4	4	PHYS 2331
	Physics B – Exam and full- year AP course (See Note 2)	5, 4, 3 (See Note 1)	10	10 PHYS 2010, PHYS 2020,
				PHYS 2030, PHYS 2040
	Physics C (Mechanics) (See Note 3)	5, 4, 3 (See Note 1)	4	PHYS 2311, PHYS 2321

	Physics C (Elec/Mag) (See Note 3)	5, 4, 3 (See Note 1)	4	PHYS 2331, PHYS 2341
Psychology	Psychology	5, 4, 3 (See Note 1)	3	PSYC 1000 or 1005 or elective
Spanish	Spanish Language	5	6	SPAN 2120, None
	Spanish Language	4	6	SPAN 2110, SPAN 2120
	Spanish Language	3 (See Note 1)	3	SPAN 2110
	Spanish Literature	5	6	None
	Spanish Literature	4	3	None
	Spanish Literature	3 (See Note 1)	3	SPAN 2120
Statistics	Statistics	5, 4, 3 (See Note 1)	3	MATH 2830

Note 1: An AP exam score of 3 requires a minimum grade of A in the second semester of the high school AP course for credit to be awarded.

Note 2: Students may take the corresponding UC Denver laboratory course to meet a lab science core curriculum or major requirement. See the academic department for additional information.

Note 3: Students must meet the major department's laboratory proficiency standards before enrolling in additional laboratory courses. See the academic department for additional information.

Note 4: Computer science majors who demonstrate proficiency in C++ programming will receive credit that substitutes for C SC 1410. Business majors will receive credit that substitutes for ISMG 2200.

Note 5: Computer science majors who demonstrate proficiency in C++ programming will receive credit that substitutes for C SC 1410 and C SC 2421. Business majors will receive credit that substitutes for ISMG 2200 and three elective credits.

Note 6: Students must pass a proficiency exam before enrolling in PMUS 1200. Contact CAMadvising@ucdenver.edu for information.

*Duplicate credit for exams and/or college courses with similar content is not awarded.

UC Denver School Code:

4875

Send Official Score Reports To:

UC Denver Office of Admissions
Campus Box 167
P.O. Box 173364
Denver, CO 80217-3364

Official Score Reports and Information May Be Obtained By Contacting:

The College Board
AP Services
P.O. Box 6671
Princeton, NJ 08541-6671
888-225-5427

www.collegeboard.com

College-Level Examination Program

Incoming students may earn university credit by examination in some subject areas in which they have demonstrated college-level proficiency. Interested students may take approved examinations through the College-Level Examination Program (CLEP) of the College Entrance Examination Board (CEEB) testing service.

Acceptable CLEP examinations and credit awards are outlined in the following chart. Original, official CLEP score reports are required for credit award consideration.

[College Level Examination Program \(CLEP\) chart](#)

College Level Examination Program (CLEP)

Credit award and course equivalency information listed in this table applies only to degree programs completed entirely at the Downtown Campus. Health programs at the

Anschutz Medical Campus have different credit award policies; visit www.ucdenver.edu/academics and/or contact the program office directly for additional information.

CLEP Examination Title*	Credit Hours Awarded	UC Denver Equivalent Course
<i>(Only the following exams are accepted by UC Denver)</i>	w/50th percentile minimum score:	
Composition and Literature		
American Literature	6	None
Analyzing and Interpreting Literature	3	None
Composition, Freshman College	3	ENGL 1020
English Literature	6	None
Science and Mathematics		
Algebra – College	3	MATH 1110
Trigonometry	3	MATH 1120
Precalculus	4	MATH 1130
Calculus	4	MATH 1401
Biology (See Note 1)	6	BIOL 2051-3, BIOL 2061-3
Chemistry (See Note 1)	6	CHEM 2031-3, CHEM 2061-3
Social Science and History		
American Government	3	PSCI 1101
History of U.S. I	3	HIST 1361

History of U.S. II	3	HIST 1362
Macroeconomics, Principles of	3	ECON 2012
Microeconomics, Principles of	3	ECON 2022
Psychology, Introductory	3	PSYC 1000
Sociology, Introductory	3	SOCY 1001
Western Civilization I	3	HIST 1211
Western Civilization II	3	HIST 1212
Business		
Financial Accounting	3	ACCT 2200
Information Systems and Computer Applications	3	ISMG 2200

Note 1: Students may take the corresponding UC Denver laboratory course to meet a lab science core curriculum or major requirement. See the academic department for additional information.

*Duplicate credit for exams and/or college courses with similar content is not awarded.

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888-225-5427

www.collegeboard.com

International Baccalaureate Diploma Program

The International Baccalaureate Diploma Program (IB), available at select high schools, is a rigorous, pre-university course of study emphasizing liberal arts from an international perspective.

In accordance with HB 03-1108, the University of Colorado Denver will grant at minimum 24 semester hours of credit for any student who has graduated from high school having successfully completed an International Baccalaureate diploma program with a minimum score of 4 on each exam. Credit may be granted for most individual IB courses where examinations are completed with at least a score of 4 for students who do not complete an IB diploma program. For additional information, students should contact their academic advisors and refer to the following chart. Original, official IB transcripts with exam scores are required for credit award consideration.

[International Baccalaureate \(IB\) chart](#)

International Baccalaureate (IB)

(minimum of 24 credit hours awarded with IB diploma and a score of 4 on each exam)

Credit award and course equivalency information listed in this table applies only to degree programs completed entirely at the Downtown Campus. Health programs at the Anschutz Medical Campus have different credit award policies; visit www.ucdenver.edu/academics and/or contact the program office directly for additional information.

IB Examinations*	Minimum Exam Score	Standard Exam		Higher Exam	
(Other IB exams may be considered for credit with a minimum score of 4.)		UC Denver Equivalent Course	Credit Hours Awarded	UC Denver Equivalent Course	Credit Hours Awarded
Anthropology	4	ANTH 2102	3	ANTH 2102, None	6

Art (Visual)	4	FINE 1001	3	FINE 1001, None	6
Biology	4	BIOL 2051/2071	4	BIOL 2051/2071, BIOL 2061/2081	8
Chemistry	4	CHEM 2031/2038	4	CHEM 2031/2038, CHEM 2061/2068	9
Computer Science	4	(See Note 1)	3	(See Note 2)	6
Design Technology	4	Not Acceptable (See Note 3)		Not Acceptable (See Note 3)	
Economics	4	ECON 2012	3	ECON 2012, ECON 2013	6
English	4	ENGL 1020	3	ENGL 1020, None	6
French (A-1)	4	FREN 2110, FREN 2120	6		
French (A-1)	4			None	6
French (B)	4	FREN 1010, FREN 1020	10	FREN 2110, FREN 2120	6
History of Europe	4	HIST 1211	3	HIST 1211, HIST 1212	6
History of the Americas	4	HIST 1361	3	HIST 1361, HIST 1362	6
History (other)	4	None	3	None	6

Latin	4	LATN 1010, LATN 1020	10	LATN 2010, LATN 2020	6
Mathematics	Academic credit will be awarded for any IB examination in mathematics with a minimum score of 4. IB credit in mathematics requires departmental review for course equivalencies.				
Music	4	PMUS 1001	3	PMUS 1001, None	6
Philosophy	4	PHIL 1012	3	PHIL 1012, None	6
Physics	4	PHYS 2010/2030	5	PHYS 2010/2030, PHYS 2020/2040	10
Psychology	4	PSYC 1000	3	PSYC 1000, PSY 1005	6
Russian (B)	4	None	10	None	6
Spanish (A-1)	4	SPAN 2110, SPAN 2120	6		
Spanish (B)	4	SPAN 1010, SPAN 1020	10	SPAN 2110, SPAN 2120	6
Theatre	4	THTR 1001	3	THTR 1001, None	6

Note 1: Computer science majors who demonstrate proficiency in C++ programming will receive credit that substitutes for CSCI 1410. Business majors will receive credit that substitutes for ISMG 2200.

Note 2: Computer science majors who demonstrate proficiency in C++ programming will receive credit that substitutes for CSCI 1410 and CSCI 2421. Business majors will receive credit that substitutes for ISMG 2200 and three elective credits.

Note 3: Not acceptable unless part of minimum 24 hours awarded with diploma.

*Duplicate credit for exams and/or college courses with similar content is not awarded.

UC Denver School Code:

01398

Send Official Score Reports To:

UC Denver Office of Admissions
Campus Box 167, P.O. Box 173364
Denver, CO 80217-3364

Official Score Reports and Information May Be Obtained By Contacting:

International Baccalaureate Organization

Telephone: 212-696-4464

Web site: www.ibo.org

E-mail: transcripts.ibna@ibo.org

Military Service and Schooling

To have credit for educational experience evaluated, applicants with military experience should submit the Smart Transcript. Credit will be awarded as recommended by the Commission on the Accreditation of Service Experiences of the American Council on Education, to the extent that the credit is applicable to the degree the student is seeking at UC Denver.

Credit for courses completed through the U.S. Armed Forces Institute will be evaluated on the same basis as transfer credit from collegiate institutions.

Reserve Officers' Training Corps (ROTC)

Students enrolled in Army, Air Force or Navy ROTC programs should consult with their college or school regarding the application of ROTC course credit toward graduation requirements. For information about ROTC programs, click on the links below.

[Aerospace Studies - Air Force ROTC](#)

Aerospace Studies – Air Force ROTC

Contact: Lynda Smith

Office: CU-Boulder Folsom Stadium, Room 218

Telephone: 303-492-8351

Fax: 303-492-8353

Web site: www.colorado.edu/AFROTC/

E-mail: Det105@colorado.edu

Mailing Address

AFROTC Det 105
University of Colorado
371 UCB
Boulder, CO 80309-0371

The Reserve Officers' Training Corps (Air Force, Army and Navy) programs offer students the opportunity to receive a commission as an officer in the United States Air Force, United States Army, United States Navy and United States Marine Corps. This program is in conjunction with a students' major course of study and is similar to an academic minor. Both the Army ROTC and the Air Force ROTC programs offer two-year and four-year programs with options for undergraduate and graduate students, active duty and reserve. The Naval ROTC program offers the same with the exception that there is no support available for graduate students. All offer competitive scholarships and a varying degree of course credit. For more information, contact the ROTC offices on the Boulder or Downtown Campus.

[At A Glance: Air Force Aerospace Studies \(Air Force ROTC\)](#)

At A Glance: Air Force Aerospace Studies (Air Force ROTC)

Students: 175-200

Faculty: 7

Branches

Finance and Contracting
Legal and Chaplin
Maintenance and Logistics
Medical and Dental
Operations
Special Duty Assignments
Special Investigations
Support

Student Organizations/Activities

Civil Air Patrol
Drill Team
Color Guard

Arnold Air Society
Persing Rifles
Silver Wings
Formal Military Engagements
Athletic Competitions
Motivational Activities

Additional Information

Earn a degree in the field of your choice while gaining leadership and management experience you need to succeed in either the Air Force or the business world.

ROTC graduates move directly into a management-level position within the Air Force, well ahead of their non-ROTC peers.

Information about numerous career opportunities—such as pilot, development engineer, navigator and space, missile and command control—is available online at www.afrotc.com.

Bragging Rights

2006 Right of Line Award winner — Best Detachment in the Nation

2006 High Flight Award winner — Best Detachment in the Region

NASA astronaut alumni

Aerospace Studies

U.S. Air Force ROTC offers several programs leading to a commission in the U.S. Air Force upon receipt of at least a baccalaureate degree.

Standard Four-Year Program

This standard program is designed for incoming freshmen, or any student with four years remaining until degree completion. It consists of three parts: the general military course for lower-division students (normally freshmen and sophomores); the professional officer course for upper-division students (normally juniors and seniors); and leadership laboratory (attended by all cadets). Completion of a four-week summer training course is required prior to commissioning.

Modified Two-Year Program

All undergraduate and graduate students are eligible for these programs. They are offered to full-time, regularly enrolled degree students and require at least two years of full-time college (undergraduate or graduate level, or a combination). Those selected for this program must complete a six-week field training program during the summer months as a prerequisite for entry into the professional officer course the following fall semester.

Leadership Laboratory

All AFROTC cadets must attend leadership laboratory (two hours per week). The laboratory involves a study of Air Force customs and courtesies, drill and ceremonies, career opportunities and the life and work of an Air Force junior officer.

Other AFROTC Programs

Other programs are frequently available based on current Air Force needs. Any AFROTC staff member in Boulder (303-492-8351) can discuss best alternatives. Interested students should make initial contact as early as possible, as selection is on a competitive basis. There is no obligation until a formal contract is entered.

Air Force College Scholarship Program

A scholarship board is held at the end of each semester for students who have at least one semester of full-time college credit and a 2.5 GPA. Students selected for this program are placed on scholarships that pay tuition, book allowance, nonrefundable educational fees, and subsistence of \$300–\$500 per month, tax-free. These scholarships are available in all academic disciplines and are two to three years in length. All cadets enrolled in the professional officer course receive \$450–\$500 per month subsistence during the regular academic year.

Flight Opportunities

Prior to entering the fourth year of the AFROTC program, qualified AFROTC students can compete for pilot and navigator allocations. Cadets receiving a pilot or navigator allocation will begin flight training after completion of their degree and commissioning as a second lieutenant. All cadets are eligible to fly with the Civil Air Patrol while enrolled in AFROTC.

USAF Nursing Programs

Qualified nursing students can compete for nursing scholarships. This scholarship can lead to a rewarding career as an Air Force officer, serving as a doctor or nurse. The prehealth scholarship pays for an undergraduate degree and medical school.

AFROTC Course Credit

AFROTC credit for graduation varies with each college. Students should contact the appropriate college for determination of credit.

Registration

The AFROTC program is offered through the University of Colorado-Boulder. Students at the UC Denver Downtown Campus may register for AFROTC classes through the

concurrent registration process. Contact your dean's office for the appropriate forms. AFROTC classes begin with the AIRR prefix.

[Military Science - Army ROTC](#)

Military Science – Army ROTC

Contact

UC Denver Office

CPT Byron Elliott
Auraria Campus
S. Classroom Bldg 213 A/B
Telephone: 303-352-7079
Fax: 303-556-2159

CU-Boulder Office

Nancy McMillin
Folsom Stadium, Room 215
Telephone: 303-492-6495

Web site: www.Colorado.edu/AROTC/

E-mail: arotc@colorado.edu

Mailing Address

AROTC
University of Colorado
370 UCB
Boulder, CO 80309-0370

The Reserve Officers' Training Corps (Air Force, Army and Navy) programs offer student opportunity to receive a commission as an officer in the United States Air Force, United States Army, United States Navy and United States Marine Corps. This program is in conjunction with students' major course of study and is similar to an academic minor. Both the Army ROTC and the Air Force ROTC programs offer two-year and four-year programs with options for undergraduate and graduate students, active duty and reserve. The Naval ROTC program is the same with the exception that there is no support available for graduate students. All ROTC programs offer competitive scholarships and a varying degree of course credit. For more information, contact the ROTC offices on the Boulder or Downtown Campus.

[At A Glance: Military Science \(Army ROTC\)](#)

At A Glance: Military Science (Army ROTC)

Students (Cadets)

160

2009 Officer Commissions Awarded

20

Faculty

10

Additional Information

Army ROTC courses are college electives you can try out for up to two years with no obligation.

ROTC is a two- to four-year elective where leadership is the curriculum.

Student Organizations/Activities

Color Guard

Ranger Challenge team

Run Club

Bataan Death March in New Mexico

Annual Spring Ski Trip

Bonfils Blood Drive

Tri-Military Competition

Dining In and Military Ball

Spring Tri-Military Awards Ceremony

Summer Training Internships: Leadership

Training Course (LTC), Leadership Development and Assessment Course (LDAC)

Branches

Air Defense Artillery, Armor, Aviation, Corps of Engineers, Field Artillery, Infantry, Chemical Corps, Military Intelligence Corps, Military Police Corps, Signal Corps, Adjutant Military Corps, Finance, Ordnance Corps, Personnel, Quartermaster Corps, Transportation, Medical Corps and Nurse Corps

Bragging Rights



Top 8 in nation for physical fitness
Largest program in Colorado

Additional Information

Military officers rank the highest for confidence in leaders of institutions (Harris Poll).

Commissioned officers serve our nation around the world: Alaska, Hawaii, Italy, Germany, Korea, Afghanistan, Iraq and in 132 other nations.

100% placement rate for officers commissioned through ROTC.

Commissioned as a second lieutenant in the Army; average starting salary is roughly \$48,000. More information is available online at www.goarmy.com/rotc or www.colorado.edu/AROTC.

Class Locations

Auraria Campus
Colorado School of Mines
University of Colorado at Boulder

Military Science

Army ROTC is an elective program that can lead to a commission as an officer in the active Army, the Army Reserve or the Army National Guard. All Army ROTC classes are offered at UC Denver for freshmen, sophomores and juniors, at the University of Colorado at Boulder (UCB) and at Colorado School of Mines (CSM). Students interested in Army ROTC classes should contact the Department of Military Science at UC Denver. The Department of Military Science offers two programs for students.

Standard Four-Year Program

The four-year program consists of two phases: the basic course (freshman and sophomore years) and the advanced course (junior and senior years).

Basic

The basic course offers a 2- or 3-semester-hour class each semester covering Army history and organization as well as military leadership and management. Laboratory sessions provide the

opportunity to apply leadership skills while learning basic military skills. Enrollment in the basic course incurs no military obligation except for Army scholarship recipients.

Advanced

The advanced course covers leadership, tactics and unit operations, training techniques, military law and professional ethics, and includes a leadership practicum each semester. A 35-day summer advanced camp at Fort Lewis, Washington, provides challenging leadership training and is a prerequisite for commissioning. The advanced course students must have completed the basic course and obtain permission from the professor of military science.

Two-Year Program

The two-year program for academic juniors and graduate students consists of the advanced course, preceded by a four-week summer ROTC basic course at Fort Knox, Kentucky. Veterans or students who have participated in three years of Junior ROTC or Civil Air Patrol may be eligible to enroll in the advanced course without attendance at basic camp or completion of the basic course. Inquiries on advanced placement should be directed to the Department of Military Science. The advanced course students must obtain permission from the professor of military science.

Scholarship Programs

Four-year college scholarships are available to high school seniors, who should apply before December 1 of their senior year. Competition for two- and three-year scholarships is open to all University of Colorado students whether or not they are currently enrolled in ROTC. Scholarship students receive full tuition and laboratory fees, a \$1,200 per-year book allowance and an allowance of \$350-\$500 per month during the academic year. Students interested in the scholarship program should contact the enrollment officer no later than the beginning of the spring semester to apply for the following academic year. Contact the enrollment and scholarship officer at 303-492-3549 or armyrotc@colorado.edu.

Activities and Leadership Laboratories

Students may participate in activities with the Buffalo Battalion's Charlie Company located on the Auraria Campus, to include color guard, intramural sports, running club and ranger challenge. Weekly or Saturday leadership labs provide cadets with practical leadership experience and performance-oriented, hands-on instruction outside the classroom. Leadership labs are compulsory for enrolled cadets. PT is conducted three times a week with the purpose of developing muscular strength, endurance and cardio-respiratory endurance.

Army Nursing Program

Qualified nursing students can compete for nursing scholarships. This scholarship can lead to a rewarding career as an Army Nurse Corps officer. Contact the Army ROTC enrollment officer at 303-492-3549 for information and benefits.

Registration

Students who wish to register for Army ROTC classes sign up for them through the normal course registration process. AROTC classes begin with the MILR prefix. For more information about Army ROTC, contact the Department of Military Science office, which is conveniently located in the CCD Administration Building at South Classroom Building, Room 213 A/B, Auraria Campus, 303-352-7079.

Courses

- [MILR 1011 - Adventures in Leadership](#) Summer 2010 Registration: **MILR 1011**

MILR 1011 - Adventures in Leadership

Summer 2010 Registration **MILR 1011**

Introduces fundamentals of leadership and the U.S. Army. Examines Army organization, customs and history as well as its current relevance and purpose. Students also investigate basic leadership and management skills necessary to be successful in both military and civilian settings. Includes fundamentals of Army leadership doctrine, team-building concepts, cartography, marksmanship and basic military tactics. Note: lab fee, 3 hour lecture, 2 hour lab, 3 hours of PT per week and 80 hours of field training. **Semester Hours:** 2to 2

Registration is changing. Visit our website for details ucdenver.edu/registration.

- [MILR 1021 - Adventures in Leadership II](#) Summer 2010 Registration: **MILR 1021**

MILR 1021 - Adventures in Leadership II

Summer 2010 Registration **MILR 1021**

Covers selected leadership topics in small military organizations such as troop leading procedures, military first aid and casualty evacuation concepts, ethical work climates, Army organizations and installations, and basic military tactics. Introduces students to effective military writing styles. Note: Lab fee. 2 hour lecture, 2 hours lab, and 3 hours PT per week. 80 hours field training. Prereq: Milr 1011. **Semester Hours:** 2to 2

Registration is changing. Visit our website for details ucdenver.edu/registration.

- [MILR 2031 - Leadership and Management I](#) Summer 2010 Registration: **MILR 2031**

MILR 2031 - Leadership and Management I

Summer 2010 Registration **MILR 2031**

Comprehensively reviews advanced leadership and management concepts including motivation, attitudes, communication skills, problem solving, human needs and behavior and leadership self development. Students continue to refine effective written and oral communication skills and to explore topics such as unit light infantry tactics and are prepared to perform as midlevel leaders in the cadet organization. Note: lab fee, 3 hour lecture, 2 hour lab, 3 hours of PT per week and 80 hours of field training. **Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

- [MILR 2041 - Leadership and Management II](#) Summer 2010 Registration: **MILR 2041**

MILR 2041 - Leadership and Management II

Summer 2010 Registration MILR 2041

Focuses on leadership and management functions in military and corporate environments. Covers various components of Army leadership, risk management and planning theory, and leadership evaluation. Continues to refine written and oral communication skills. Note: Lab fee. 3 hour lecture, 2 hours lab, and 3 hours PT per week. 80 hours field training. Prereq: MILR 2031. **Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

- [MILR 3052 - Operations and Training I](#) Summer 2010 Registration: **MILR 3052**

MILR 3052 - Operations and Training I

Summer 2010 Registration MILR 3052

Further explores the theory of managing and leading small military units at the squad platoon levels. Students examine leadership styles and techniques related to advanced small unit tactics. Familiarizes students cartography, land navigation, field craft and weapons systems. Involves multiple, evaluated leadership opportunities in field settings and hands-on experience with actual military equipment. Students are given maximum leadership opportunities in weekly labs. Note: lab fee, 3 hour lecture, 2 hour lab, 3 hours of PT per week and 80 hours of field training. Prereq: permission of professor of Military Science. **Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

- [MILR 3062 - Leadership and Development II](#) Summer 2010 Registration: **MILR 3062**

MILR 3062 - Leadership and Development II

Summer 2010 Registration MILR 3062

Focuses on managing personnel and resources, military decision making, operations order, and oral communication. Exposes students to tactical unit leadership in preparation for the summer advance camp experience. Note: Lab fee. 3 hour lecture, 2 hours lab, and 3 hours PT per week. 80 hours field training. Prereq: Consent of the Professor of Military Science, MILR 3052. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

- [MILR 4072 - Officer Leadership I](#) Summer 2010 Registration: **MILR 4072**

MILR 4072 - Officer Leadership I

Summer 2010 Registration **MILR 4072**

Examine management and leadership concepts and techniques at company and higher echelons. Includes analyses of professional ethics, effective training procedures, subordinate counseling and staff officer briefing techniques. Also investigates counter terrorism, modern peacekeeping missions and the impact of the information revolution on the art of land warfare. Conducted with multiple practical leadership opportunities to organize cadet training and activities. Note: lab fee, 3 hour lecture, 2 hour lab, 3 hours of PT per week and 80 hours of field training. Prereq: permission of professor of Military Science. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

[Naval Studies – Naval ROTC \(U.S. Navy and Marine Corps\)](#)

Naval Studies – Naval ROTC (U.S. Navy and Marine Corps)

Contact: LT Ricardo Leyva

Office: CU-Boulder Folsom Stadium, Room 233

Telephone: 303-492-2576

Fax: 303-492-0543

Web site: www.colorado.edu/NROTC

E-mail: Ricardo.leyva@colorado.edu

Mailing Address:

NROTC Recruiting Officer

University of Colorado

374 UCB

Boulder, CO 80309-0374

The Reserve Officers' Training Corps (Air Force, Army, and Navy) programs..... as an

officer in the United States Air Force, United States Army, United States Navy and United States Marine Corps. Both the Army ROTC and the Air Force ROTC programs offer two-year and four-year programs with options for undergraduate and graduate students, active duty, and reserve. The Naval ROTC program offers the same, with the exception that there is no support available for graduate students. All offer competitive scholarships and a varying degree of course credit. For more information, contact the ROTC offices on the Boulder or Downtown campus.

[At A Glance: Naval Studies \(Naval ROTC\)](#)

At A Glance: Naval Studies (Naval ROTC)

Students

150-180

Faculty

7

Student Organizations/Activities

Color Guard
Drill Team
Endurance Team
Sailing Team
Rifle/Pistol Team
Bataan death march
Tri-Military competition
Dining In and Sea Services Ball
Spring Tri-Military Awards (Scholarship) Ceremony

Branches

Surface Warfare (Navy)
Submarine Warfare (Navy)
Aviation (Navy and Marine Corps)
United States Marine Corps

Additional Information

Four- to nine-semester full-tuition scholarships are available for incoming and current freshmen and sophomores who wish to commission as officers within the United States Navy or Marine Corps. More information available at www.nrotc.navy.mil

Naval Studies

U.S. Naval ROTC provides several programs all leading to a commission in the U.S. Navy or U.S. Marine Corps upon receipt of a baccalaureate degree.

Standard Four-Year Program

Incoming freshmen can receive full tuition funding (8 semesters) for their undergraduate education. This is the “normal” pathway by which students enter the program. Applications need to be completed online via the national NROTC Web site (www.nrotc.navy.mil) well before the student matriculates, typically the January prior to fall admission. Students are highly encouraged to apply early. Scholarships are awarded based on high school GPA, ACT/SAT scores and extracurricular activity levels. Students interested in engineering or nursing degrees may be eligible for up to nine semesters of funding. If interested in nursing, please contact the recruiting officer for more detail.

Two-Year Program

Students can apply for a four-semester scholarship in the spring semester of their sophomore year. Scholarships are awarded based on college GPA, personal interview and recommendation by the NROTC unit. Please contact the recruiting officer for more information.

College Program

The main prerequisite for joining the NROTC unit is that the student is currently admitted to UC Denver. Anyone in this status has a very good chance of being allowed to participate with the NROTC unit in a nonscholarship (a.k.a. college program) status, and to eventually commission as an officer in the U.S. Navy or Marine Corps. After participating in the NROTC unit in a nonscholarship status for at least one semester, the NROTC unit may recommend that students be considered for a full-tuition scholarship. A scholarship board is held at the end of each semester for these students. Chances for being awarded a full-tuition scholarship for as many as seven semesters are very good if the student has a cumulative college GPA of 3.0 or higher. High school GPA and ACT/SAT scores are not considered in the scholarship selection process. This is a great opportunity for students who either missed the deadline for applying to NROTC, who are already in college or who perhaps didn't perform well enough in high school to earn a scholarship through the standard four-year program.

NROTC Course Credit

NROTC credit for graduation varies with each college. Students should contact the appropriate college for determination of credit.

Registration

The NROTC program is offered through the University of Colorado-Boulder. Students at the UC Denver Downtown Campus may register for NROTC classes through the concurrent registration process. Contact your dean's office for the appropriate forms. NROTC classes begin with the NAVR prefix.

Intra-University Transfer

Students on the Denver Campus may change colleges or schools within the university provided they are accepted by the college or school to which they wish to transfer. Intra-university transfer forms may be obtained from the student's school or college or from the Office of the Registrar. Decisions on intra-university transfers are made by the college or school to which the student wishes to transfer.

Students in continuing and professional studies programs wishing to enroll in regular courses or degree programs on the Denver Campus should contact the Office of Admissions for a degree application.

Readmission Requirements for Former Students

UC Denver students who have not registered and attended classes on the Denver Campus for one year or longer and who have not attended another institution since the University of Colorado are considered returning students and must formally apply for readmission. An additional application fee is only required if changing from undergraduate to graduate or nondegree to degree status, or if a degree was earned and the student is applying for a second degree. Application forms are available at the Office of Admissions and at www.ucdenver.edu/admissions.

Students who have attended another college or university since last attending the University of Colorado must apply as transfer students and meet the admission criteria and transfer student deadlines for receipt of documents. This requires payment of the \$50 (subject to change) nonrefundable application fee and submission of one official transcript from each college or university attended since last enrollment at UC Denver. Transcripts must be sent *directly* from the issuing institution to:

Office of Admissions
University of Colorado Denver
Campus Box 167
P. O. Box 173364
Denver, CO 80217-3364

Students who last attended another University of Colorado campus must formally apply for admission and meet the admission criteria of the Denver Campus. An application fee is not required unless going from undergraduate to graduate status, from nondegree to

degree status or if a degree was earned. Students may apply online or request an application from the Office of Admissions at www.ucdenver.edu/admissions. University of Colorado transcripts are not required, but official transcripts from each college or university attended prior to enrollment at the University of Colorado must be submitted.

Admission of Nondegree Students

Persons who have reached the age of 20 and who want to take university courses, but do not plan to work toward a University of Colorado degree, may be admitted as nondegree students provided they are eligible to return to all collegiate institutions previously attended. A 2.0 cumulative GPA for all institutions attended is required to be a nondegree student. Questions regarding admission as a nondegree student should be directed to the Office of Admissions. Each school/college limits the number of semester hours taken as a nondegree student that may be transferred to a degree program.

Students considering changing from nondegree to degree status will need to apply as an undergraduate or graduate degree seeking student and meet the admission requirements of the intended program of study. Students under age 22 will be required to submit high school transcripts and ACT/SAT scores in addition to official college transcripts from each institution attended, regardless of the number of credit hours completed.

Note: International students are not admitted as nondegree students.

Financial Implications for Nondegree students

Students with a baccalaureate degree who are admitted as nondegree students will be classified as nondegree graduate students and assessed graduate tuition regardless of the level of courses taken. If enrolling only in undergraduate courses, an adjustment may be requested through the Office of the Registrar to pay the undergraduate tuition rate. However, the Colorado Opportunity Fund (COF) is not available to in-state nondegree graduate students. To utilize COF and pay the lowest tuition rate, students must apply as undergraduate degree-seeking students, even if a degree is not desired.

Nondegree students are not eligible to receive federal or state financial aid, student loans and most UC Denver scholarships.

How to Apply

To apply for admission as a nondegree student, obtain a nondegree student application form from the Office of Admissions or submit one via the Web. Return the completed application by the deadline for the term desired. A \$25 (subject to change) nonrefundable application fee is required. No additional credentials are required. *Nondegree students are advised that registration for courses is on a space-available basis, and that admission as a nondegree student does not assure availability of specific courses.*

Continuation as a nondegree student with no prior undergraduate degree is contingent upon maintaining an overall GPA of 2.0 upon completion of 12 or more semester hours.

Admission of Students Seeking a Second Undergraduate Degree

Students who already hold a bachelor's degree may apply for admission to a program in which they can earn a second undergraduate degree. Applicants for a second undergraduate degree must meet UC Denver admissions standards. These students may apply to the College of Arts & Media, College of Engineering and Applied Science, College of Liberal Arts and Sciences or the School of Public Affairs. Persons who already hold an undergraduate degree in any discipline generally may not apply for a second undergraduate degree in business. Rather, they should apply to a graduate MBA or MS business program. Contact the Business School at 303-556-5900 for additional information.

How to Apply

1. Apply online or request an application for undergraduate admission from the Office of Admissions at www.ucdenver.edu/admissions.
2. Complete the application and send it to the Office of Admissions with a \$50 (subject to change) nonrefundable application fee.
3. Have one official transcript sent to the Office of Admissions from each collegiate institution attended. Official transcripts for enrollment at any campus of the University of Colorado are not required. Official transcripts are those sent by the issuing institution *directly* to:
Office of Admissions
University of Colorado Denver
Campus Box 167
P.O. Box 173364
Denver, CO 80217-3364
Hand-carried or faxed copies are not official.

Transcripts from the institution where the first undergraduate degree was earned must have final grades posted for the semester that the student graduated and have the official notation of the degree awarded.

All credentials presented for admission become the property of the University of Colorado and must remain on file. Students who do not declare all previously attended institutions are subject to disciplinary action and/or dismissal.

Students who knowingly falsify transcripts or test scores will be denied admission to, or will be disenrolled from, the university.

High School Postsecondary and Concurrent Enrollment

High school juniors and seniors with demonstrated academic abilities may be admitted to UC Denver with special approval for one term only. This approval may be renewed. Credit for courses taken may subsequently be applied toward a university degree program. For more information and application instructions, contact the Office of Admissions, 303-556-6745 or admissions@ucdenver.edu.

Admission Requirements for International Students

The University of Colorado Denver is proud to have a diverse population of international students coming from more than 100 countries. Instructions for international student admissions are available in the [Information for International Students](#) section of this catalog. International application forms are accessible on the international admissions Web site at www.internationaladmissions.ucdenver.edu.

New Student Orientation

A welcome and general information program open to all new students is held at the beginning of the fall and spring semesters. The program provides an introduction to the campus, information about student services and student activities available through UC Denver and services provided to all students on the Auraria Campus, including information on getting an ID and parking.

New freshmen will also receive information regarding academic advising and specific orientation sessions for students and parents, which are held at various times during the year. Transfer and graduate students should contact their schools and colleges for additional information on academic advising, as well as special orientation sessions that may be held for a particular program.

Orientation information is sent to admitted students from the orientation office. For more information, call 303-352-3520 or visit North Classroom, 2024.

Four-Year Graduation Guarantee

The University of Colorado Denver has adopted a set of guidelines to define the conditions under which an undergraduate student will be guaranteed to graduate in four years. More information is available through the undergraduate advising offices for each college and the major program offices. The Denver Campus has five undergraduate colleges in which this guarantee applies: College of Arts & Media, Business School, College of Engineering and Applied Science, College of Liberal Arts and Sciences and School of Public Affairs.

UC Denver's Denver Campus guarantees that if a student begins studies in a fall semester and lack of scheduling of essential courses is found to have prevented a student from completing all course work necessary for a BA, BFA or BS degree from the university by the end of the student's eighth consecutive fall and spring semester, the college/school shall provide tuition plus any course fees for all courses required for completion of the degree requirements. This applies *only* when needed courses are *not offered* by the college/school and does not apply to scheduling conflicts for individual

students. *Students must satisfy all the requirements described below to be eligible for this guarantee.*

This guarantee applies to all students who enroll beginning in a fall term as first-semester, full-time freshmen without admission deficiencies, who do not need remedial course work and who satisfy all the requirements described below. This guarantee does not include completion of all options within the major, a second major, a double degree, a minor or a certificate program. The four-year graduation guarantee does not apply to programs in which the degree has been discontinued or is in the process of being phased out. In these cases, every effort will be made to allow students to fulfill requirements by taking courses at other universities and colleges to facilitate timely completion of the degree.

Some study abroad programs may not provide a sufficient range of courses to allow students to meet the requirements, thus, students who participate in study abroad programs during the fall or spring semesters may not be eligible for this guarantee. A student may be able to participate in a study abroad program during the summer semester and still meet all the requirements of this guarantee. It is essential that a student work closely with an advisor to determine if the student can participate in a study abroad program and still meet all the requirements of this guarantee.

Requirements

Students must satisfy all of the following requirements to be eligible for this guarantee.

1. Students must begin studies in a fall semester and enroll in UC Denver course work as specified on the student plan of study for eight consecutive fall and spring semesters.
2. Students must complete all required course work by the end of the eighth semester.
3. No fewer than 60 semester hours of applicable course work must be completed successfully by the end of the second year (24 calendar months); 90 semester hours by the end of the third year (36 calendar months); and 120 semester hours by the end of the fourth year (48 calendar months). Students must successfully complete an average of 15 semester hours each semester.
4. Students must meet with their college advisor and their major advisor for academic advising during the first, third, fifth and seventh semesters of study.
5. The major must be declared no later than the end of the first semester of study and students must not change their major or any options within the major.
6. A required plan of study toward the major must be agreed upon and signed by the student and advisor at the end of the first semester. Thereafter students must make satisfactory progress toward completing the major, as defined by each major, and the general education requirements. Courses with certain grades may not meet the satisfactory progress requirement of this guarantee. A statement of

- what constitutes satisfactory progress and what grades are acceptable is available from the major or departmental office at the time the major is declared.
7. A minimum of 30 semester hours of college general education courses should be completed by the end of the second year, including core curriculum courses that also meet major requirements and foreign language proficiency.
 8. All lower-division graduation requirements must be successfully completed by the 90-semester-hour mark.
 9. Students must remain in good academic standing according to their school/college academic policies.
 10. Grades of C-, C or C+, as defined by the college/school, must be earned in all course work required for the major, and students must have a cumulative GPA of 2.0 in all major course work attempted.
 11. Students must register each semester within one week of the student's specified eligibility to register.
 12. Students must take courses that are specified in the student plan of study approved by their advisor.
 13. Elective courses must be avoided if they conflict with required major or general education courses. Elective courses must not be given a higher priority than required courses.
 14. Students must meet all departmental, school or college and university policies regarding graduation requirements.
 15. The college/school must be notified in writing of the student's intent to graduate no later than the beginning of the seventh semester of study. A graduation application must be filed no later than the deadline for the appropriate graduation date. The student must complete a graduation checkout/senior audit with their advisor.
 16. The student is responsible for and must keep documentation proving that these requirements were satisfied (e.g., records of advising meetings attended, advising records and instructions, etc.).

Undergraduate Experiences

Assistant Vice Chancellor for Undergraduate Experiences: John Lanning,
john.lanning@ucdenver.edu

Assistant to the AVC for Undergraduate Experiences: Nadine Montoya-Donoho,
nadine.montoya@ucdenver.edu

Office: Lawrence Street Center, 300

Telephone: 303-315-2133

Fax: 303-315-5829

Web site: www.ucdenver.edu/ue

The Office of Undergraduate Experiences coordinates and implements undergraduate education programs to promote access for all undergraduate students to high-quality and innovative UC Denver programs, improve the recruitment and retention of

undergraduate students and coordinate programs between academic and student affairs to better serve and engage undergraduate students.

This includes coordination of programs that aim to improve the quality of undergraduate experiences.

- The core curriculum is an academic program of required general education courses that gives UC Denver students a quality educational foundation for a lifetime of success.
 - [UC Denver Undergraduate Core and gtPATHWAYS Curriculum](#)
- The Colorado Commission on Higher Education initiated the gtPATHWAYS program to ensure that students could transfer credit for core courses to any other higher education institution in the state.
- The University Honors and Leadership program combines leadership and scholar components to prepare students for the new challenges of the 21st century.
- The Experiential Learning Center coordinates internships and supports undergraduate research, interdisciplinary learning, e-portfolio support, civic engagement, etc. on the Downtown Campus.
- Early Alert assists students early in the semester who are having trouble adjusting personally or academically to their new environment.
- First-year seminars teach academic and study skills and ease the transition both socially and academically for incoming students.
- Living/learning communities involve combinations of courses, some of which take place in the residence halls, that focus around a single academic theme.
- Supplemental instruction is a peer-facilitated academic support program that targets historically difficult courses so as to improve student performance and retention.

Other responsibilities of this office include ensuring the quality of new undergraduate degree programs, promoting cross-college academic programs, training faculty and working in many other capacities to ensure that students have a positive and productive academic career at UC Denver.

University Honors and Leadership Program (UHL)

Director: Steven G. Medema

Assistant to the Director: Susi Tattershall

Office: 1047 Ninth Street Park

Telephone: 303-556-5297

Fax: 303-556-6744

E-mail: UHL@ucdenver.edu

Web site: www.ucdenver.edu/uhl

University Honors and Leadership (UHL) is a program of excellence designed for outstanding students who have demonstrated superior achievement in academic performance and/or outstanding leadership qualities. The program is founded on the

premise that the integration of rigorous programs of academic excellence and leadership education provides the ideal environment in which to develop the gifts of the next generation of leaders in academia, business, policymaking and service to communities local, national and global.

The UHL program is unique in integrating academic honors and leadership education within a highly selective learning community of outstanding students and faculty. The UHL program allows students to complement their major field of study with a traditional honors experience in the academic honors track or program of leadership education in the leadership studies track. Students move through the UHL program in cohorts that simultaneously promote community, teamwork and individual initiative. All of the UHL courses are multidisciplinary, reflecting our view that the ability to effectively analyze the challenges faced in all sectors of society can be enhanced by the integration of appropriate pieces drawn from a broad base of perspectives and problem-solving skills. The UHL program complements this with an emphasis on the development of exceptional oral and written communication skills, projects that steep the students in sophisticated research methods and the opportunity to work in teams to solve practical problems in the community.

The Academic Program

UHL is a multidisciplinary cohort program consisting of 27 semester hours of course work to be completed over four years. The UHL courses will substitute for most of the UC Denver general core curriculum requirements.

UHL students are given the opportunity to pursue a traditional honors experience through the academic honors track of the UHL program or to focus on leadership education through the UHL leadership studies track. UHL students have a common first-year experience, taking a core of course work common to both tracks. The second and third years of the UHL program offer programs designed specifically for the academic honors and leadership studies tracks. The UHL students come together for a two-semester capstone research seminar in the fourth year.

Students who successfully complete the academic honors track will receive a university honors designation on their diploma and on their university transcript. Students who successfully complete the leadership studies track will graduate with a minor in leadership studies.

Admission

Admission to the UHL program is competitive. In addition to meeting published requirements for admission to UC Denver, students must have a high school GPA, class ranking and SAT/ACT scores commensurate with an honors educational experience. For

example, we would expect that applicants would rank in the top ten percent of their high school class and/or have scored in the 90th percentile or above on the SAT/ACT.

Students who wish to be considered for admission to the UHL program must submit the following application materials:

- A completed UHL application form
- A written essay
- Three letters of recommendation
- High school transcripts and transcripts for all college-level work completed to date
- SAT and/or ACT scores

We require a personal interview with all students who are selected as finalists for admission.

Applicants for admission to the UHL program should show evidence of ability and desire to:

- take responsibility for their own learning, for self-discovery and for personal and intellectual growth.
- learn about and understand diverse, competing perspectives, viewpoints and values.
- profit from varied modes of learning.
- become responsible and contributing members of the UHL program, the university and society.

Application information can be found on the UHL Web site at www.ucdenver.edu/UHL.

First-Year Seminars

Assistant Vice Chancellor for Undergraduate Experiences: John Lanning,
john.lanning@ucdenver.edu

Assistant to the AVC for Undergraduate Experiences: Nadine Montoya-Donoho,
nadine.montoya@ucdenver.edu

Office: Lawrence Street Center, 300

Telephone: 303-315-2133

Fax: 303-315-5829

Web site: www.ucdenver.edu/fye

UC Denver offers an optional program of First-Year Seminars (FYS) designed to assist students to successfully make the transition from high school to college, improve student retention and boost new student confidence. The FYS courses integrate rigorous academic content with academic skills such as library usage, campus resources, information literacy, time management, communication skills and career counseling. Class size is capped at 24 students to facilitate interaction between student and

instructor and to allow the instructor to serve as a mentor in the student's first semester of college.

An important objective of the FYS program is to both challenge and support so students can excel academically and socially at UC Denver. FYS classes engage students in active learning beyond the traditional classroom, laboratory or studio classes. In the FYS courses, students learn about themselves and their abilities. The experiences obtained from the FYS program aim to promote academic exploration and interdisciplinary learning, civic engagement, cultural awareness, leadership, problem solving and other professional skills.

Why should entering high school students participate in a First-Year Seminar course?

- higher first semester grades
- higher student satisfaction facilitated by small class size and a faculty mentor
- better utilization of campus resources paid for through student fees
- early exploration of career paths and a suitable major

The strong academic component of the UC Denver FYS courses allows the course to count toward graduation requirements in the UC Denver Core Curriculum, or general education program, required of all undergraduate students. Students are encouraged to use the FYS program to explore areas either within or outside their major. Students should work with their academic advisor during orientation to select an appropriate FYS course.

Experiential Learning Center

Director: Lissa Gallagher

Location: Tivoli Student Union, Suite 260

Telephone: 303-556-6656

Web site: www.ucdenver.edu/elc

Experiential learning, broadly defined as hands-on learning, engages students in active learning beyond traditional lectures, discussions and laboratory exercises. Well-planned, supervised and evaluated learning experiences outside the classroom can stimulate academic inquiry while promoting interdisciplinary learning, civic engagement, career development, cultural awareness, leadership, problem solving and other professional and intellectual skills.

The Experiential Learning Center is committed to developing, expanding and promoting applied learning options for students. They support students, faculty and community partners by facilitating quality learning experiences that enhance the undergraduate experience.

Early Alert Program

The UC Denver Downtown Campus participates in a campuswide Early Alert program to identify undergraduate students needing assistance from academic and student service offices. Providing assistance early in the semester is very important to student success in their baccalaureate program.

The Early Alert program is designed for faculty to identify students in the fifth and sixth weeks of the semester who need assistance because of academic performance, class participation and/or behavior issues. Students who are identified by faculty for an alert are contacted by the advising office in the student's home college, and it is important for students to respond to Early Alert communication with their advisors. Assistance is then provided to students through academic advising and through referrals to appropriate UC Denver student service offices.

Goals of the early alert program are to:

- increase student academic success
- improve student persistence and graduation rates
- increase communication between students and faculty
- increase communication between students and academic advisors
- increase student utilization of student service offices

Further information about the UC Denver Early Alert program is available from the Office of Undergraduate Experiences, 303-315-2133, www.ucdenver.edu/earlyalert.

UC Denver Undergraduate Core and gtPATHWAYS Curriculum

[View the UC Denver Undergraduate Core and gtPATHWAYS Curriculum table](#)

Core Curriculum

All undergraduate students at UC Denver's Downtown Campus must complete a 34-to-38-semester-hour core curriculum of general education course work. The UC Denver core curriculum is specifically designed as the foundation for academic success for the baccalaureate degree as well as for a lifetime of success.

The undergraduate core curriculum is based on a philosophy of a liberal arts education. The phrase "liberal arts" originates from Latin roots *liber*, "to be free," and *ars*, "skill or ability to do something." Thus, a liberal arts education develops a set of skills to set one free. Course work in a traditional liberal arts education is designed to provide an understanding of ourselves, ours and other cultures and our environment.¹

The undergraduate core curriculum emphasizes intellectual competencies and provides optional choices to develop a skill base in the broad knowledge areas that make up the undergraduate curriculum. A detailed chart of faculty-approved core courses and college

core requirements is available at the following link: [UC Denver Undergraduate Core and gtPATHWAYS Curriculum Table](#).

The Core Curriculum Oversight Committee, composed of faculty in each undergraduate school and college, monitors the curriculum.

¹ H. Thorne Compton, "The Liberal Arts and Critical Thinking: Building Blocks of the Educated Person," in *A Student Guide to Higher Education*, John N. Gardner and A. Jerome Jewler, Editors, Wadsworth Publishing Company, Belmont, CA, Chapter 1988.

Intellectual Competencies

English Composition (two courses)

- English composition courses develop critical thinking, reading, writing, information literacy and research-based writing skills.

Mathematics (one course)

- Mathematics courses develop critical thinking, logic, quantitative reasoning and numerical relationships/patterns in behavioral/social and physical phenomena.

Knowledge Areas

Arts and Humanities (two courses)

- Arts courses develop creativity, self-expression, aesthetics and stimulation of thought. Topic areas include arts, fine arts, music, professional music and theatre.
- Humanities courses develop ethics and priorities, human experience and development, contemporary life issues and responsibilities and impacts of social actions. Topic areas include English literature, modern languages, history, philosophy and religious studies.

Behavioral and Social Sciences (two courses)

- Behavioral science courses develop an understanding of human behavior, communication and an analysis of human experience and development. Topic areas include anthropology, communication and psychology.
- Social science courses develop an understanding of human society and the interrelationship of social phenomena. Topic areas include economics, geography, political science, sociology and ethnic studies.

Biological and Physical Sciences, Mathematics (two courses)

- Biological and physical science courses develop knowledge through the scientific method, scientific reasoning and solutions to complex phenomena in nature. Topic areas include biology, chemistry, geology, physics and environmental science.
- Mathematics courses are typically not classified as a science but provide the tools and models to investigate science and to formulate hypotheses and laws.

International Perspectives (One Course)

- International perspectives courses develop insight into globalization impacts and the influence of an expanding multicultural society.

Cultural Diversity (One Course)

- Cultural diversity courses provide insight and analysis of race and gender issues within the United States.

The value of a liberal arts-oriented core curriculum greatly exceeds its basic economic value, providing personal life and workforce skills necessary for a dynamic 21st century. Students should work closely with academic advisors to choose courses from the core curriculum that compliment their majors and future careers.

Guaranteed Transfer: gtPATHWAYS Program

The Colorado Commission on Higher Education (CCHE) has charged each Colorado public institution of higher education with providing undergraduate students a set of general education courses guaranteed to transfer as core credit to any other Colorado public institution. This program is called gtPATHWAYS, with “gt” referring to guaranteed transfer.

Transferring students are able to apply up to 31 semester hours of gtPATHWAYS approved courses with grades of C- (1.7) or higher toward their general education program at the receiving institution. Students may also apply gtPathways-approved courses to courses in their major, depending on policies at UC Denver.

Students transferring to UC Denver with an associate's degree from a Colorado community/junior college in the gtPATHWAYS program are guaranteed fulfillment of all lower-division core curriculum requirements. Students planning to transfer in/out of UC Denver under the gtPATHWAYS program should work with their academic advisor to obtain details of transfer credit.

General education courses approved for the gtPATHWAYS program are identified in the [UC Denver Undergraduate Core and gtPATHWAYS Curriculum Table](#). gtPATHWAYS-

approved courses are also identified in the [Courses chapter](#) of this catalog. For example, the suffix GT-SC1 in “BIOL 1550-4. Basic Biology: Ecology and the Diversity of Life: GT-SC1” identifies the course as a gtPATHWAYS approved science course with a laboratory.

Further information about the statewide transfer program, including the list of approved courses and distribution requirements, is available at <http://highered.colorado.gov/Academics/Transfers/gtPathways/default.html>.

Information for Graduate Students

Welcome to the Graduate School on the Denver Campus. Almost half of our students on the Denver Campus are enrolled in graduate programs. We have a higher ratio of graduate to undergraduate students than most other universities in the country. This special emphasis on graduate education provides a strong culture of graduate studies on the campus and has engendered a number of innovative programs and teaching methods, such as dual master's degrees or classes that are entirely online. Graduate programs on the Denver Campus also benefit from UC Denver's immediate proximity to the city, which provides rich opportunities for internships and employment, collaborations between the university and the city and a wealth of real world problems that can test and elaborate ideas gained in the classroom.

A list of all graduate programs is available in the [Academic Programs section](#) of the UC Denver Web site.

The Denver Campus Graduate School offers 25 master's programs and nine PhD programs. In addition, schools and colleges offer other master's programs that are independently accredited and are not housed in the Graduate School. For students in those programs, most of your needs will be met by the department in which your program resides. Information about these graduate programs is available under the specific school or college in this catalog. However some programs, those having a diamond designation, are programs within the Graduate School and follow the rules outlined in this section.

The colleges and schools offering graduate opportunities on the Denver Campus include:

- College of Architecture and Planning
- College of Arts & Media
- Business School
- School of Education & Human Development
- College of Engineering and Applied Science
- College of Liberal Arts and Sciences
- School of Public Affairs

Individual graduate programs are described within the school/college sections of the catalog.

Graduate School

Dean: Robert Damrauer, PhD

Administrative Assistant: Carie Carroll

Apply Yourself Manager: Krystal Allen

Office: 1380 Lawrence Street, Suite 300

Telephone: 303-315-5826

Fax: 303-315-5829

Web site: www.ucdenver.edu/academics/colleges/Graduate-School/Pages/default.aspx

Mailing Address: P.O. Box 173364, Campus Box 163, Denver, CO 80217

Graduate education is a critical component of the Mission of the University of Colorado Denver (UC Denver). The Graduate School is one of several schools within UC Denver and its mission is to facilitate and enhance the educational experiences and opportunities for all graduate students and to encourage excellence in research, creative and scholarly work.

In accordance with its mission, the Graduate School leadership and the graduate faculty, plan, develop, approve, evaluate and administer graduate programs (PhD and master's degree programs). The Graduate School also ensures that graduate programs comply with the standards of excellence and sound academic administration established by the rules and policies of the Graduate School and adopted by the University Board of Regents and the Colorado Commission on Higher Education. In particular, the Graduate School is charged with maintaining high standards and quality of both the graduate programs and the faculty of the Graduate School. Other functions of the Graduate School include:

- a) Fostering multidisciplinary, interdisciplinary and innovative programs and promoting collaboration that creates unique opportunities for student learning, research and discovery;
- b) Formulating and maintaining uniform standards for academic excellence in graduate-level courses and research experiences offered for credit;
- c) Promoting a supportive environment for the graduate student community;
- d) Providing a voice for graduate education in the planning processes of the university; and
- e) Publishing a current Graduate School Student Handbook on the Graduate School Web site.

Graduate School Rules

Requirements for Admission

Note that the following are minimum requirements. College and school regulations, if more stringent, take precedence over the minimum guidelines as set forth by the Graduate School.

Regular Degree Students

Students are admitted by the Graduate School as regular degree students provided they meet the following criteria:

- Hold a baccalaureate or master's degree from an accredited college or university or demonstrate completion of work equivalent to the baccalaureate or master's degree given at UC Denver. Applicants whose credentials include studies or course work at an institution outside the U.S. must include a validated English translation and an evaluation of the transcript by a professional accrediting service (such as World Education Services).
- Usually have an undergraduate grade point average of 3.00 or better ("A" is equal to 4.0) and/or a 3.00 or better GPA in a completed or partially completed (at least 1/3) master's degree program. Applications from individuals who attended a college or university that does not issue grades or a GPA will be evaluated by the Graduate School on a case-by-case basis.
- Have adequate preparation to enter graduate study in the chosen program as demonstrated by their performance in the GRE or an appropriate substitute, or an earned MS/MA or PhD from a school in the U.S.A., or completion of at least 12 credit hours of transferable graduate-level course work. Although the Graduate School recommends that applicants take the GRE or other standardized test, it is not a requirement for admission as a regular degree student if one of the other two indicators of preparedness is present. Some graduate programs, however, may require that all applicants take the GRE or an equivalent.
- Meet any additional requirements (such as particular undergraduate course work) for admission as established by the program.

International students must meet ALL of these requirements and also must provide:

- Documentation in English (or a certified English translation) of the completion of a bachelor's degree, master's degree or the equivalent at the time of matriculation as evaluated by the International Admissions Office.
- Applicants whose native language is not English must take either the Test of English as a Foreign Language (TOEFL) or the International English Language Testing System (IELTS) exam and must score above 525 (paper) or 192 (computer) or 71 (Internet based) on the TOEFL or 6.0 on the IELTS. Schools or colleges or individual graduate programs may require higher standards on these tests.
- Applicants whose native language is not English are not required to take the TOEFL test if they have completed a baccalaureate or graduate-level degree

- program at an English-speaking college or university or have completed at least two semesters at a college or university in the United States as a full-time student and obtained a “B” average (3.0 GPA) or higher.
- Financial and other documents required by the International Scholars and Students Office to process immigration documents.
 - A certified English translation of all records and references not in English.
- Additional requirements and documentation may also be required.

Provisional Degree Students

A graduate program that wishes to admit an applicant who does not meet the criteria for admission as a regular degree student can petition the Graduate School to admit the applicant as either a regular or provisional degree student. The petition must include a letter from the graduate program director to the dean that outlines the rationale to support such an admission. If the student is to be admitted as a provisional student, then the petition must include a description of the conditions that the student must meet in order to become a regular degree student. The admission of the applicant as a provisional degree student requires the approval of the dean.

Based on the requirements of the graduate program and the recommendations of the graduate program director, the dean will determine and advise the program director and the student of the conditions that the student must satisfy to be transferred from provisional to regular status. The dean, in consultation with the program director, will also determine the time period (one or two semesters for full-time students and a maximum of four semesters for part time students) in which these conditions be met.

Provisional students are subject to the same standards of performance required of regular degree students, plus any other requirements imposed by program faculty as conditions of admission. At the end of the specified probationary period, the dean, in consultation with the program director will review the performance of the provisional student. The student must either have satisfied the requirements for conversion and be admitted to regular degree status or be dismissed from the graduate program to which they were provisionally admitted. The Graduate School will notify both the program director and the student whether the provisional student has satisfied the requirements and that their status has been transferred to that of a regular student, or has failed to meet the requirements and has been dismissed.

Application Procedures

Applicants seeking admission to UC Denver's graduate programs should apply directly to the appropriate department rather than the Graduate School or the Office of Admissions. See specific departments/programs for more information. Read all application instructions carefully before completing the online application. Online applications are submitted electronically to the department. Supplementary application

materials (if applicable) should be mailed to the department to which you are applying. Make sure to clearly mark the materials indicating your full name, social security number, the department in which you are applying and contents of the supplementary material. In addition, sufficient postage must be included if the materials are to be returned to the applicant. If applying to more than one department, you must submit a complete application and separate fee to each department. Students will receive offers of admission or rejection from the graduate department.

An applicant for admission must present:

- Parts I and II of the Denver Campus Graduate School application form, including the tuition classification form, which may be obtained from the departmental program coordinator.
- Two official transcripts for all academic work in colleges and universities completed to date.
- Three letters of reference. Have the nominators include the applicant's name and social security number in their letters of reference.
- A nonrefundable application fee (check or money order) of \$50 for domestic students or \$75 for international students. *No application will be processed until this fee is paid.*
- Any other material required specifically by the program faculty. This may include scores from the GRE or other examination. Check with program coordinators in the departments for additional information that may be required.

Again, the student must check with the program to determine the deadline for submitting the application and application fee to the program of interest.

When a prospective degree student applies for admission, the chairperson or a student admissions committee of the department will decide whether the applicant shall be admitted and make that decision known to the Office of Admissions.

Students who wish to apply for a graduate student award (e.g., fellowship, scholarship, assistantship) should contact their department before the application deadline for information, since deadlines are usually earlier for aid requests than for admission.

Readmission/Changing Programs

Former and current students who wish to be re-admitted or change from one degree program to another must meet the requirements of the new degree program and provide all items required of students applying to the Graduate School on the Downtown Campus for the first time. These applicants, however, may petition the program to which they were initially admitted to secure a release of transcripts and letters of recommendation supplied at the time of their initial application.

Transferring

Students transferring from another University of Colorado campus to the Denver Campus must apply and be accepted by the program on this campus.

A student who has completed a master's program at UC Denver must resubmit parts I and II of the graduate application for acceptance into the doctoral program.

Nondegree Students

A student who wishes to take graduate courses, but is not interested in earning a specific advanced degree, may apply as a nondegree student. Contact the Office of Admissions at 303-556-2704 for further information. Nondegree students will be allowed to register only on the campus to which they have been admitted.

Nondegree students who later desire to pursue a graduate degree program at this university are encouraged to submit the complete graduate application and supporting credentials to their department as soon as possible. Note that the GPA for courses taken as a nondegree student is calculated separately and is not incorporated in the official graduate GPA.

A department *may* recommend the transfer of as many as 9 semester hours toward the requirements of a master's degree for courses taken either as a student at another accredited graduate school, as a nondegree student at the University of Colorado or a combination.

A grade of B- or better must be earned. A 10-year time limit is in effect.

New Student Orientation

An orientation program for new students is held at the beginning of the fall and spring semesters, during the week prior to the first day of classes. The orientation program provides information to new students about activities and services available on the Denver Campus. Information on the expectations, opportunities, registration process, parking and securing ID cards is also provided. Academic advising sessions are held before registration for the term. Students should contact their schools and colleges for additional information on advising, as well as special orientation sessions that may be scheduled for their programs.

Registration

On the regular registration days of each semester, students who have been admitted to a graduate program are required to follow appropriate registration procedures.

Students should register for classes the semester they are accepted as graduate students. If unable to attend that semester, they must notify the Office of Admissions in addition to the department that has accepted them.

Withdrawal

A graduate student who desires to withdraw from the university must apply to the dean of his/her school or college for permission to withdraw in good standing. *A student who discontinues attendance in a course without official withdrawal will be marked as having failed the course. After the 10th week of the class, the student must have the associate dean's signature to drop a course.*

Assistantships and Fellowships

Graduate Student Teaching Appointments

Many departments employ graduate students as part-time instructors or teaching assistants. The instructorship is reserved for those advanced graduate students already possessing appropriate degrees who may be independently responsible for the conduct of a section or course. Contact the department for further information.

Research Assistantships

Research activities provide opportunities for graduate students to obtain part-time work as research assistants in many departments. Such funds are from external grants obtained by faculty members. Contact the department for further information.

Additional information about registration and financial aid are available in separate sections of this catalog. For information about tuition and fees, please visit the Bursar's office Web site.

Requirements for Advanced Degrees

Graduate Student Handbooks

Each graduate program is expected to provide students with a handbook—electronic, paper or both—indicating in some detail the curricular requirements, the expectations for satisfactory progress toward the degree completion, a timeline for the steps needed to meet these expectations and other features unique to each program, such as the composition and formation of student committees to guide and review the student's progress.

GPA Requirements and Quality of Graduate Work

A student is expected to maintain at least an overall 3.0 GPA in all work attempted while enrolled in a graduate program and to make satisfactory progress toward a degree in other respects as determined by his or her department.

For all graduate degrees, a grade below C is unsatisfactory and will not be counted toward the minimum requirements for these degrees.

Credit by Transfer

A limited amount of high-quality resident graduate work done in a recognized graduate school elsewhere within the time allowed may be accepted, provided it is recommended by the department concerned and approved by the school or college dean. The maximum amount of work that may be transferred to this university is 12 semester hours or 40 percent of the number of credits required for the master's degree, whichever is higher, and 30 hours for PhD degrees.

The school or college shall determine if graduate classes taken by an undergraduate can be transferred to a graduate program. They shall also determine if courses taken in the University of Colorado System are considered resident or transfer courses.

Courses taken as pass/fail or satisfactory/unsatisfactory will not be transferred. In addition, a grade of B- or above must be earned for a course to be transferred. Courses taken some time ago will need to be validated by the program director.

Use of English

A student who is noticeably deficient in the use of standard English in all oral and written work may not obtain an advanced degree from the University of Colorado. Ability to use the language with precision and distinction should be cultivated as an attainment of major importance.

The university reserves the right to test English proficiency for nonnative speakers of English to confirm and validate sufficiency for credit-bearing course work and degree programs.

Each department will judge the qualifications of its advanced students in the use of English. Reports, examinations and speech will be considered in estimating the candidate's proficiency.

Graduate Appeals

Details may be found in the [Graduate School Rules](#), which can also be accessed [online](#).

Master's Degree

A student regularly admitted to a graduate program and later accepted as a candidate for the master of arts, master of science or other master's degrees will be recommended for the degree only after certain requirements have been met.

The requirements stated below are minimum requirements; additional conditions may be set by the individual programs.

Students planning to graduate should ascertain current deadlines with their graduate programs. It is the graduate student's and the department's responsibility to see that all requirements and deadlines are met (e.g., changing of *IW* grades, notification of final examinations, etc.).

Departments or program committees may have deadlines that must be met by the graduate students in that department or program. It is the student's responsibility to ascertain and meet these requirements.

Minimum Requirements

The minimum requirement is 30 (semester) credits. While it is expected that most of this course work will be at the graduate (5000 and above) level, some graduate programs may allow particular undergraduate courses that are outside the discipline of their program to count toward the graduate degree. The proportion of undergraduate credit hours cannot exceed 20% of the course requirement of the graduate program and must be approved by the program director on a case-by-case basis. Undergraduate courses within the same discipline as the graduate program cannot be credited toward a graduate degree. If the program has a thesis option, the thesis must count for 3-6 credits. Independent study course work cannot exceed 25 percent (7.5 credits) of the 30 credits of course work required for the master's degree.

Admission to Candidacy

Details may be found in the [Graduate School Rules](#), which can also be accessed [online](#).

Master's Thesis Credit

Details may be found in the [Graduate School Rules](#), which can also be accessed [online](#).

Thesis Requirements

Details may be found in the [Graduate School Rules](#), which can also be accessed [online](#).

Time Limit

Master's degree students have five years from the date of the start of course work to complete all degree requirements.

Doctor of Philosophy

The doctor of philosophy (PhD) degree is the highest academic degree conferred by the university. To state the requirements for the degree in terms of semester hours would be misleading, because the degree is not conferred merely upon the satisfactory completion of a course of study, however faithfully pursued.

Students who receive this degree must demonstrate that they are proficient in some broad subject of learning and that they can critically evaluate work in this field. Furthermore, they must have shown the ability to work independently in their chosen field and must have made an original contribution of significance to the advancement of knowledge. The technical requirements stated below are minimal requirements for all candidates for the degree; additional conditions set by the departments or schools will be found in the announcements. Any department may make additional regulations consistent with these general rules.

Studies leading to the PhD degree must be chosen so as to contribute to special competence and a high order of scholarship in a broad field of knowledge. A field of study chosen by the student may be in one department or it may include two or more closely related departments. The criterion as to what constitutes an acceptable field of study shall be that the student's work must contribute to an organized program of study and research without regard to the organization of academic departments within the university.

Minimum Course Dissertation Requirements

Details may be found in the [Graduate School Rules](#) (PDF).

Examinations

Each PhD program will require at least comprehensive and final examinations. Notice of all examinations must be filed with the dean of the Graduate School at least two weeks prior to administration.

Comprehensive Examination

Details may be found in the [Graduate School Rules](#) (PDF).

Continuous Registration Requirements for Doctoral Candidates

Details may be found in the [Graduate School Rules](#) (PDF).

Dissertation Requirements

Details may be found in the [Graduate School Rules](#) (PDF).

Final Examination/Defense

Details may be found in the [Graduate School Rules](#) (PDF).

Time Limit

Doctoral degree students have eight years from the date of start of the doctoral program.

Graduate Faculty

The graduate programs at the Denver Campus Graduate School are delivered by faculty who are especially qualified by education and experience for graduate teaching and scholarship.

The university and college/school qualifications are published in the “Graduate Faculty” section of the Graduate School Rules. These rules distinguish between regular faculty, who are typically full-time members of the UC Denver faculty, and special faculty who may not be full-time, but who have special skills that enhance a college/school’s graduate course offerings. Faculty who meet these qualifications are admitted to membership in the graduate faculty of UC Denver. These are the only faculty members permitted to teach graduate courses or to serve on thesis, dissertation or graduate student committees at either campus of UC Denver.

Research Opportunities

UC Denver is strongly committed to discovering new knowledge and novel creative expressions through the research and creative efforts of its faculty. Such activities not only advance knowledge and enhance the quality of life, but strengthen teaching by grounding instruction in scholarship and professional practice. These activities constitute an important component of UC Denver’s service to the community at large. Externally funded projects are a major priority at the Denver Campus.

Research projects, training and public service programs encompass both traditional and nontraditional fields of study, focusing on issues important at all levels—city, state,

national and international. The benefits to campus are substantial. Externally funded activities

- assist in sustaining scholarly discourse and creative work
- enable faculty members to engage in the advancement of knowledge,
- provide the foundation for solving pressing practical problems of vital concern to society
- enhance the educational opportunities of students both at undergraduate and graduate levels

In addition, a great deal of research at the university is conducted without substantial external support. This research also yields important insights that are conveyed to a national audience through faculty publications, presentations, exhibits, performances and professional activities. Many members of the faculty are leaders within the national scholarly community. All these pursuits bring recognition to the university, establish the credibility of its faculty and enhance the value of the degree it confers.

The active engagement of graduate students in these scholarly and creative activities is the center piece of a vibrant program in graduate education. The mentorship of graduate students by the graduate faculty is a major objective of the educational process. In addition, the consolidation of the Downtown Campus with the Anschutz Medical Campus is opening new opportunities for collaborative, interdisciplinary work.

Information for International Students

The University of Colorado Denver provides a variety of international programs and educational opportunities and services for international and domestic students, scholars, faculty, staff and the greater Denver community. The goals of the Office of International Affairs are to raise international awareness on the campus, to provide opportunities for students to gain global competency needed in today's interdependent world and to create a campus community that is welcoming to international students and scholars.

International Admissions

Director: Derrick Alex

Telephone: +1-303-315-2230

Fax: +1-303-315-2246

Web site: www.internationaladmissions.ucdenver.edu

The Department of International Admissions at the University of Colorado Denver assists all international students with the international application process from first contact through issuance of initial immigration documents. The conversion of foreign grades into the United States system is done in-house. At the request of academic departments,

International Admissions also evaluates course work completed at foreign institutions by domestic applicants.

International Admissions representatives travel overseas to recruit qualified international students. The department also advises staff and faculty traveling overseas on possible networking with prospective international students, visiting Fulbright offices and foreign universities with UC Denver brochures and information.

International Admissions Application Deadlines

Undergraduate

<i>Term</i>	<i>Preferred Deadline</i>	<i>Final Deadline</i>

Summer	January 15	May 3

Fall	March 15	July 22

Spring	October 1	December 1

Graduate

<i>Term</i>	<i>Preferred Deadline</i>

Summer	January 15

Fall	February 15*, March 15

Spring	October 1

Final deadlines vary by department and by programs. Please contact the academic department for final deadline.

** College of Architecture & Planning*

English Language Requirement

Both Test of English as a Foreign Language (TOEFL) scores and the International English Language Testing System (IELTS) scores are accepted at UC Denver as proof of English language proficiency.

The UC Denver institutional code for TOEFL is 4875. Test information and registration materials for TOEFL may be obtained from the Ministry of Education, American Culture Center or educational institutions in the applicant's country. Information may also be obtained directly from:

Educational Testing Services, CN6151
Princeton, NJ 08541-6151 USA
606-921-9000

Web site: www.toefl.org

E-mail: toefl@ets.org

To receive test information and registration materials for IELTS please visit www.ielts.org or send an e-mail to ielts@ieltsintl.org.

Live-In Residence Requirement

The Denver Campus at UC Denver requires that all first-time international undergraduate students live in the Campus Village at Auraria apartments. Additional information about the facilities, policies and programming at Campus Village are available in the [Campus Life](#) section of this catalog.

Exemptions to the campus residency policy will be evaluated and made on a case-by-case basis. Exemption forms are available through the Office of Student Life, Tivoli room 303, or [online](#). It is not mandatory for international graduate students to live on campus. For further information, please contact the Office of Student Life at 303-556-3399 or at housing@ucdenver.edu.

Minimum Requirements for International Applicants

Undergraduate Freshman (First-Year) Students

College	TOEFL* IELTS		or	ACT/SAT
	Internet Based	Paper Based		
Arts & Media**	71	525	6.0	Not required
Business	71	525	6.0	Not required
Criminal Justice	71	525	6.0	Not required
Engineering	71	525	6.0	25/1150

Liberal Arts and Sciences	71	525	6.0	Not required

** The English language requirement can be satisfied with one of the three TOEFL exams or the IELTS exam.*

*** Some programs in Arts & Media require an audition.*

Undergraduate Transfer Students

College	TOEFL*		or IELTS		GPA
	Internet Based	Paper Based			
Arts & Media**	71	525	6.0	2.4	
Business †	71	525	6.0	3.0	
Criminal Justice	71	525	6.0	2.4	
Engineering‡	71	525	6.0	2.75	
Liberal Arts and Sciences	71	525	6.0	2.4	

** The English language requirement can be satisfied with one of the three TOEFL exams or the IELTS exam.*

*** Some programs in Arts & Media require an audition.*

† Must meet the same GPA requirements as domestic students.

‡ A minimum of one year's course work in calculus and calculus-based physics is required for engineering.

Graduate Students

College	TOEFL		IELTS	
	IBT Based	Paper Based		
Architecture & Planning	71	525	6.0	
PhD Design & Planning	90	575	6.5	
Business	71	525	6.0	

Education & Human Development

Master's	71	525	6.0
PhD	79	550	6.5
Engineering	71	525	6.0
Public Affairs	79	550	6.5
Criminal Justice	71	525	6.0
Most other programs	71	525	6.0

Minimum TOEFL and IELTS scores vary by academic department. English language requirement may be waived for admission in some programs for international students that have graduated with a bachelor's degree from foreign institutions where the language of instruction was English. Please contact International Admissions for more information.

On-Campus Employment

On-campus employment is permissible for F-1 and J-1 students provided they maintain immigration status, a minimum GPA and full-time enrollment. Students must request work authorization prior to commencing employment. Qualified students can apply for on-campus employment depending on availability.

Student Life

Office: Tivoli Student Union, 303

Telephone: 303-556-3399

Web site: www.ucdenver.edu/life/services/studentlife/Pages/home.aspx

It is the mission of the Office of Student Life to complement the academic program of studies at UC Denver and enhance the overall educational experience of students through the development of, exposure to and participation in social, cultural, intellectual, recreational, leadership and governance programs. The Office of Student Life is the advising, coordinating, resource and general information center for student organizations, student government, student programs and the academic honor societies. The office is responsible for the administration of the student fee budget and monitors all student fee expenditures to assure compliance with UC Denver and state of Colorado regulations and procedures. The director of student life represents the assistant vice chancellor for university life on selected UC Denver, tri-institutional and Auraria

committees and maintains effective lines of communication with Metropolitan State College of Denver, Community College of Denver and Auraria Higher Education Center.

Health Insurance

Office: Tivoli Student Union, 303

Telephone: 303-556-6273

All F-1 and J-1 students enrolled at the Downtown Campus are required to have health insurance. Students are automatically enrolled in the policy when they register for classes. J-2 dependents are encouraged to enroll in the policy but are eligible to submit comparable insurance coverage with another company in order to meet the Department of State insurance requirement. The Insurance Office welcomes F-2 dependents as well as other international students in other visa categories to enroll in the policy because the cost of health care in the USA is expensive. For further information about the mandatory policy or information about the waiver process, please contact the Student Health Insurance office at 303-556-6273.

Applying to Undergraduate Programs

1. Submit a complete International Application form along with a \$75 nonrefundable application fee, **payable to the University of Colorado Denver**. DO NOT SEND CASH. The application fee must be in U.S. funds only. (Use an international money order or your personal check payable in U.S. currency). Please send it to the following address:

By Air Mail:

University of Colorado Denver
International Admissions
P.O. Box 173364, Campus Box 185
Denver, CO 80217-3364
USA

By Courier (FedEx, DHL, UPS, etc.):

University of Colorado Denver
International Admissions
1380 Lawrence Street, 9th Floor, Suite 932
Denver, CO 80204-2029
USA
Telephone: 303-315-2230

2. Applicants must submit complete and "official" academic records of all course work from secondary schools and any universities attended. Official academic

records are records that are directly sent by the issuing institution to the university or are issued to the student in a sealed envelope to be delivered by the student to the university. If the documents are not written in English, they must be translated by a certified translator. The translation must be literal and no conversion of grades should be attempted by the translator. Undergraduate applicants who have more than one year full-time course work in a post secondary institution are not required to submit high school transcripts.

3. Both Test of English as a Foreign Language (TOEFL) scores and the International English Language Testing System (IELTS) scores are accepted at UC Denver as proof of English language proficiency. Applicants must submit an official TOEFL or IELTS score report that is no more than two years old. The UC Denver institutional code for TOEFL is 4875. The English language requirement may be waived if the applicant has completed six hours of college-level English composition with a B average (3.0 GPA or higher) from an accredited U.S. institution.
4. A financial statement and a bank statement from the sponsor showing the amount of funds available for support must be submitted to the university. If the student has been awarded a scholarship from a private source or government agency, enclose the award letter. All financial support documents and documentation from banks must be original and should not be more than six months old.
5. The Scholastic Aptitude Test (SAT) or American College Test (ACT) score is required for undergraduate freshman engineering applicants. **Please be advised that all documents submitted along with the application become the property of the university and will NOT be returned to the applicant.**

The student's file will not be considered complete, nor will it be submitted to the admissions committee, until all requested materials are received. To expedite processing, all the information should be sent at least five months before the semester in which you wish to enroll.

Applying to Graduate Programs

1. Submit a complete international application form along with a \$75 nonrefundable application fee, **payable to the University of Colorado Denver**. DO NOT SEND CASH. The application fee must be in U.S. funds only. (Use an international money order or your personal check payable in U.S. currency.) Please send it to the address on the application form.
2. Certified copies of "official" academic records from each college or university, and/or professional schools attended, should be submitted to the university. These official academic records should include courses completed, grades or

marks obtained and certificates or degrees awarded. Official academic records are records which are directly sent by the issuing institution to the university or are issued to the student in a sealed envelope to be delivered by the student to the university. If documents are not in English, they must be translated by a certified translator. The translation must be literal and no conversion of grades should be attempted by the translator.

3. Both Test of English as a Foreign Language (TOEFL) scores and the International English Language Testing System (IELTS) scores are accepted at UC Denver as proof of English language proficiency. (Applicants must submit an official TOEFL or IELTS score report which is no more than two years old.) The UC Denver institutional code for TOEFL is 4875. The English language requirement may be waived if the applicant has attended a college or university in the United States as a full-time student and has completed two semesters of academic work with a B average (3.0 GPA or higher). Some departments may also waive the English language requirement if the language of instruction for the students bachelor degree was English. An official letter from the academic institution may be requested to grant this waiver.
4. A financial statement and a bank statement from the sponsor showing the amount of funds available for support must be submitted to the university. If you have been awarded a scholarship from a private source or government agency, enclose the award letter. All financial support documents and documentation from banks must be original and should not be more than six months old.
5. Three letters of recommendation* (two letters for the Business School) from college or university professors must accompany the international application form. If you have been out of school for several years, we will also accept recommendations from your employer or supervisor. The admissions committee prefers academic recommendations over employer/supervisor recommendations. *The Department of Electrical Engineering requires that at least two of the letters be from university faculty.
6. The Graduate Management Admission Test (GMAT) is required if you are applying to the Business School. For more information, please visit www.mba.com. The GMAT institutional codes for Business School programs are:

Program	Code
MBA	MPB-0G-78
11-Month MBA	MPB-0G-65
MS Programs	MPB-0G-75

The Graduate Record Examination (GRE) is a requirement for admission consideration in many graduate departments and considered valuable for other programs. For more information, visit www.gre.org. You can also e-mail gre-info@ets.org or call +1.609.771.7670. The UC Denver institutional code for the GRE is 4875.

If you are applying for a master's degree in public administration or the criminal justice program, you must take the GMAT or GRE.

Departmental Requirements

Graduate applications are reviewed by a faculty committee in the department in which the student wishes to enroll. Only those students who have completed an undergraduate program that is equal to a U.S. bachelor's degree are considered for admission. Please check with academic departments for specific program requirements.

To access department Web sites, go to www.ucdenver.edu and click on Schools and Colleges.

Please be advised that all the documents submitted along with the application become the property of the university and will NOT be returned to the applicant.

The student's file will not be considered complete, nor will it be submitted to the admissions committee, until all requested materials are received. All students applying to any graduate program should contact their academic department for specific departmental requirements.

Department of Biology

Please visit the [department Web site](#) for admissions information.

Business School

The Business School also requires that you answer the following essay questions as part of your application. The essays should be limited to 200 words per question and included on a separate sheet of paper. Sign and date the pages and include them with your application:

1. How will the MBA/MS degree enhance your career plans? Project the kinds of positions you anticipate having five years after earning the degree. What experiences have you had that form the foundation of your goals?

2. Give a candid appraisal of yourself. Include some discussion of your strengths and weaknesses.
3. Discuss three of your achievements or accomplishments.
4. Describe your level of commitment to education and the ways in which you might make a special contribution to the learning experience of others.

School of Education & Human Development

Please visit the [school Web site](#) for additional application requirements.

Department of Electrical Engineering

Students applying for the MS in electrical engineering are required to choose an area of specialization from the following:

- Systems and Controls
- Signal Processing
- Communication Systems
- Microelectronic and VLSI
- Computer Engineering
- Photonics
- Power Systems

Expenses

The estimated tuition, living expenses which include room, board, books and insurance, for the fall 2009, spring 2010 and summer 2010 (9 months) semesters for international students are listed below. Expenses are subject to change without notice. Personal expenses and travel costs are not included. The tuition costs may change yearly, and fees, books and supplies vary according to program. Taking more credits may also increase the cost of the program. If summer is your first term on the Downtown Campus, you are required to be registered as a full-time student to maintain immigration status.

Estimated Undergraduate Costs* (12 credits)

Tuition and Fees	\$19,610
Room and Board	\$9,464

Books and Insurance	\$2,080

Total Shown on Immigration Document	\$31,154

For each dependent, estimate an additional	\$4,250

Estimated Graduate Costs* (6 credits)

Tuition and Fees	\$14,718

Room and Board	\$7,904

Books and Insurance	\$2,080

Total Shown on Immigration Document	\$24,702

For each dependent, estimate an additional	\$4,250

*Estimated costs are for fall 2009 and spring and summer 2010. These figures are for budgeting purposes only. Expenses are subject to change at any time without notice. Personal expenses and travel costs are not included.

International Student and Scholar Services

Director: Laura Welch

Telephone: +1-303-315-2230

The International Student Services unit provides a variety of services and programs to international students with a special emphasis on F-1 and J-1 students. The unit provides check-in sessions, orientations, work clinics and immigration advising, and we often partner with other UC Denver departments to offer programs and events to our international student population. For more information related to immigration matters, programs, and advising services for international students, please visit our Web site at www.ucdenver.edu/international.

Health Professions

[At a Glance: Anschutz Medical Campus](#)

[Undergraduate Health Profession Programs, Denver Campus](#)

[Graduate Health Profession Programs, Denver Campus](#)

[Health Profession Programs, Anschutz Medical Campus](#)

Undergraduate Health Careers Advisors

(Downtown Campus)
Charles Ferguson
303-556-4350
or
Kent Nofsinger
303-556-6218

Not sure what health specialty to enter?
Visit the Health Careers Web site for information:
clas.ucdenver.edu/healthcareers/

Graduate Advisors

See contact information under each school or college in this chapter.

Denise Leberer, CLAS
Advising
303-556-2868

Pre-nursing, pre-pharmacy and dental hygiene advising

Unlike most chapters in this catalog that focus on all programs for a particular school, this chapter provides information about programs within the schools and colleges that prepare students for a career in the health professions. On the Denver Campus, two colleges offer health-related undergraduate programs. Students who complete their prerequisites or undergraduate degrees on this campus may choose to apply to graduate and health professional programs on the Anschutz Medical Campus. Three schools on the Denver Campus offer health-related graduate programs. Denver Campus students may choose to stay and complete a master's or PhD degree on this campus or apply to programs on the Anschutz Medical Campus. The new state-of-the-art clinical and research facilities on the Anschutz Medical Campus offer students unparalleled training in the health professions. Admission to these programs is very selective, and admission to the Denver Campus does not assure admission to Anschutz Medical Campus programs. All programs on the Anschutz Medical Campus require incoming students to have either a bachelor's degree or minimum of 60 semester hours of undergraduate work completed before applying.

Undergraduate Programs on the Denver Campus

Two colleges on the Denver Campus offer health-related programs for undergraduate students seeking careers in the health sciences. *Admission to the Denver Campus, however, does not assure admission to any professional health career program.* Admission to those programs is a separate, competitive process open to qualified applicants from any accredited college or university.

College of Liberal Arts and Sciences

Department of Biology

Contact: Kimberly F. Regier

Telephone: 303-556-8309

E-mail: Kimberly.Regier@ucdenver.edu

Web site: clas.ucdenver.edu/biology/

To serve the needs of students who wish to obtain recognition for the acquisition of specialized skills in biology and to better prepare students for graduate school, health careers and jobs in industry, the Department of Biology offers a [certificate program in biotechnology](#) .

Health Careers

Advisor: Charles Ferguson

Telephone: 303-556-4350

Advisor: Denise Leberer

Telephone: 303-556-2868

Advisor: Kent Nofsinger

Telephone: 303-556-6218

Web site: clas.ucdenver.edu/healthcareers/

Health career advisors on the Downtown Campus assist in planning a course of study designed to improve your chances of success in the health career of your choice, including: dentistry and dental hygiene, medicine, medical technology, nursing, optometry, osteopathy, pharmacy, physical therapy, physician assistant, podiatry or veterinary medicine. A comprehensive list of health career options and additional information to help you mold your academic experience to your specific goals is available on the [health careers Web site](#)

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BA/BS-MD Program

The BA/BS-MD degree program is a partnership between University of Colorado Denver's College of Liberal Arts and Sciences and the University of Colorado School of Medicine. The purpose of the program is to assemble 8-10 outstanding students from broadly diverse backgrounds who are committed to serving the health care needs of Colorado. Acceptance into the program and successful completion of all requirements gives students a reserved seat in a top-ranked medical school and the freedom to explore other interests during their exciting college years at UC Denver. For more information, visit <http://babsmd.ucdenver.edu> or contact one of the health career advisors listed above.

Health and Behavioral Sciences

Contact for minor: Sharry Erzinger

Telephone: 303-556-6793

Web site: clas.ucdenver.edu/hbsc/

The health and behavioral sciences department offers a minor in community health science that is designed to provide undergraduates with the basic intellectual and methodological tools needed for public health. The minor in community health science supplements graduate degrees in a broad range of fields, including the biomedical sciences, social and behavioral sciences, public health, law, medicine, dentistry, pharmacy, business administration and health services research. The program is especially appropriate for students intending to pursue careers in public health, as well as the primary care specialties in medicine, nursing or health policy and administration.

While a major is not currently available, students may develop an individually structured major (ISM) that combines course work in community health sciences with that of related fields such as anthropology, biology and psychology. For details see the [Individually Structured Major BA](#) section in the [College of Liberal Arts and Sciences](#) chapter of the catalog.

College of Engineering and Applied Science

Contact: Engineering Student Services (advising)

Telephone: 303-556-4768

Web site: ucdenver.edu/engineering

The desirability of obtaining an engineering education prior to undertaking a study of medicine is increasing continually as medicine itself is evolving. A great deal of new equipment, most of it electronic, is being developed to assist the medical practitioner in treatment of patients. Bioengineering, engineering systems analysis, probability and

communication theory are highly applicable to medical problems. The College of Engineering and Applied Science offers students a pre-medicine option.

Graduate Programs on the Denver Campus

Business School

Director: Errol L. Biggs

Telephone: 303-556-5845

E-mail: Errol.Biggs@ucdenver.edu

Web site: ucdenver.edu/ACADEMICS/COLLEGES/BUSINESS/DEGREES/

The Business School offers three degree options for those interested in health administration—MBA, MS and an executive MBA. These three degree options are outlined in the [Business School](#) chapter of this catalog.

College of Engineering and Applied Science

Contact: Lynn E. Johnson

Telephone: 303-556-2372

E-mail: MEngGIS@ucdenver.edu

There are numerous ways in which geographic information systems (GIS) are used throughout health care and public health, including environmental health and epidemiology, disease surveillance and health services research. The College of Engineering and Applied Science offers a master of engineering degree with a GIS option, which emphasizes quantitative methods in the development and application of GIS technologies to a spectrum of discipline-specific settings having significant spatial dimensions.

College of Liberal Arts and Sciences

Department of Anthropology

Graduate Director: Christopher Beekman

Telephone: 303-556-6040

Fax: 303-556-8501

E-mail: Christopher.Beekman@ucdenver.edu

Web site: clas.ucdenver.edu/anthropology/

Students may earn an MA with a research concentration in medical anthropology or pursue an integrated MA/PhD in health and behavioral sciences. Details of these

programs are included in the [Department of Anthropology](#) section in the [College of Liberal Arts and Sciences chapter](#) of this catalog.

Health and Behavioral Sciences

Program Director: Richard Miech

Telephone: 303-556-8422

E-mail: Richard.Miech@ucdenver.edu

Web site: clas.ucdenver.edu/hbsc/

The interdisciplinary PhD program in health and behavioral sciences provides an overarching framework integrating social and behavioral science perspectives on health and health care, while allowing the student to select and fully develop a particular research interest and professional career. This program has become a leader regionally in the application of GIS to health-related research.

Depending upon a student's chosen area of concentration, the successful graduate will gain expert knowledge of:

- research design and methods
- the determinants of health and disease
- the structure and organization of health care systems
- behavioral choices and how to use them to enhance wellness
- the contribution of individual, social and cultural factors to health behavior
- how guided change in health care systems may enhance quality, efficacy and access

The significance of these skills in addressing our current health care crisis will insure that graduates will be in demand in a number of employment sectors, ranging from community and public health organizations to nonprofit research organizations and private health care settings.

Programs on the Anschutz Medical Campus

Information about Anschutz Medical Campus programs are in this chapter is for reference only. Contact individual schools and program directors for details.

Graduate School

Contact: Office of the Dean

Telephone: 303-724-2915

Web site: www.ucdenver.edu/graduateschool

Degree Programs: Master of science programs in: biostatistics; genetic counseling; clinical science; nursing—nurse midwifery, nurse practitioner (adult, family, family

psychiatric/mental health, pediatric, women's health care), adult clinical nurse specialist, health care informatics, pediatric special needs

Doctor of philosophy in: biochemistry and molecular genetics; biomedical sciences program; biostatistics; cancer biology; cell biology, stem cells and development; clinical science; computational bioscience; epidemiology; health services research; human medical genetics; immunology; microbiology; molecular biology; neuroscience; nursing; pharmacology; pharmaceutical sciences; physiology and biophysics; reproductive sciences; structural biology and biophysics; toxicology

At the University of Colorado Denver Anschutz Medical Campus Graduate School, students learn to push the frontiers of human health and disease in more than a dozen basic science, clinical and nursing disciplines. In conjunction with the UC Denver School of Medicine, the Graduate School offers a joint MD/PhD in the medical scientist training program which develops investigators with a broadly-based knowledge of both basic and clinical biomedical sciences. The school's personal mentor-student emphasis provides a distinctive learning experience.

[Health Sciences Programs](#)

School of Dental Medicine

Contact: Office of Admissions and Student Affairs

Telephone: 303-724-7120

Web site: www.ucdenver.edu/sdm

Degree Programs: doctor of dental surgery, international student program, orthodontics, periodontics and general practice residency programs

The University of Colorado Denver School of Dental Medicine currently enrolls 52 dental students annually. As a graduation requirement, the 202 dental students also provide dental clinical care to underserved populations throughout the state of Colorado. In addition to our nationally recognized DDS program, our post-doctoral in orthodontics, periodontics, general practice residency programs are thriving. Consistent with our mission to increase access to education and care, the International Dental Student Program began in January 2005, which offers qualified graduates of foreign dental programs the opportunity to earn a doctor of dental surgery degree. The University of Colorado Denver School of Dental Medicine is the only regional university-based dental implant center. In addition, the school pioneers research in oral cancer, salivary gland disease, neurobiology and pain control.

School of Medicine

Contact: Office of Admissions

Telephone: 303-724-8025

Web site: <http://medschool.ucdenver.edu>

Degree Program: Doctor of medicine

The University of Colorado Denver School of Medicine is nationally and internationally respected for its education, research, patient care and community service programs. Faculty members teach and care for patients at University of Colorado Hospital, The Children's Hospital, Denver Health, National Jewish Health and the Denver V.A. Medical Center, working side by side with nearly 1,000 graduate doctors training in medical specialties and generalist care at the university. In addition to providing exceptional patient care and education, the medical school's greatest achievement has been the ability to attract gifted faculty and students. The school's physicians and research scientists have pioneered medical breakthroughs that have become national and world models.

Child Health Associate/Physician Assistant

Contact: Office of Admissions

Telephone: 303-724-7963

E-mail: chapa-info@ucdenver.edu

Web site:

www.ucdenver.edu/academics/colleges/medicalschoo/education/degree_programs/PAProgram/Pages/Home.aspx

Degree Program: Master of physician assistant studies (MPAS)

Ranked eighth in the nation, the child health associate/physician assistant (CHA/PA) is a primary care PA with specialized training in the care of infants, children and adolescents as well as training in the care of adult patients. Program graduates are prepared to provide comprehensive medical care to patients of all ages and practice under state and national guidelines established for all PAs. Graduates are employed in many settings including managed care organizations, community health centers, physician's offices, public health agencies, hospitals, school-based adolescent clinics, emergency departments and rural and inner city health care delivery sites.

Physical Therapy

Contact: Physical Therapy Program

Telephone: 303-724-9144

E-Mail: susan.halloran@ucdenver.edu

Web site:

www.ucdenver.edu/academics/colleges/medicalschoo/education/degree_programs/pt/Pages/PT.aspx

Degree Program: Doctor of physical therapy (DPT)

The University of Colorado Denver physical therapy program offers a three-year, post-baccalaureate professional education program of didactic learning and extensive clinical experiences culminating in a doctor of physical therapy degree. Graduates are prepared to excel in the physical therapy profession and adapt to the ever-evolving health care environment. As part of the School of Medicine, our entry-level program has been continuously accredited for more than 60 years. Foundational elements of our curriculum include movement science, evidence-based practice, patient-centered care and the delivery of interprofessional health care services as doctors of physical therapy.

Graduate Medical Education (Residency and Fellowship Programs)

Telephone: 303-724-6031

Web

site: www.ucdenver.edu/ACADEMICS/COLLEGES/MEDICALSCHOOL/EDUCATION/GRADUATEMEDICALEDUCATION/Pages/graduatemedicaleducation.aspx

The University of Colorado Denver School of Medicine and affiliated hospitals provide graduate medical education (training of residents and fellows) in more than 60 specialties and subspecialties. The Graduate Medical Education Manual provides details about these opportunities on the Anschutz Medical Campus.

Continuing Medical Education

Telephone: 303-724-3552

Web site:

ucdenver.edu/academics/colleges/medicalschooleducation/continuingmedicaleducation

The School of Medicine provides continuing education opportunities for physicians and other health care professionals worldwide. The mission is to enhance the knowledge, skills and performance of physicians and other health care professionals and, in the process, to improve the health care of the populations they serve.

College of Nursing

Contact: Office of Student Affairs and Diversity

Telephone: 303-724-1812

Web site: www.nursing.ucdenver.edu

Degree Programs: BS in nursing, MS in nursing, doctor of nursing practice (DNP), PhD in nursing

In 2008, the College of Nursing celebrated 110 years of contributions to nursing education, practice and research. The college offers four degrees: BS, MS, DNP and

PhD, and is one of 15 selected U.S. nursing schools piloting a program advancing quality and safety education in nursing (QSEN). The college's BS graduates consistently place well above the state and national average on the nursing licensure examination. The college annually ranks in the top schools of nursing in the country for the quality of its graduate programs. The College of Nursing is a leading educator of doctorally prepared nurses, internationally recognized for the quality of its graduates as nurse scientists, educators and clinical leaders.

School of Pharmacy

Contact: Office of Student Services

Director: Beverly Brunson

PharmD Telephone: 303-724-2882

PhD Telephone: 303-724-7263

Fax: 303-724-7330

Web site: www.ucdenver.edu/pharmacy

Degree Programs: Doctor of pharmacy (PharmD), PhD in toxicology, PhD in pharmaceutical sciences

As drug products become more potent, more complex and more numerous, the need for pharmacists to assume a more active role in consultation and patient counseling has increased remarkably. The University of Colorado Denver School of Pharmacy is one of the nation's top-ranked pharmacy schools and is committed to pharmaceutical education, research and patient care. The school's more than 500 professional and graduate students learn about the chemical and physical properties of medicinal agents, the biology of disease and the actions of drugs on the human body, while pursuing either a doctor of pharmacy or PhD degree. The school also provides continuing education programs to pharmacists and other health practitioners throughout the state.

Colorado School of Public Health

Contact: Colorado School of Public Health

Telephone: 303-724-4613

Web site: <http://publichealth.ucdenver.edu>

Degree Programs: Master of public health (MPH) professional degree; master of science (MS) in biostatistics or epidemiology; doctor of philosophy (PhD) in analytical health sciences—biostatistics, epidemiology, health services research; doctor of public health (DrPH) professional degree

The Colorado School of Public Health is the first and only school of public health in the Rocky Mountain region. Collaboratively formed by University of Colorado Denver, Colorado State University and University of Northern Colorado, the school supports

students, practitioners and communities, with access to educational programs, innovative research and community services.

The school offers professional, graduate, residency and certificate programs. Each program provides the training that students need to succeed in general and specialized public health careers. Programs of study focus on a variety of professional interests including animals, people and the environment; biostatistics and informatics; community and behavioral health; community health education; environmental and occupational health; epidemiology; global health and health disparities; health and exercise science; health communication; health services research; health systems, management and policy; occupational medicine; preventive medicine; and public health nutrition. Students entering the public health programs have access to the collective resources and expertise offered by the collaborating universities and multiple community and government partnerships.

CU Online

- [Delivery Media](#)
- [Programs](#)
- [Business School](#)
- [School of Education & Human Development](#)
- [College of Engineering and Applied Science](#)
- [College of Liberal Arts and Sciences](#)
- [School of Public Affairs](#)
- [Faculty](#)

[At A Glance: CU Online](#)

[Frequently Asked Questions](#)

[Computer Requirements](#)

You have a life filled with family and friends. A life filled with work and responsibilities. A life—filled... which makes a rigid school schedule seem even more impractical and unrealistic. That's why, in 1996, the University of Colorado Denver developed CU Online for its Downtown Campus, making a sought-after education not only convenient, but conceivable. And since becoming one of the first fully accredited online programs in the country, CU Online has continued to grow and evolve into the respected and renowned institution it is today.

Essentially, CU Online allows you the opportunity to attend the University of Colorado Denver on your time, at your convenience, while also providing the recognition and respect that only a brick and mortar university can offer. So besides the safety net of an actual campus, once you graduate you can proudly display your diploma with a level of honor and admiration that sometimes isn't found with virtual institutions.

But it's not only one or two electives or random courses; you can actually complete an entire degree (or 16) all online, without stepping a foot on campus. CU Online allows you to enjoy the same stimulating courses, top-notch faculty and dedicated resources as the on-campus students...but with the freedom and convenience that online courses naturally provide.

However, CU Online didn't always have the number of degree programs (16), certificates (10) or courses (350+) that are currently available. In that first semester in 1996, you could choose from up to three courses. Slightly less than the 216 courses that were available fall 2009. And that's only the beginning. CU Online is well on its way to achieving its initial goal of providing students like you with the most comprehensive set of online courses, services and resources of any institution of higher education in the world.

So whether you're looking to start a degree, finish one or just take the occasional course or two, CU Online provides the opportunity to tailor courses around your life...rather than tailor life around your courses.

Delivery Media

CU Online courses run on a traditional semester schedule and, although courses are not self-paced, they are flexible. As a student, you're able to log into your courses on a regular basis, at your convenience. You will be assigned a home page to access courses, find lectures and assignments and participate in class discussions and real-time course chat rooms.

Each course is developed to offer everything you would expect from UC Denver. But online, instead of on-campus. So instructors deliver course content and lectures through cutting edge technology, such as streaming audio, video and multimedia slide shows.

Some professors offer weekly assignments to help ensure you are right on track with the materials being taught. Quizzes and tests can be timed to help affirm your mastery of the material. In addition, assignments may be uploaded to the site, which is like creating an attachment in e-mail.

Exams are taken and administered in a variety of ways. They can be administered online by using your course software with an Internet browser, as a take-home exam where you print out a hard copy and hand it in, or proctored by an outside party, an instructor or the teacher's assistant (TA).

As a bonus, if you are registered for only online courses, you are simply responsible for the information technology fee and the student information system fee. **All other traditional fees are waived**, along with the incidental fees associated with commuting to campus, parking, child care, etc. There is also a special tuition discount if you are an out-of-state student enrolled only in online courses.

Programs

CU Online offers courses in liberal arts and sciences, arts and media, business, education, engineering, public affairs and architecture and planning. Below are the complete degree programs and certificates that can be completed exclusively through online courses:

Degree Programs

- [Bachelor of arts in English writing \(BA\)](#)
- [Bachelor of arts in nursing, RN to BS](#)
- [Bachelor of arts in sociology \(BA\)](#)
- [Doctor of nursing practice \(DNP\)](#)
- [Doctor of pharmacy, nontraditional pharmD \(NTPD\) - Extended studies](#)
- [Doctor of philosophy \(PhD\) in nursing](#)
- [Master of arts in early childhood education \(MA\)](#)
- [Master of arts in information and learning technologies \(MA\), eLearning design and implementation](#)
- [Master of arts in information and learning technologies \(MA\), school library](#)
- [Master of business administration \(MBA\)](#)
- [Master of criminal justice \(MCJ\)](#)
- [Master of engineering \(MEng\), geographic information systems](#)
- [Master of public administration \(MPA\)](#)
- [Master of science in information systems \(MS\), enterprise technology management](#)
- [Master of science in management and organization \(MS\), managing for sustainability](#)
- [Master of science in nursing \(MS\), informatics option](#)

Certificates, Modules and Other Online Programs

- [Certificate in palliative care](#)
- [Clinical educator certificate](#)
- [Designing eLearning environments \(DeE\) certificate](#)
- [Early childhood special education, specialist license](#)
- [Early literacy certificate](#)
- [Health care informatics certificate](#)
- [Nonprofit management certificate](#)
- [Special education generalist endorsement](#)
- [Teaching English to speakers of other languages \(TESOL\) certificate](#)

The semester hours you earn through online courses are **identical to those earned through traditional on-campus courses**. UC Denver is a fully accredited institution, making semester hours easily transferable to other universities. And if you graduate solely by taking online courses, the degree is the same.

Business School

Master of Business Administration (MBA)

The professional MBA program at the UC Denver Business School is outstanding in its ability to integrate leading-edge research with practical business applications in an intellectually challenging environment. Business courses are accredited through the Association to Advance Collegiate Schools of Business International (AACSB).

The professional MBA program emphasizes active learning through case studies, computer simulations, real-world group projects, class discussions and involvement with Colorado businesses. A master's in business administration degree from UC Denver prepares you with the management and leadership skills required to achieve your personal career goals.

The professional MBA can be individualized and tailored to your specific interests and career goals. Below are the four MBA specializations that you can complete entirely online.

- Enterprise technology management (ETM)
- Finance (FNC)
- Information systems (IFS)
- Managing for sustainability (MNS)

The professional MBA program requires the completion of 48 semester hours, including 30 semester hours of required MBA core courses, 3 semester hours in international business and 15 semester hours of electives, which you'll choose from other graduate business courses. The following are examples of Business School courses available online from spring 2007 through spring 2009 along with proposed courses. Visit www.cuonline.edu/catalog for up-to-date information about online degrees and available courses. All courses are 3 semester hours.

- Analysis, Modeling and Design
- Analyzing and Interpreting Accounting Information
- Applied Economics for Managers
- Business Forecasting
- Business Intelligence Systems
- Business Process Management
- Data Analysis for Managers
- Data Base Management Systems
- Emerging Technologies
- Enterprise Knowledge Management
- Entrepreneurial Financial Management
- Financial Decisions and Policies
- Financial Management

- Financial Modeling
- Global Enterprise Systems
- Information Systems Management and Strategies
- Information Systems Security and Privacy
- International Corporate Governance
- Internet Marketing
- Investment Management Analysis
- IT Infrastructure
- IT Project Management
- Legal and Ethical Environment of Business
- Macroeconomics and Financial Markets
- Management of Financial Institutions
- Management of Operations
- Managing Individuals and Teams
- Marketing Management
- Object-Oriented Business Programming
- Quantitative Methods for Finance
- Security Analysis and Firm Valuation
- Service Oriented Architecture
- Short-term Financial Management
- Strategic Management
- Web Site Development Practice and Technologies

Program contact: Shelly Townley, Shelly.Townley@ucdenver.edu.

Master of Science in Information Systems — *Enterprise Technology Management (ETM)*

The information systems (IS) program in the Business School has established UC Denver as a leader and innovator in the field. As part of that innovation, the online master of science (MS) program has been developed to help keep you one step ahead of your collegiate peers when pursuing your information based field of choice. You can now complete two distinct specializations completely online

The enterprise technology management specialization focuses on information technology as the prime driver and enabler of business strategy. Courses cover the emerging technologies and the evolving role and importance of IT in modern organizations while concentrating on the strategic, technological, financial and organizational issues involved with the effective management of information technology within an enterprise.

The following are examples of courses available online from spring 2007 through spring 2009 along with proposed courses. Visit www.cuonline.edu/catalog for up-to-date information about online degrees and available courses. All courses are 3 semester hours.

- Analysis, Modeling and Design
- Analyzing and Interpreting Accounting Information
- Business Intelligence Systems
- Business Process Management
- Data Analysis for Managers
- Data Base Management Systems
- Emerging Technologies
- Financial Management
- Global Enterprise Systems
- Information Systems Management and Strategies
- Information Systems Security and Privacy
- IT Infrastructure
- IT Project Management
- Legal and Ethical Environment of Business
- Management of Operations
- Managing Individuals and Teams
- Marketing Management
- Strategic Management

Program contact: Shelly Townley, Shelly.Townley@ucdenver.edu.

Master of Science in Management and Organization -

Managing for Sustainability

The MS in management focuses on group and organizational effectiveness, organizational design and organizational change. The MS in management and organization program prepares you for upper-level managerial positions in the public and private sectors. Upon completion of this program you will:

- Create effective strategies for success in today's complex and constantly changing business environment
- Effectively design organizations
- Learn how to manage interpersonal dynamics
- Implement planned change and organizational transformations

The course work for the MS in management degree consists of 10 courses (30 semester hours). The four required courses will provide you with a broad perspective and solid foundation in management. The following are examples of courses available from spring 2007 through spring 2009 along with proposed courses. Visit www.cuonline.edu/catalog for up-to-date information about online degrees and available courses. All courses are 3 semester hours.

- Accounting and Finance for Sustainability
- Business and the Natural Environment
- Designing Effective Organizations
- Managing for Sustainability

- Managing Individuals and Teams
- Managing People for Competitive Advantage
- Organizational Development
- Social Marketing

Program contact: Shelly Townley, Shelly.Townley@ucdenver.edu.

College of Engineering and Applied Science

Engineering - *Geographic Information Systems*

The master of engineering degree—geographic information systems (MEng-GIS) option is directed to engineers and other environmental and urban infrastructure professionals seeking skills in using and managing these rapidly developing spatial data technologies.

The MEng-GIS degree at UC Denver is multidisciplinary involving civil engineering (environmental, geodesy and remote sensing, water resources, geotechnical and transportation), geography and environmental sciences (remote sensing, ecology, air quality, environmental impact assessment), urban and regional planning (spatial analysis, community development), information systems (data structures, database systems and software engineering), applied mathematics (probability and statistics, networks, simulation and optimization) and engineering management strategic planning, project management, policies).

The MEng-GIS degree program consists of 30 graduate semester hours - 9 courses, plus one course of and advanced applications project. The following are examples of courses available online from spring 2007 through spring 2009 along with proposed courses. Visit www.cuonline.edu/catalog for up-to-date information about online degrees and available courses. All courses are 3 semester hours.

- Advanced Remote Sensing
- GIS Analyses—Theory and Practice
- GIS Laboratory (two or more versions may be available)
- GIS Management and Policies
- GIS Relational Database Systems
- GIS Spatial Database Development
- Introduction to Geographic Information Systems
- Master's Report Multiple Factor GIS Analysis

Program contact: Lynn Johnson, MEngGIS@ucdenver.edu.

College of Liberal Arts and Sciences

Bachelor of Arts in English Writing (BA)

The Department of English writing major offers you the knowledge and skills necessary to write well in a number of contexts including nonprofit organizations, industry and academia. This is accomplished through a combination of traditional and new media courses and through the service learning and internship opportunities provided for you. The flexible and interdisciplinary nature of this degree is designed to prepare students wishing to enter graduate school or pursue jobs in education, law, editing, professional writing and other areas.

If you're majoring in writing, you must present a total of 39 hours for the major, of which 27 hours must be earned in upper division courses. The following are examples of courses available online from spring 2007 through spring 2009 along with proposed courses. Visit www.cuonline.edu/catalog for up-to-date information about online degrees and available courses. All courses are 3 semester hours.

- Advanced Composition
- Argumentation and Logic
- Business Writing
- Grammar, Rhetoric and Style
- Introduction to Creative Writing
- Language Theory
- Senior Seminar in Writing
- Special Topics in Rhetoric and Writing
- Technical Writing

Program contact: Joanne Addison, Joanne.Addison@ucdenver.edu.

Bachelor of Arts in Sociology (BA)

Sociology is the study of group life: its characteristics, changes, causes and consequences. It combines scientific and humanistic perspectives in the study of urban and rural life, family patterns and relationships, social change, intergroup relationships, social class, environment, technology and communications, health seeking behavior and social movements.

A major in sociology is accomplished by completing a general core of 19 hours, plus a minimum of 15 electives in sociology, for a total of 34 hours with an average grade of C (2.0) in all courses. The following are examples of courses available online from spring 2007 through spring 2009 along with proposed courses. Visit www.cuonline.edu/catalog for up-to-date information about online degrees and available courses. All courses are 3 semester hours.

- Contemporary Sociological Theory
- History of Sociological Theory
- Introduction to Research Methods
- Introduction to Sociology
- Introduction to Statistics

- Urban Sociology

Program contact: Rachel Watson, Rachel.Watson@ucdenver.edu.

Teaching English to Speakers of Other Languages (TESOL) Certificate

If you're a nondegree-seeking student, this certificate program allows you the opportunity to receive a credentialed certificate in teaching English to speakers of other languages (TESOL). The certificate courses can also be applied to the graduate degree program in Applied Linguistics without increasing the minimum number of semester hours required to graduate.

This certificate is 12 semester hours and is geared toward either native English speakers who want to teach overseas or international students who want to teach English in their home country or other countries. The following are examples of courses available online from spring 2007 through spring 2009 along with proposed courses. Visit www.cuonline.edu/catalog for up-to-date information about online degrees and available courses. All courses are 3 semester hours.

- Cross Cultural Communication
- Language Theory
- Principles and Practices of Second Language Acquisition
- Teaching Second Language and Second Dialect

Program contact: Ian Ying, hongguang.ying@ucdenver.edu.

College of Nursing (Anschutz Medical Campus)

Bachelor of Science in Nursing - *RN to BS*

The RN-bachelor of science degree program, based on the Colorado Nursing Articulation Model, is an educational pathway available for registered nurses who desire career mobility and professional development.

The following are examples of courses available online from spring 2007 through spring 2009 along with proposed courses. Visit www.cuonline.edu/catalog for up-to-date information about online degrees and available courses.

- Health Assessment for RN's (Available in Summer)
- Nursing Care/ Case Management (Available in Spring)
- Nursing Research (Available in Spring)
- Professional Nursing: Environmental Context for Practice: Bioethical and Legal Foundations (Available in Spring)
- Professional Nursing: Reflective Practice, Social Justice, Issues & Trends (Available in Fall)

- Public Health Nursing (Available in Fall Block II, Spring Block I & II)
- Senior Integrated Practicum (Available in Fall Block I, Spring Block I & II)

Program contact: Nina Sanchez: Ninali.Sanchez@ucdenver.edu.

Certificate in Palliative Care

Palliative care refers to the comprehensive management of the physical, psychological, social, spiritual, and existential needs of patients with progressive illness and their families. This program integrates palliative care principles into the practice of health care professionals for those working in acute and long-term care in both rural and urban settings in Colorado and beyond, and to provide theory review for the HPNA Palliative Care Nursing Credentialing Examination.

The following are examples of courses available online from spring 2007 through spring 2009 along with proposed courses. Visit www.cuonline.edu/catalog for up-to-date information about online degrees and available courses.

- Advanced Concepts in Palliative Care
- Complex Symptoms Management in Palliative Care

Program contact: Judy Campbell: Judy.Campbell@ucdenver.edu.

Clinical Educator Certificate

The clinical educator certificate is a comprehensive program that provides the knowledge and skills needed to successfully develop clinical education programs for nurses in your facility. Graduates with this certificate assume professional roles in clinical education, including:

- Clinical/nursing education director/manager
- Community and public health educator
- Perioperative educator clinical nurse specialist educator/manager
- Clinical instructor

The following are examples of courses available online from spring 2007 through spring 2009 along with proposed courses. Visit www.cuonline.edu/catalog for up-to-date information about online degrees and available courses.

- Clinical Teaching Theory
- Planning and Evaluation
- Writing a Business Plan

Program contact: Judy Campbell: Judy.Campbell@ucdenver.edu.

Doctor of Nursing Practice (DNP)

As a DNP graduate, you will be prepared to be a clinical leader who designs models of health care delivery, evaluates clinical outcomes, identifies and manages health care needs of populations, and uses technology and information to transform health care systems.

In fall 2005, the University of Colorado Denver College of Nursing became the first school in the Rocky Mountain region to initiate the doctor of nursing practice (DNP) degree. The University of Colorado's DNP program has approval from the Board of Regents and the Colorado Commission on Higher Education (CCHE).

The following are examples of courses available online from spring 2007 through spring 2009 along with proposed courses. Visit www.cuonline.edu/catalog for up-to-date information about online degrees and available courses.

- Applied Evidence-based Practice
- Context of Practice, Population and Patient Management
- Cultural Competence for Advanced Practice
- Designing Theory-guided Models of Care
- DNP Capstone Clinical Evaluation Project
- DNP Capstone Clinical Evaluation Proposal Development
- DNP Leadership Role Residency
- Emerging Therapies for Advanced Nursing Practice
- Epidemiology and Environmental Health
- Inferential Statistics
- Leadership, Management, Innovation and Entrepreneurship
- Management Information for Decision Support
- Practice Epistemology: Expanding Ways of Knowing for Reflective Practice

Contact: nursing.admissions@ucdenver.edu

Doctor of Philosophy (PhD) in Nursing

As a nurse scholar, this PhD program prepares you to advance the art, science and practice of the discipline. PhD preparation in nursing promotes knowledge development for reflective, theory-based and research-guided nursing practice. The PhD program equips you to conduct knowledge development and scholarly inquiry and to be actively engaged in many roles including:

- Administrator
- Clinician-scholar
- Educator
- Health care policy analyst
- Researcher

The following are examples of courses available online from spring 2007 through spring 2009 along with proposed courses. Visit www.cuonline.edu/catalog for up-to-date information about online degrees and available courses.

- Experimental Design and Analysis
- Methods of Disciplined Inquiry in Nursing
- Multivariate Design and Analysis
- Philosophy of Human Science
- Qualitative Empirical Research
- Quality and Cost Effective Outcomes: Macro-level
- Quality and Cost Effective Outcomes: Micro-level
- Quantitative Interpretive Research
- Research Practicum & Ethics of Inquiry
- Selected Topics in HEHIH
- Seminar in HEHIH
- The Discipline of Nursing
- Theory and Knowledge Development

Contact: nursing.admissions@ucdenver.edu

Health Care Informatics Certificate

As a health care professional, this health care informatics program provides an opportunity for health care professionals to acquire knowledge and skills in the rapidly progressing field of informatics. With recent movements toward the adoption of the electronic health record and the need for IT infrastructure to increase patient safety and facilitate evidence-based practice, there is a growing need for more informatics specialists. This certificate provides opportunities for those new to the field and those who may be practicing in the field and need a professional update.

The certificate is a 9 semester hour program. The following are examples of courses available online from spring 2007 through spring 2009 along with proposed courses. Visit www.cuonline.edu/catalog for up-to-date information about online degrees and available courses.

- Database Management Systems
- Decision Support
- e-Health
- Foundations of Healthcare Informatics
- HCI Design Principles
- IT Systems Life Cycle
- Knowledge Management
- Semantic Representation

Program contact: Judy Campbell: Judy.Campbell@ucdenver.edu.

Master of Science (MS) in Nursing - Informatics Option

The College of Nursing's master of science program in nursing is designed to prepare you for advanced nurse practice roles. You're taught to formulate clinical, administrative or policy decisions to promote health with clients experiencing wellness, acute or chronic illness, and to develop, manage, and evaluate the care within communities and health care systems.

The program is structured to provide a foundation for career paths for future leaders in advanced nursing practice and to prepare lifelong learners who demonstrate knowledge, skill, critical thinking and flexibility. The master of science program also provides the foundation for doctoral study in nursing.

The following are examples of courses available online from spring 2007 through spring 2009 along with proposed courses. Visit www.cuonline.edu/catalog for up-to-date information about online degrees and available courses.

- Advanced Practicum: Healthcare Informatics
- Database Management Systems
- Decision Support
- E-Health
- Foundations of Health Care Informatics
- Health Systems, Policy & Social Justice
- Human Computer Interaction Design
- Human Technology Interface
- Information Systems Life Cycle
- Knowledge Management
- Philosophic, Theoretic & Ethical Foundations of APN
- Research Methods for Advanced Practice
- Semantic Representation

Contact: nursing.admissions@ucdenver.edu

School of Education & Human Development

Designing eLearning Environments Certificate

This is an exciting time if you're an instructional design and technology professional. There is a growing demand for your eLearning expertise, knowledge and skills, and you will find limited competition in this growing field. The designing eLearning environments (DeE) certificate program focuses specifically on the skills needed to design and facilitate online learning opportunities for learners in K–12, higher education and corporate settings. This program is perfect if you're not interested in a graduate degree.

The DeE certificate program is a sequence of three online courses. The following are examples of courses available online from spring 2007 through spring 2009 along with proposed courses. Visit www.cuonline.edu/catalog for up-to-date information about online degrees and available courses. All courses are 3 semester hours.

- Designing and Teaching in eLearning Environments
- Developing eLearning Instruction
- Integrating Media in eLearning Environments

Program contact: Jannette Noonan, education@ucdenver.edu.

Early Childhood Special Education, Specialist License

As a graduate earning the early childhood special education specialist license you'll have the theoretical background and skills in assessment, teaching and collaboration necessary to work with young children with disabilities. As a graduate with this license you can assume professional roles like lead teacher, early interventionist, service coordinator, Child Find team member, special education consultant and behavior specialist.

The ECSE specialist course sequence consists of 40 semester hours. A total 800 hours of fieldwork/practica is required for the license. Approximately 290 hours of fieldwork are associated with course assignments; 510 hours of intense, culminating practica occur toward the end of the second year of study. The following are examples of courses available online from spring 2007 through spring 2009 along with proposed courses. Visit www.cuonline.edu/catalog for up-to-date information about online degrees and available courses. All courses are 3 semester hours.

- Administrative Seminar
- Advanced Child Growth and Development
- Approaches to Young Children's Learning
- Basic Statistics
- Curriculum and Program Development in ECE
- Early Childhood Profession
- Early Intervention Strategies
- Infant/Toddler Practicum (170 clock hours—online option not possible)
- Language and Literacy in Young Children
- Literacy and Mathematics K–12
- Measurement and Evaluation in ECE
- Medical/Physiological Aspects of Developmental Disabilities
- Preschool Practicum (170 clock hours—online option not possible)
- Primary Practicum (170 clock hours—online option not possible)
- Screening and Assessment in Young Children
- Seminar: Research and Current Issues in ECE
- Social and Cognitive Development and Disorders
- Working with Parents and Families

Program contact: education@ucdenver.edu.

Early Literacy Certificate

This certificate program allows you to take courses in the specialty area of early literacy and apply these courses directly toward the full master's degree. The MA programs (K–6 and 7–12) in the School of Education & Human Development provide you with a means for completing a master's degree in curriculum and instruction with an emphasis in reading/writing while simultaneously fulfilling the requirements toward a Colorado reading teacher endorsement. In light of federal NCLB and state CBLA initiatives, this supplementary certificate offers primary grade teachers, preschool teachers and para-educators greater background in the development, assessment and instruction of literacy for young children.

The certificate program allows teachers to take 9 semester hours in the specialty area of early literacy and apply them directly toward the full master's degree. The following are examples of courses available online from spring 2007 through spring 2009 along with proposed courses. Visit www.cuonline.edu/catalog for up-to-date information about online degrees and available courses. All courses are 3 semester hours.

- Early Literacy Instruction
- Early Literacy Routines and Assessment
- Literacy Development PreK–3rd Grade

Program contact: Jennifer Ream, Jenna.Ream@ucdenver.edu.

Master of Arts in Early Childhood Education

The mission of the early childhood education online program is to provide substantive support if you're preparing to become a leader in professional practice as an early childhood accomplished teacher, with the master's degree in ECE. This degree prepares you to work in settings which include public schools, child care programs, private preschools and kindergartens, early intervention programs including Head Start and Early Head Start, family support and home-based programs.

The ECE program is composed of 40 semester hours. A total of 425 hours of fieldwork/practica is required. The following are examples of courses available online from spring 2007 through spring 2009 along with proposed courses. Visit www.cuonline.edu/catalog for up-to-date information about online degrees and available courses. All courses are 3 semester hours.

- Administrative Seminar
- Advanced Child Growth and Development
- Approaches to Young Children's Learning
- Basic Statistics
- Curriculum and Program Development in ECE

- Early Childhood Profession
- Early Intervention Strategies
- Language and Literacy in Young Children
- Literacy and Mathematics K-2
- Measurement and Evaluation in ECE
- Medical/Physiological Aspects of Dev. Disabilities
- Screening and Assessment in Young Children
- Seminar: Research and Current Issues in ECE
- Social and Cognitive Development and Disorders
- Working with Parents and Families

Program contact: education@ucdenver.edu.

Master of Arts in Information and Learning Technologies

- eLearning Design and Implementation

The eLearning design and implementation (eDI) program offers an ILT MA degree that is specifically designed to meet your needs as a practicing professional educator as you confront the increasingly important role electronic and online technologies play within post-secondary, K–12 and corporate education. The eDI MA program is for K–12 teachers, higher education instructors, trainers, content experts and corporate instructional developers.

The eLearning program is composed of 36 semester hours. The following are examples of courses available online from spring 2007 through spring 2009 along with proposed courses. Visit www.cuonline.edu/catalog for up-to-date information about online degrees and available courses. All courses are 3 semester hours.

- Developing Educational Web Sites
- Instructional Message Design
- Learning Processes in Instructional Technology
- Managing Instructional Development
- Media for Web-based Learning Environments
- Policies and Planning for eLearning Programs
- Research in Information and Learning Technologies
- Strategies for Online Learning

Program contact: education@ucdenver.edu.

Master of Arts in Information and Learning Technologies

— *School Library*

This MA prepares you with the knowledge-management skills and information access points for school library resources. Courses will integrate information and learning

technology strategies, along with courses on school library management, instructional design and instructional leadership.

All topics covered will be close to your heart as a school librarian as you collaborate with teachers on instructional units and create user-friendly school library programs that support the love for reading and information literacy. Finally, for this nationally recognized NCATE-AASL-approved school library media education program, you will complete field experience in both elementary and secondary schools for the K–12 school library endorsement.

The program is comprised of 36 semester hours and can be completed in 14 months on an intensive track (summer term to the next summer term) or a standard two-year schedule taking one course each semester. The following are examples of courses available online from spring 2007 through spring 2009 along with proposed courses. Visit www.cuonline.edu/catalog for up-to-date information about online degrees and available courses. All courses are 3 semester hours.

- Adolescent Literature
- Children's Literature Through the Ages
- Collection Development
- Field Experience-Elementary
- Field Experience-Secondary
- Foundations of School Librarianship
- Information Literacy and Reference
- Information Storage and Utilization
- Instructional Development and Production
- Leadership and Practice in ILT
- Management in ILT
- Research in Information and Learning Technology

Program contact: education@ucdenver.edu.

Special Education Generalist K–12 Endorsement

This program is designed for teachers already licensed in elementary or secondary general education. Specifically, this program is geared toward teachers without the formal credentials required to serve students with disabilities, as well as teachers who want to improve their ability to meet the needs of all learners.

A 10-course (26 semester hours) sequence represents the program plan of study. The following are examples of courses available online from spring 2007 through spring 2009 along with proposed courses. Visit www.cuonline.edu/catalog for up-to-date information about online degrees and available courses. All courses are 3 semester hours.

- Advanced Assessment in Special Education
- Collaboration and Consultation

- Instructional Strategies for Students with Special Needs
- Literacy Intervention for Students with Special Needs
- Positive Behavior Supports
- Special Education for the School Professional
- Special Education Generalist Internship and Site (Online option not possible)
- Special Education Generalist Internship and Site Seminar (Online option not possible)
- The Use of Technology in Special Education
- Transition/Secondary Planning

Program contacts: Meredith Lopez, Meredith.Lopez@ucdenver.edu.

School of Pharmacy

Doctor of Pharmacy, Nontraditional PharmD (NTPD) – Extended Studies

As a working and licensed pharmacist in the United States or Canada, this nontraditional pharmD (NTPD) program is a part-time and flexible program that meets clerkship requirements through a combination of challenge credit for professional practice experiences and through clerkships performed in traditional or nontraditional formats. The NTPD program is fully accredited by the Accreditation Council for Pharmacy Education. No visits to campus are currently required.

School of Public Affairs

Master of Criminal Justice

The master's degree in criminal justice helps you develop your critical thinking skills and provides an interdisciplinary perspective on crime and the criminal justice system. Specifically, the program focuses on law enforcement, correctional systems, juvenile justice and the formulation of laws and codes. Besides the classic criminal justice curriculum, you will learn about the most pressing current issues through special interest seminars. Past topics have included gang behavior, white-collar crime and hate crimes. Research projects provide another channel for you to become familiar with the issues.

You must complete 36 graduate semester hours, which include a core sequence of four core courses providing a firm foundation in theory, practice and research methods associated with U.S. criminal law and justice. A wide variety of electives gives you the chance to develop special expertise in your unique area of interest (e.g., corrections, mental illness and crime, federal law enforcement, victim assistance and criminal justice administration).

If you do not have previous criminal justice experience, you will be required to complete an internship with a local, state or federal criminal justice or juvenile justice agency. The Internship/Field Study will count as 3 of the 21 elective semester hours. The program culminates with either a traditional 3-6-semester-hour thesis, or a 3-semester-hour field-based final capstone project. The following are examples of courses available online from spring 2007 through spring 2009, along with proposed courses. Visit www.cuonline.edu/catalog for up-to-date information about online degrees and available courses. All courses are 3 semester hours.

- Law and Social Control
- Administration of Criminal Justice
- Nature and Causes of Crime
- Research Methods in Criminal Justice
- Advanced Seminar/Capstone

Program contact: Brendan Hardy, Brendan.Hardy@ucdenver.edu

Public Administration (MPA)

This master of public administration (MPA) degree will help you manage government and nonprofit organizations as well as nourish the related skills needed to thrive in this growing field. The curriculum is built upon core courses that develop essential problem-solving and decision-making skills. The required curriculum will help hone skills in management and analysis, but you may gain specific insights into an area of interest by pursuing one of three concentrations available. Each is designed to equip you with the management and analysis skills demanded of managers in challenging public affairs positions.

You must complete a minimum of 36 semester hours of graduate course work, excluding preparatory workshops, with a grade point average of 3.0 or better. The following are examples of courses available online from spring 2007 through spring 2009, along with proposed courses. Visit www.cuonline.edu/catalog for up-to-date information about online degrees and available courses. All courses are 3 semester hours.

- Advanced Seminar in Public Policy and Management
- Economics and Public Finance
- Introduction to Public Administration and Public Service
- Leadership and Professional Ethics
- Organizational Management and Change
- Research and Analytic Methods
- The Policy Process and Democracy

Program contact: Annie Davies, Annie.Davies@ucdenver.edu

Nonprofit Management Certificate

The nonprofit management certificate prepares you to become an innovative and critical thinker in the areas of nonprofit organizational management and public policy. The nonprofit certificate's unique design bridges theoretical knowledge with real-world experience. As you prepare to start your career (or advance in your current position), you'll gain insight into the interdependence between the nonprofit, public and for-profit sectors.

You must complete 15 semester hours from courses offered and approved by the faculty in the nonprofit program. The following are examples of courses available from spring 2007 through spring 2009 along with proposed courses. Visit www.cuonline.edu/catalog for up-to-date information about online degrees and available courses.

All courses are 3 semester hours.

- Collaboration Across Sectors
- Nonprofit Boards and Executive Leadership
- Nonprofit Financial Management
- Nonprofits and Public Policy
- Seminar in Nonprofit Management
- Social Entrepreneurship
- Strategic Management for Nonprofit and Public Managers
- Understanding and Achieving Funding Diversity

Program contact: Annie Davies, Annie.Davies@ucdenver.edu

Hybrid Courses

A hybrid course is just like it sounds. It is half on-campus and half online. The best of both worlds. So if you're taking online courses and enjoy the scheduling flexibility but feel that you're missing out on some of the intangibles of being in a classroom, then the hybrid courses are for you. Hybrid courses meet approximately 50 percent of the normal classroom hours on campus, and the remainder of the course work is completed online.

Supplemental Courses

An online technology supplemented campus course uses technology delivered instruction and materials (e.g. Web, CD ROM, etc.) to supplement classroom or laboratory instruction. CU Online also supports faculty using Web-based courseware to augment their traditional classes. Many faculty use instructional technology to post their syllabi, lecture notes, hold online quizzes and practice exams, and to coordinate Web resources and library media. But these materials do not substitute for or reduce the amount of traditional on-campus instructional contact time.

Contact CU Online at 303-315-3700, visit the Web site at www.cuonline.edu or send an e-mail to helpdesk@cuonline.edu.

Faculty

The professors and faculty of traditional classes are the same ones teaching online courses. That might not immediately evoke your applause and admiration, but it's actually great news. Four out of five full-time faculty hold doctoral degrees with many years of teaching experience, and many are actively engaged in their fields outside the classroom. Not only do they have real-world experience, but many of our faculty are consultants, advisors and partners to the leading organizations that frequently hire UC Denver graduates.

Tuition, Fees and Financial Aid

At UC Denver, we have a longstanding belief that finances should never stand in the way of motivated, talented individuals who want to better themselves and make a positive impact on the world around them. Through a tradition providing strong financial assistance and aid programs, we enforce this belief every day.

Tuition and Fees

Bursar: Evan Icolari

Office: North Classroom, 1003

Telephone: 303-556-2710

E-mail: bursar@ucdenver.edu

Web site: www.ucdenver.edu/bursar/

Student Service Center: North Classroom, 1001

Telephone: 303-556-2710

All tuition and fee rates are established by the Board of Regents, the governing body of the University of Colorado, in accordance with legislation enacted annually by the Colorado General Assembly. The regents set tuition rates and fees at a budget retreat in June for the coming fall, spring and summer terms, but reserve the right to change rates at any time. Rates for the current year are available online to assist prospective students in anticipating costs. Please refer to the Web site at www.ucdenver.edu/bursar in July for new rates.

Registration Advance Payment

All students will be required to pay a nonrefundable \$200 registration advance payment each term prior to registering. Students may register for a term once that term's registration advance payment is made. This advance payment will be applied to that term's tuition and fees cost.

To note disadvantage students who have significant financial need, a waiver of the term's registration advance payment will be allowed if the student has applied for financial aid and has met other financial aid eligibility criteria for that term. If the student

pays the registration advance payment and later applies for and receives full tuition and fees from financial aid, the excess paid will be refunded to the student.

For more information, please visit www.ucdenver.edu/bursar.

Drop Charge

Beginning the second Tuesday of the fall and spring terms until census date (the sixth day of summer term), a \$100 drop transaction charge will be assessed each time a student drops a course. This includes student initiated drops done in order to change sections within a course. Section changes done for an administrative purpose through the deans' offices will be exempted from drop charges. If a student withdraws (therefore dropping all classes), a drop charge will be assessed for each course.

For more information, please visit www.ucdenver.edu/bursar.

Special tuition rates are available for nondegree graduate students taking undergraduate courses only. Contact the Office of the Registrar at 303-556-2389 to request this special tuition rate.

Payment of Tuition and Fees

All tuition and fees (except the application fee) are due on the day indicated on your billing statement. Students may choose the payment plan that is available on the Downtown Campus. Specific information on the deferred payment plan is included on the [Web site](#), published before each semester.

Students who register for courses are liable for payment of tuition and fees if they withdraw from school after census date. Refund policies for students who withdraw from the university both before and after census date are included in the [academic calendar](#). A student with financial obligations to the university will not be permitted to register for any subsequent term, to graduate, to be issued transcripts or to be listed among those receiving a degree or special certificate. The only exception to this regulation involves loans and other types of indebtedness that are due after graduation. Personal checks are accepted for any university obligation. Any student who pays with a check that is not acceptable to the bank will be assessed an additional service charge. Students may also pay tuition and fees by credit card, or through the student portal by credit card or an electronic withdrawal directly from a checking or savings account.

Students who register in a nondegree status, and who later apply and are admitted to a degree status for that term, are responsible for the difference in tuition between the nondegree program and their applicable degree program and will be billed accordingly.

Undergraduate tuition for resident students is based on the total number of completed semester hours. The rate increases once a student has completed 60 hours.

Tuition Appeals

Students are responsible for abiding by the published deadlines. Tuition is not refundable when students drop or withdraw from courses after the published deadlines. If circumstances beyond the student's control have made the late drop or withdraw necessary, the student may file a tuition appeal.

Instructions and forms for submitting a tuition appeal are available on the registrar's Web site, www.ucdenver.edu/registrar, or in the Office of the Registrar in the CU Building Annex. Completed tuition appeals packets must be submitted to the tuition appeals coordinator in the registrar's office within three months following the end of the term being appealed.

Past Due Tuition and Fees

Past due student accounts are referred to the Office of Student Debt Management (SDM) for collection. If accounts are not paid in full, a 20 percent internal collection cost will be assessed on the unpaid balance. This is in addition to the 1.75 percent service charge per month that all past due accounts are subject to. If your account is referred to a third-party agency, you must pay any collection costs and attorney fees allowed by the Uniform Consumer Credit Code.

College Opportunity Fund (Vouchers)

An act of the Colorado state legislature in May 2004 established a new way for the state to provide state tax dollar support for higher education at the undergraduate level. The state is no longer appropriating monies to institutions for undergraduate education, but is providing direct funding to undergraduate students through the College Opportunity Fund (COF). This program is also known as "vouchers" or "stipends." If an undergraduate in-state student applies for and authorizes use of the voucher, COF vouchers will be applied to the student's university bill.

For details, see www.CollegeinColorado.org.

Residency Classification for Tuition Purposes

Tuition classification is governed by Colorado statutes that apply to all state-funded institutions in Colorado. Institutions are bound by the provisions of this statute and are not free to make exceptions to the rules set forth.

Students are initially classified as in-state or out-of-state for tuition purposes at the time of application. The classification is based upon information furnished by the student and from other relevant sources. After the student's status is determined, it remains unchanged in the absence of satisfactory evidence to the contrary.

Once a student is classified as a nonresident for tuition purposes, the student must petition for a change in classification. Petitions must be submitted NO LATER THAN THE FIRST OFFICIAL DAY OF CLASSES of the term for which the student wishes to be classified as a resident. It is preferred that petitions be received 30 days prior to the beginning of the term. Late petitions will not be considered until the next semester. Specific information may be obtained from the [Office of Admissions](#).

The final decision regarding tuition status rests with the university. Questions regarding residence (tuition) status should be referred only to the tuition classification officer. Opinions of other persons are not official or binding upon the university. Additional information is available in the brochure *Classification of Students for Tuition Purposes*, which may be obtained from the admissions office.

Basic Requirements

The statute provides that an in-state student is one who has been a legal domiciliary of Colorado for one year or more immediately preceding the beginning of the term for which the in-state classification is being sought. Persons over 23 years of age or who are emancipated establish their own legal domicile. Those who are under 23 years of age and unemancipated assume the domicile of their parent or court-appointed legal guardian. An unemancipated minor's parent must, therefore, have a legal domicile in Colorado for one year or more before the minor may be classified as an in-state student for tuition purposes.

Establishing Domicile

Domicile is established when one has a permanent place of habitation in Colorado and the intention of making Colorado one's true, fixed and permanent home and place of habitation. The tuition statute places the burden of establishing a Colorado domicile on the person seeking to establish the domicile. The question of intent is one of documentable fact and needs to be shown by substantial connections with the state sufficient to evidence such intent. Legal domicile in Colorado for tuition purposes begins the day after connections with Colorado are made sufficient to evidence one's intent. The most common ties with the state are (1) change of driver's license to Colorado, (2) change of automobile registration to Colorado, (3) Colorado voter registration, (4) permanent employment in Colorado and most important, (5) payment of state income taxes as a resident by one whose income is sufficient to be taxed. Caution: payment or filing of back taxes in no way serves to establish legal domicile retroactive to the time filed. In order to qualify for in-state tuition for a given term, the 12-month waiting period

(which begins when the legal domicile is established) must be over by the first day of classes for the term in question. If one's 12-month waiting period expires during the semester, in-state tuition cannot be granted until the next semester.

Resident Tuition for Active Duty Military Personnel

The Colorado legislature approved resident tuition for active duty military personnel on permanent duty assignment in Colorado and for their dependents. **ELIGIBLE STUDENTS MUST BE CERTIFIED EACH TERM.** Students obtain a completed verification form from the base education officer and submit the form with their military ID to the registrar's office after they have registered but before the end of the drop/add period. At the time the verification form is certified in the registrar's office, the student's bill will be adjusted to reflect the resident tuition rate. Students who have been certified remain classified as nonresidents for tuition purposes and must petition to change their status once they establish permanent ties to Colorado.

Financial Aid

Director of Financial Aid: Patrick McTee

Office: North Classroom, 1030

Telephone: 303-556-2886

E-mail: finaid@ucdenver.edu

Web site: www.ucdenver.edu/finaid

The Financial Aid Office offers more than \$70 million in financial aid awards to qualified students at the Denver Campus each year. If the student's financial aid application materials are received before the April 1 priority date, then the student is considered for a package of need-based grant, work-study (part-time employment), and/or student loan funds. If the financial aid application materials are received after the April 1 priority date, then the student is usually considered only for a Federal Pell Grant and student loans.

Eligibility

Each student must qualify for financial aid as follows:

1. Be a U.S. citizen or be admitted to the United States by the INS on a permanent basis.
2. Be classified as a degree-seeking student by the Denver Campus Office of Admissions (Teacher certification students are eligible to apply for financial aid and are considered undergraduate students according to federal guidelines).
3. Be enrolled for a minimum number of credits as specified on the financial aid award letter.
4. Meet the minimum requirements of Financial Aid Academic Standards.
5. Apply for financial aid by submitting all of the required documentation. The Free Application for Federal Student Aid (FAFSA) is required for all programs.

6. Not be in default on any student loan or owe a refund on any educational grant.
7. Male applicants must be registered with the Selective Service.

Applying

Each applicant must complete the financial aid application materials for submission to the Financial Aid Office. Complete information must be available to the office before eligibility can be determined.

Limited Funds—The majority of general financial aid funds are awarded on a **first-come, first-served** basis to eligible students who document significant financial need and who submit a valid FAFSA application to the Financial Aid Office by the April 1 priority date. Application completion is defined as having the results of the FAFSA (Free Application for Federal Student Aid) and all other required documents into the Financial Aid Office. The FAFSA is available at www.fafsa.ed.gov. Financial aid is awarded to needy students who meet the priority date until all of the funds are committed for the year. If the file is completed after April 1, then awards will be limited to Federal Pell Grant (for needy undergraduate students only) and/or student loans. Application for financial aid must be made each year; application materials are available in January of each year.

It is the student's responsibility to be sure application materials are complete. Please contact the Financial Aid Office for application forms and complete details. You may also obtain this information online at www.ucdenver.edu/finaid. All financial aid policies and procedures are subject to change due to revisions in federal and state laws, regulations, guidelines and applicable institution policies.

Qualifying

Financial Need

Most financial aid awards are based on the concept of financial need. Financial need is calculated as cost of attendance (tuition, fees, books, living expenses) minus family contribution (student/spouse contribution and parents' contribution for dependent students).

The cost of attendance is the estimated total cost to attend UC Denver, including tuition and fees, room and board, books and supplies, transportation and personal expenses. The Financial Aid Office determines standard budgets based upon average tuition and fees charged and other budget items established by the Colorado Commission on Higher Education. Current cost-of-attendance figures are available on our Web site at www.ucdenver.edu/finaid.

The contributions from the student/spouse and from the parents are calculated by a standardized formula that is required by federal law. The formula considers income,

savings and other assets, family size, number of children in postsecondary school and other factors.

If the student/spouse contribution plus the parents' contribution is equal to or greater than the cost of attendance, then the student will not qualify for need-based financial aid. Students may appeal for special consideration if they are experiencing unusual circumstances. Financial aid is intended to supplement and not replace financial contributions from the student and parents.

Determining Dependency Status

The federal government provides specific guidelines that define dependency status for financial aid purposes. Dependency status is determined by a series of questions on the FAFSA that can be reviewed at www.fafsa.ed.gov. Students classified as *dependent* are required to provide student and parent household and financial information from their parents when applying for financial aid. If a student is classified *independent*, then the student's parental information is not considered when the calculation of family contribution is made. Current law defines an *independent student* as one who meets at least one of the following conditions:

1. Age 24 or older (born after January 1, 1986)
2. Graduate student
3. Married student
4. Student with legal dependents other than a spouse
5. Student has children who receive more than half their support
6. Veteran of the U.S. armed forces or currently on active duty
7. At age 13 or older was an orphan, ward of the court or in foster care
8. Student is an emancipated minor or in a legal guardianship in their state of legal residence
9. On or after July 1, 2008, was a unaccompanied homeless youth or considered an unaccompanied, self-supporting youth at risk of becoming homeless

A dependency status may be appealed to the Financial Aid Office if unusual circumstances exist. Contact the office for appeal guidelines.

Course Loads

Most undergraduate financial aid programs require at least 12 credits per semester, and graduate programs require at least 5 credits per semester. Federal Stafford Loan recipients must carry at least a half-time credit load (6 semester hours for undergraduates per semester and 3 semester hours for graduates per semester). Higher or lower minimums may be required for individual awards (check your award letter for the exact number of credits required).

Satisfactory Academic Progress (SAP)

Students must make satisfactory academic progress as defined by the Financial Aid Office to be eligible for financial aid. For more information, students should review the Financial Aid Academic Standards policy, available on our [Web site](#) or in the Financial Aid office.

Appeals

Students may appeal all decisions by contacting the Financial Aid Office in person or by written request. Appeals will be reviewed and considered within three weeks of receipt and a written response will be mailed to the student. The decision of the appeals committee is final.

Refunds and Repayments

If a recipient of federal financial aid withdraws from all classes on or before the 60 percent point of the term, that student may be required to repay a portion of his/her financial aid. The federal government has defined that the recipient has only earned a portion of their financial aid, and the earned aid is directly proportional to the percentage of time the student attended classes up to and including the 60 percent point of the term. The rest of the financial aid is defined as unearned financial aid and must be returned to the federal financial aid programs. Unearned aid includes both the amount allocated to tuition and fees and the amount allocated to the student for other educational expenses. For a complete description of these requirements, request a copy of the financial aid repayment policy from the Financial Aid Office.

Reapply Each Year

Financial aid awards are not automatically renewed each year. Students must reapply and meet priority dates each year. Application materials for the next academic year are available beginning January 1.

Awards

Students are notified in writing of their financial aid eligibility approximately four to six weeks after all application materials have been received in the Financial Aid Office. If

awarded, an award notice is e-mailed to the student; it includes the types and amounts of aid awarded and the minimum number of semester hours required each term.

Grants, Loans and Work-Study

The following aid programs are funded by the federal government:

1. *Federal Pell Grant*—Eligibility for the Federal Pell Grant is determined before any other aid is awarded. Awards are defined by a strict need-based formula provided by the federal government, and award amounts vary depending on the amount of financial need and enrollment status. Only undergraduate students seeking a first time bachelors degree are eligible.
2. *ACG and SMART Grants*—Academic Competitiveness Grants (ACG) are awarded to freshman and sophomore Pell Grant recipients who are U.S. citizens and who have graduated from high school programs designated as a rigorous program. National Science and Mathematics Access to Retain Talent Grants (SMART) are awarded to junior and senior Pell Grant recipients who are U.S. citizens and who are majoring in specific areas of physical, life or computer sciences; mathematics, technology, engineering or a critical foreign language.
3. *Federal Teach Grant*—This Teach Grant program is available to students who intend to teach in a public or private service school that serves students from low-income families. Students can be considered for up to \$4000 per academic year, if eligible. More information can be found on the Financial Aid Office Web site.
4. *Federal Direct Stafford Loan (2 types)*—The **subsidized** Federal Direct Stafford Loan program requires that students show financial need in order to qualify. Interest on the subsidized loan is paid for the student by the federal government as long as the student remains enrolled at least half-time and for a six-month grace period after graduation or dropping below half-time enrollment. The **unsubsidized** Federal Direct Stafford Loan program **does not** require the student to document financial need, but a valid FAFSA application is required. Eligibility is calculated as the cost of attendance minus other financial aid awarded. *Interest is not paid by the federal government for the unsubsidized program, and the student may elect to pay the interest now or to allow the interest to be added to the total principal loan amount.*
5. *Federal Direct PLUS Loan*—Graduate students and parents of *dependent students* are eligible to borrow under the Federal Direct PLUS program. The PLUS program is unsubsidized, and interest payments become the responsibility of the borrower at the time of disbursement.
6. *Federal Supplemental Educational Opportunity Grant (SEOG)*—This is a need-based grant program for students who have not yet obtained a bachelor's degree. Students must be eligible for a Federal Pell Grant to be considered for SEOG. This funding is very limited.

7. *Federal Perkins Loan*—This is a need-based loan program, with an fixed interest rate currently at 5 percent. No repayment of interest or principal is due until nine months after the student ceases to be enrolled at least half-time or graduates.
8. *Federal College Work-Study*—Work-study is a need-based program that allows students to work on a part-time basis (on campus, off campus or at nonprofit agencies) to help meet their educational costs.

The state of Colorado funds the following programs:

1. *Colorado Student Grant*—A need-based grant for resident undergraduate students.
2. *Colorado Leveraging Educational Assistance Partnership Grant*—A need-based grant for resident undergraduates who have not yet obtained a bachelor's degree. This grant is funded 50 percent by the federal government and 50 percent by the state of Colorado.
3. *Colorado Graduate Grant*—A need-based grant for resident graduate students.
4. *Colorado Work-Study*—A program similar to the College Work-Study program but limited to resident undergraduate students. Limited amounts of Colorado Work-Study funds are available to students regardless of financial need. In addition, there are some grant programs funded by the institution.
5. *Colorado Teach Grant Program*—This scholarship to students in a approved teacher preparation program who excel in high-need content areas and who demonstrates an interest or commitment to teaching as a career.

DRUG CONVICTIONS AND FINANCIAL AID ELIGIBILITY

A student who has been convicted of any offense under any federal or state law involving the possession or sale of a controlled substance shall not be eligible to receive any grant, loan or work assistance during the period beginning on the date of such conviction and ending after the interval specified in the following table:

If convicted of an offense involving:

The possession of a controlled substance: Ineligibility period is:

First offense 1 year
 Second offense 2 years
 Third offense Indefinite

The sale of a controlled substance: Ineligibility period is:

First offense 2 years
 Second offense Indefinite

Scholarships

For a complete listing of the many scholarships offered at the Denver Campus, go to www.ucdenver.edu/admissions. In addition, many Internet search programs are available to help students identify scholarships for which they may be eligible. One of the largest is www.FastWeb.com.

Other Sources

There are several other sources of funds for students. Employment opportunities are listed in the Student Employment Office and the Career Center. Graduate students should inquire about additional types of financial aid through their academic departments. American Indian students should request information about Bureau of Indian Affairs and tribal scholarships from their tribe.

Short-Term Loans

Short-term loans are available to enrolled students to cover unexpected financial needs. Loans are generally limited to \$500 and are due within 30 days. There is a \$10 per loan administrative charge.

Find it Here

Not sure of the difference between the registrar and the bursar? Here's a quick guide to finding what you need.

Admissions

CU-Denver Building Annex, 200
303-556-2704

www.ucdenver.edu/admissions

Application: pick up, drop off, application fee payment, admission status

Residency forms

Information about establishing domicile for tuition classification

General transfer credit information

Information about UC Denver

Scholarship guides

Talk to an admission counselor

Bursar

North Classroom, 1003
303-315-2710

www.ucdenver.edu/bursar

Application fees payments by credit card

College Opportunity Fund (vouchers)

Departmental deposit transactions

Payment of tuition and fees

Refunds

Student account reconciliation

Student Service Center—one-stop processing for bursar, financial aid, registration and admission functions

Third-party billing

Financial Aid

North Classroom, 1030

303-556-2886

www.ucdenver.edu/finaid

Free Application for Federal Student Aid (FASFA) www.fafsa.ed.gov

Grant, work-study and student loan information

Short term loans

How to apply for financial aid

Registrar

CU-Denver Building Annex, 100

303-556-2389

www.ucdenver.edu/registrar

Class registration

Course descriptions

Diplomas

Enrollment verification

Grades and GPA

Schedule adjustment (drop/add) forms

Schedule Planner (online course schedule)

SMART (online registration system)

Transcripts

Tuition appeals

Student Debt Management

North Classroom, 1003

303-556-2937

www.ucdenver.edu/admin/studentfinancialservices/debtmanagement

Past-due tuition collection

Student loan processing

Office of the Registrar

UC Denver offers students a completely online system of planning their schedules and registering for classes. As a student, you are responsible for knowing the deadlines, rules, regulations, course loads, prerequisites and policies of the university, as well as those of the college or school in which you are enrolled, all of which is provided within this online catalog.

Office of the Registrar

Registrar: Teri Burleson

Office: CU-Denver Building Annex, 100

Telephone: 303-556-2734

E-mail: Teri.Burleson@ucdenver.edu

Web site: www.ucdenver.edu/Registrar

Academic Calendar*

Summer 2010

Registration	Begins early March
May 31	Memorial Day holiday (campus closed, no classes)
May 18–June 4	Maymester
June 7–July 31	Summer
July 5	Independence Day holiday observation (campus closed, no classes)
July 31	End of Term

Fall 2010

Registration	Begins late April
August 23	First day of classes
September 6	Labor Day holiday (campus closed, no classes)
November 22–28	Fall break for students (campus open, no classes)
November 25	Thanksgiving holiday (campus closed, no classes)
December 13–18	Finals week
December 18	Commencement

Spring 2011

Registration Begins early November

January 17 Martin Luther King Jr. holiday (campus open, no classes)

January 18 First day of classes

March 21–27 Spring break (campus open, no classes)

May 9–14 Finals week

May 14 Commencement

Maymester - Summer 2011

Registration Begins mid-March

May 30 Memorial Day holiday (campus closed, no classes)

May 17–June 3 Maymester

June 6–July 30 Summer

July 4 Independence Day holiday (campus closed, no classes)

July 30 End of Term

*The university reserves the right to alter the academic calendar at any time. Consult the Web site at www.ucdenver.edu/registrar for application deadline dates, deadlines for changing programs and registration dates and procedures.

Registration

Students should review the sections of this catalog that describe in detail the academic programs available at the Denver Campus.

New and transfer undeclared undergraduate students, as well as prebusiness and preengineering students, should contact the Academic Advising Center at 303-352-3520 to arrange for an advising appointment prior to registration. Other freshmen and transfer students should contact their school or college to arrange for an advising appointment prior to registration.

The registrar's office will send an e-mail message to the student's university-assigned e-mail address, inviting the student to register, including registration information and a registration time assignment. Registration is by time assignment only. Students may register via the Web on or after their assigned time.

Web Registration and Student Information

Denver Campus students can register and obtain information regarding their academic and financial records by accessing a secure web site that requires an assigned student ID and personal identification number (PIN) to access their registration or student record options.

Online registration allows the student to check the availability of specific courses prior to their registration time and to search for available courses by department, course level or meeting time. If registration in a course is denied, the Web registration system will specify the reason.

Student information available online currently includes mailing address verification (or change), admission application status, financial aid information, schedule by semester, grades by semester, unofficial transcript, account balance, online payment and degree audit (for some programs). For security reasons, none of the student information screens will display a student's name or student number.

Additional information regarding programs, faculty, courses and policies are available through the home page: www.ucdenver.edu.

Definition of Full-Time and Part-Time Status

Individual students receiving financial aid may be required to complete hours in addition to those listed below. The exact requirements for financial aid will be listed in the student's financial aid award letter.

Undergraduates and nondegree graduate students:

Full-time 12 or more semester hours

Part-time 6 or more semester hours

Graduate degree students:

Full-time:

5 or more semester hours

0 semester hours as candidate for degree

1 or more semester hours of thesis (not master's reports or thesis preparation)

Half-time:

3 or more semester hours

Notes

Enrollment verification including full-time/part-time attendance can be certified beginning the first day of class.

Hours for calculating full-time/part-time attendance do not include interinstitutional hours, nor do they include hours on another CU campus, unless the student is enrolled through concurrent registration.

Students receiving veteran benefits should contact the Veteran Student Services Manager for the definition of full-time status for summer sessions. Contact information: 303-556-2745 or vaoffice@ucdenver.edu.

Individual exceptions to the minimum graduate course-load levels are considered for financial aid purposes by the financial aid committee. Students must file a written appeal with the Office of Financial Aid.

Add/Drop

Please review the current term's academic calendar for the most recent add/drop deadlines by visiting the registrar's Web site at www.ucdenver.edu/registrar.

Administrative Drop

An administrative drop is implemented by university officials in the registrar's office or the dean's office. A student may be administratively dropped from one or more classes or withdrawn from all classes for any of the following reasons:

- failure to meet certain preconditions, including but not limited to:
 - class cancellations
 - failure to meet course prerequisites
- whenever the safety of the student, faculty member or other students in a course would be jeopardized
- academic suspension, including but not limited to failure to attain or maintain a required GPA
- disciplinary suspension for having been found to have violated the Student Code of Conduct

- disruptive behavior determined by the chair and/or associate dean to be detrimental to the progress of the course and the education of other students

Auditing Courses

To qualify as an auditor for fall or spring semester, a student must be 21 years of age or older or approved by the registrar. Auditors may not be registered for any other University of Colorado courses during the time they are auditing and are not eligible to audit courses if they are under suspension from the university or have outstanding financial obligations to the university. The registrar's office does not keep any record of courses audited; therefore, credit for these courses cannot be established. Auditors may attend as many courses as they wish (except those courses with laboratories or where special equipment is used), provided they have received permission from each instructor.

An auditor's card is issued after classes begin. This card should be presented to the instructor. Auditors, whether resident or nonresident, pay 3 semester hours of resident tuition for all audited courses during the fall or spring semester for class instruction and library privileges only. Auditors do not receive student parking privileges and are not eligible for other student services. For more information, contact the bursar's office.

Senior citizens (aged 60 and over) may audit classes at no charge. Contact the Division of Enrollment and Student Affairs at 1250 14th Street, 303-556-8427.

Candidate for Degree

During the semester in which you take the comprehensive exam, defend your dissertation or thesis or present your final project, you must be registered. If you will NOT be registered for any other courses, you MUST register for CAND 5940, Candidate for Degree. You may only register for this course once.

To register for CAND 5940, Candidate for Degree, (you may NOT be registered for any other courses) obtain the call number from your department or program director. You will be billed at one credit hour of resident tuition plus the SIS fee and the information technology fee. Students registered for CAND 5940 will be considered full-time for financial aid and enrollment verification purposes.

Course Load/Restrictions

In most cases, students wishing to take more than 18 semester hours (12 in the summer session) must have the overload approved by the dean of their college or school. Consult the individual college or school for specific guidelines as to course-load restrictions.

Credit by Examination

Degree students may take examinations for credit. To qualify for an examination, the student must be formally working toward a degree at UC Denver, have a GPA of at least 2.0 and be currently registered. Contact the registrar's office for instructions. A nonrefundable fee is charged. Students should contact their degree advising office to determine whether the credit will apply to their degree.

No Credit

Students may register for a course on a no-credit basis with the consent of their instructor and the dean of their school or college. No grade or credit is awarded. The transcript reflects the name of the course taken and an N/C notation.

Pass/Fail Procedure

1. Students who wish to register for a course on a pass/fail basis (or to revert from pass/fail to graded status) may do so only during the drop/add period.
2. Up to 16 semester hours of course work may be taken on a pass/fail basis and credited toward the bachelor's degree. *Only 6 hours of course work may be taken pass/fail in any given semester.* (Note: Individual schools and colleges may have additional restrictions as to pass/fail credits. See the accompanying chart for an overview.)
3. Instructors will not be informed of pass/fail registration. All students who register for a pass/fail appear on the regular class roster, and a normal letter grade is assigned by the professor. When grades are received in the registrar's office, those registrations with a pass/fail designation are automatically converted by the grade application system. Grades of D– and above convert to grades of P. Courses taken pass/fail will be included in hours toward graduation. Pass grades are not included in a student's GPA. An F grade in a course taken pass/fail will be included in the GPA.
4. Pass/fail registration records are maintained by the registrar's office.
5. Exceptions to the pass/fail regulations are permitted for specified courses offered by the School of Education & Human Development, the extended studies programs and study abroad programs.
6. Graduate degree students can exercise the P/F option for undergraduate courses only. **A grade of P will not be acceptable for graduate credit to satisfy any Graduate School requirement.**
7. Students who register for a course on a pass/fail basis may not later (after the drop/add period) decide to receive a letter grade.

Note: many other institutions will not accept a P grade for transfer credit.

PASS/FAIL OPTION RESTRICTIONS

Core Curriculum courses used to satisfy Intellectual Competencies cannot be taken on pass/fail basis.

<u>College/School</u>	<u>General</u>	<u>Maximum</u>
Business	Only nonbusiness electives may be taken pass/fail.	Only 6 semester hours may be taken pass/fail.
Engineering and Applied Science	Required courses may not be taken pass/fail. Upper division humanities and social sciences electives are acceptable; otherwise, major department approval is required.	A maximum of 16 semester hours may be taken pass/fail, including courses taken in the honors program.
Liberal Arts and Sciences	College requires a minimum of 30 semester hours of courses with letter grades. Courses used to satisfy major, minor or foreign language cannot be taken on a pass/fail basis.	No more than 6 hours pass/fail any semester. A maximum of 16 semester hours may be taken pass/fail.

Module/Intensive Courses

Courses are also offered in five-week modules, in special weekend courses and in seminars. Students should contact the college/school for information on short-term courses offered each semester.

Withdrawal from the University

To withdraw from the University of Colorado Denver, students must drop all courses for the semester. Prior to census (see current academic calendar for census date), students must use the web registration system to drop courses. Courses dropped during this period are not recorded on the student's permanent record.

After the census date (see current academic calendar for census date), through the 10th week (fourth week for summer) students must submit a withdrawal form with the

approval of the dean and the Office of Financial Aid. Courses dropped during this period will be recorded on the student's permanent record with a grade of W.

Students seeking to withdraw after the 10th week (fourth week for summer) must petition the associate dean of their school or college. A student who stops attending classes without officially withdrawing from the university will receive grades of F for all course work during that term.

Deadlines for dropping module and intensive courses appear in the student portal.

Other Registrations

Concurrent Enrollment

Degree-seeking students who wish to attend two University of Colorado campuses concurrently must obtain permission from their school or college on their home campus. A student in a degree program registered on the Downtown Campus may take up to two courses or 6 semester hours (whichever is greater) on another CU campus if:

- the student obtains a concurrent registration form from the office of the academic dean or the registrar's office
- the course is not offered at the Denver Campus
- the student obtains approval from the academic dean
- there is space available at the other (host) campus
- the student pays tuition at the Denver Campus (home campus) at Denver Campus rates
- the home campus school or college arranges for space in the host campus classes
- the concurrent request is processed before the end of the drop/add period on both the host and home campuses

To drop a concurrent course during the *host* campus drop/add period, arrange the drop at the home campus registrar's office. To drop a concurrent course after the end of the host campus drop/add deadline, drop the course at the *host* campus registrar's office.

Interinstitutional Registration

UC Denver degree students may enroll in courses offered by the Community College of Denver. Students must be enrolled at UC Denver for at least one course during the term to be eligible to register interinstitutionally. Registration is on a space available basis. Interinstitutional courses are evaluated for transfer credit and are not included in a UC Denver student's GPA.

Pooled Courses at Metropolitan State College of Denver

Certain courses in the College of Liberal Arts and Sciences have been pooled with similar courses at Metropolitan State College of Denver (Metro State). *Undergraduate* students at the Denver Campus may register for any of the pooled courses listed in the UC Denver Web registration system. Restrictions apply to the pooled courses:

1. UC Denver, Denver Campus graduate students are not eligible to register for Metro State pooled courses.
2. Metro State pooled courses will not be included in the University of Colorado GPA. Metro State courses will appear on the University of Colorado transcript and will count in hours toward graduation. See an academic advisor for approval.
3. Metro State courses cannot be used to meet specific course requirements toward the major without prior written approval of the student's dean.
4. UC Denver, Denver Campus students who wish to take nonpooled Metro State courses must apply directly as a nondegree student to Metro State and pay tuition and fees to Metro State. Nonpooled classes will not appear on the University of Colorado transcript and will not be used in determining course loads for financial aid eligibility. Students may request an Metro State transcript to be sent to the Denver Campus at the end of the term to determine if credit can be transferred.
5. Metro State common pool courses will not satisfy residency requirements at the Denver Campus. The last 30 semester hours applied toward the baccalaureate degree must be taken in residence at the Denver Campus.
6. UC Denver, Denver Campus students taking Metro State common pool courses are subject to the Metro State grading policy and student code of conduct.

Academic Records

Student Classification

Students are classified according to the number of semester hours passed:

Freshman	0–29 hours
Sophomore	30–59 hours
Junior	60–89 hours
Senior	90+ hours

All transfer students will be classified on the same basis according to their hours of credit accepted by the University of Colorado.

Grading System and Policies

The following grading system and policies have been standardized for all academic units of the university. Other academic policies are listed in the University Policies chapter of this catalog.

Grade Symbols

The instructor is responsible for whatever grade symbol (A, B, C, D, F, I or IP) is to be assigned. Special symbols (NC and W) are indications of registration or grade status and are not assigned by the instructor. Pass/fail designations are not assigned by the instructor but are automatically converted by the grade application system, as explained under "Pass/Fail Procedure."

Standard Grades	Quality Points
<i>A = superior/excellent</i>	<i>4</i>
<i>A(-) =</i>	<i>3.7</i>
<i>B(+) =</i>	<i>3.3</i>
<i>B = good/better than average</i>	<i>3</i>
<i>B(-) =</i>	<i>2.7</i>
<i>C(+) =</i>	<i>2.3</i>
<i>C = competent/average</i>	<i>2</i>
<i>C(-) =</i>	<i>1.7</i>
<i>D(+) =</i>	<i>1.3</i>
<i>D =</i>	<i>1</i>
<i>D(-) = minimum passing</i>	<i>0.7</i>
<i>F = failing</i>	<i>0</i>

Instructors may, at their discretion, use the PLUS/MINUS system but are not required to do so.

I—incomplete—converted to an F if not completed within one year.

IP—in progress—thesis at the graduate level only.

P/F—pass/fail—P grade is not included in the GPA; the F grade is included; up to 16 hours of pass/fail course work may be credited toward a bachelor's degree.
H/P/F—honors/pass/fail—intended for honors courses; semester hours count toward the degree but are not included in the GPA.
NC indicates registration on a no-credit basis.
W indicates withdrawal without credit.

Explanation of I

An I is an incomplete grade. Policies with respect to I grades are available in the individual college and school dean's offices.

An I is given only when students, for reasons beyond their control, have been unable to complete course requirements. A substantial amount of work must have been satisfactorily completed before approval for such a grade is given.

The instructor who assigns an I sets the conditions under which the course work can be completed and the time limit for its completion. The student is expected to complete the requirements by the established deadline and not retake the entire course.

It is the instructor's and/or the student's decision whether a course should be retaken. If a course is retaken, it must be completed on the Denver Campus or in extended studies classes. The student must re-register for the course and pay the appropriate tuition.

The final grade (earned by completing the course requirements or by retaking the course) does not result in deletion of the I from the transcript. A second entry is posted on the transcript to show the final grade for the course.

At the end of one year, I grades for courses that are not completed or repeated are changed to an F.

Grade Point Average (GPA)

GPA is computed by multiplying the credit points per hour (for example, B = 3) by the number of semester hours for each course. Total the hours, total the credit points and divide the total points by the total hours. Grades of P, NC, ***, W, IP, and I are not included in the GPA. Is that are not completed within one year are calculated as F in the GPA.

If a course is repeated, all grades earned are used in determining the GPA. Grades received at another institution are not included in the University of Colorado GPA.

Undergraduate, graduate and nondegree graduate GPAs are calculated separately. Enrollment in a second undergraduate or graduate program will not generate a second undergraduate or graduate GPA.

Students should refer to their academic dean's office for individual GPA calculations as they relate to academic progress and graduation from their college or school.

Good Academic Standing

Good academic standing requires a minimum GPA that is determined by the student's school or college. Grades earned at another institution are not used in calculating the GPA at the University of Colorado.

Degree students should consult the academic standards section of their school or college for degree program requirements.

Continuation as a nondegree student is contingent upon maintaining an overall GPA of 2.0 upon completion of 12 or more semester hours.

Failure to maintain the required average will result in a nondegree student being suspended. The suspension is for an indefinite period of time and becomes part of the student's permanent record at the university. While under suspension, enrollment at the university is restricted; for more information contact the dean's office of the school /college you are enrolled in.

Nondegree students are not placed on academic probation prior to being suspended.

Automated Degree Progress

A degree progress report is an automated record reflecting a student's academic progress toward completing degree requirements in a declared major. Each degree progress report draws its information from the university's student information system. Each time a new report is run, the most up-to-date course information and grades are used. A report can be requested by logging on to the student portal. Students should contact their schools and colleges for additional information on the availability of a specific degree progress report.

Grade Reports

Grades are normally available within two weeks after the end of the semester and can be accessed through the registrar's Web page at www.ucdenver.edu/registrar.

Graduation

Undergraduates

Students should make an appointment with the advising office of their school or college to determine what requirements remain for graduation. Students intending to graduate must complete an intent to graduate application found on the Office of the Registrar's Web page under Degree Planning between the first day of registration for the term and the last day of drop/add (noted on the academic calendar - census). Students will not be officially certified to graduate until a final audit of the student's record has been completed approximately six weeks after the end of the term. After students have been certified to graduate, they must reapply to return to the Denver Campus.

Graduates

Students on the Denver Campus must file an application for candidacy with their graduate school office and complete an intent to graduate application found on the Office of the Registrar's Web page under Degree Planning between the first day of registration for the term and the last day of drop/add. Check with your school for more information. Students will not be officially certified to graduate until a final audit of the student's record has been completed, approximately six weeks after the end of the term. After students have been certified to graduate, they must reapply to return to UC Denver.

Commencement

In early March, informational brochures will be mailed to students eligible to participate in the May spring-semester commencement. In early October, information regarding the December commencement will be mailed to students who graduated in summer term or expect to graduate in fall term. Information will be provided about ordering special display diplomas, fittings for caps and gowns and obtaining diplomas and transcripts with the degree recorded. This information is also available at www.ucdenver.edu/student-services/graduation/Pages/Graduation.aspx.

Class Rank

Class rank will be calculated by undergraduate degree program within a school or college. It is possible for more than one student to have the same class rank, If more than one student has equivalent class ranking it will be reported as such. The option for a letter indicating the student's class rank will be provided to any graduating undergraduate, but there will be no designation on the University of Colorado transcript for Denver Campus students receiving bachelor's degrees. There will be one class rank per student per degree. Students can obtain class rank letters through the student portal. Late postings and grade changes after degrees are posted will not recalculate rankings. Rankings will be a snapshot calculation conducted once per term for each graduating undergraduate student after degrees are posted.

Official Transcripts

The official transcript includes the complete undergraduate and graduate academic record of courses taken at all campus locations or divisions of the University of Colorado. It contains the signature of the registrar and the official seal of the university.

Official transcripts for any given semester are available approximately three weeks after final exams. A transcript on which a degree is to be recorded is available approximately eight weeks after final exams.

On the Denver Campus, transcripts may be ordered through the student portal or requested by fax at 303-556-4829. Transcript request forms are available at www.ucdenver.edu/registrar; click on Forms.

Requests include the following:

- student's full name (include given or other name if applicable)
- student number
- birth date
- the last term and campus the student attended
- whether the current semester grades are to be included when a transcript is ordered near the end of a term
- whether the request should be held until a degree is recorded
- agency, college or individuals to whom transcripts are to be sent (Complete mailing addresses should be included; transcripts sent to students are labeled "issued to student")
- student's signature (This is the student's authorization to release the records)

There is no charge for individual official transcripts (however fees are assessed for rush service). Transcripts are prepared only at the student's request in writing or through online student PIN authentication. A student with financial obligations to the university that are due and unpaid will not be granted a transcript. Official transcripts require five to seven working days. Rush service is available and fees are assessed based on the service requested.

Notification of Rights Under FERPA at University of Colorado Denver

The Family Educational Rights and Privacy Act (FERPA) affords students certain rights with respect to their educational records:

1. The right to inspect and review the student's educational records within 45 days of the day that the university receives a request for access. Students should submit to the registrar, dean, head of the academic department or other appropriate official written requests that identify the record(s) they wish to

- inspect. The university official will make arrangements for access and notify the student of the time and place where the records may be inspected. If the records are not maintained by the university official to whom the request was submitted, that official shall advise the student of the correct official to whom the request should be addressed.
2. The right to request the amendment of the student's educational records that the student believes are inaccurate or misleading. Students may ask the university to amend a record that they believe is inaccurate or misleading. They should write the university official responsible for the record, clearly identify the part of the record they want changed and specify why it is inaccurate or misleading. If the university decides not to amend the record as requested by the student, the university will notify the student of the decision and advise the student of his or her right to a hearing regarding the request for amendment. Additional information regarding the hearing procedures will be provided to the student when notified of the right to a hearing.
 3. The right to consent to disclosure of personally identifiable information contained in the student's educational records, except to the extent that FERPA authorizes disclosure without consent. One exception that permits disclosure without consent is disclosure to school officials with legitimate educational interests. A school official is a person employed by the university in an administrative, supervisory, academic or research or support staff position (including law enforcement unit personnel and health staff); a person or company with whom the university has contracted (such as an attorney, auditor or collection agent); a person serving on the board of trustees; or a student serving on an official committee, such as a disciplinary or grievance committee, or assisting another school official in performing his or her tasks. A school official has a legitimate educational interest if the official needs to review an educational record in order to fulfill his or her professional responsibility. Upon request, the university discloses educational records without consent to officials of another school in which a student seeks or intends to enroll.
 4. The right to file a complaint with the U.S. Department of Education concerning alleged failures by the University of Colorado to comply with the requirements of FERPA.

Family Policy Compliance Office
U.S. Department of Education
400 Maryland Avenue, SW
Washington, DC 20202-4605

The following items are designated "Directory Information" and may be released at the discretion of the University of Colorado Denver unless a student files a request to prevent their disclosure:

- name
- address
- e-mail address

- telephone number
- dates of attendance
- registration status
- class
- major
- awards
- honors
- degrees conferred
- photos
- past and present participation in officially recognized sports and non-curricular activities
- physical factors (height, weight) of athletes

Forms to prevent the disclosure of directory information can be obtained at the Student Service Center in North Classroom, 1003, or via the registrar's Web site at www.ucdenver.edu/registrar. Questions regarding student rights under FERPA should be directed to the registrar's office, 303-556-2389.

Campus Life

[At A Glance: Downtown Denver and Auraria](#)

The University of Colorado Denver, Denver Campus is physically located on the 136-acre Auraria Campus, which is shared with two other institutions—Metropolitan State College of Denver and Community College of Denver. Because we share facilities, our students have access to the level of resources found at much larger public universities. Since fall 2006, the university has also been able to offer student housing adjacent to this traditionally commuter campus. Details about the campus and Campus Village are explained in this chapter.

Auraria Campus

Since opening in 1976, Auraria has become the largest campus in Colorado, enrolling approximately 43,000 students—20 percent of all the students in public higher education in the state. This is the most efficiently utilized campus in the state. Classrooms on the Auraria Campus are used an average of 50+ hours per week. Classes are held from 7 a.m. to 10 p.m. Monday through Thursday and from 8 a.m. to 6 p.m. on Friday, Saturday and Sunday. Some courses and programs are offered cooperatively by the Auraria educational institutions. Those pertaining to UC Denver students are outlined in this catalog.

The Auraria Campus offers numerous amenities to students, faculty and staff, from the largest bookstore in the Rocky Mountain region to a state-of-the-art fitness facility. Details of these amenities are outlined in this chapter.

In addition to its proximity to the thriving business and industry of downtown Denver, the Auraria Campus has a distinct historic flavor. The Tivoli Student Union is housed in a renovated brewery originally built in the 1860s. Historic Ninth Street Park, St. Cajetan's Church/Performing Arts Center, St. Elizabeth's Church, the Emmanuel-Sherith Chapel/Synagogue/Art Gallery and the Golda Meir Museum are also located on campus.

Auraria Higher Education Center

The Auraria Higher Education Center (AHEC) is the administrative body that coordinates the facilities, services and activities for the three educational institutions on campus. AHEC provides common services for the campus including: classroom scheduling, facilities management and construction, campus police, telecommunications infrastructure, student union, media services, book store, early learning center, parking and transportation, mail services and facilities master planning. Visit their Web site for additional information.

Campus Amenities

Auraria Campus Bookstore

Location: Tivoli Student Union, 900 Auraria Parkway

Hours: Mon.–Thurs., 8 a.m.–6 p.m.; Fri. 8 a.m.–5 p.m.; Sat. 10 a.m.–3 p.m.; call during vacation and interim periods

Telephone: 303-556-4286

Web site: www.aurariabooks.com

The Auraria Campus Bookstore, a department of Student and Auxiliary Services—*your campus store*—is located in the historic Tivoli Student Union. The bookstore provides textbooks for the Auraria schools, plus a complete general book department that is especially strong in technical and reference areas. Best sellers, new releases and gift book selections change frequently and are often accompanied by displays of special value books on many subjects.

Students need to bring course printouts to locate textbooks. Books are located by school; subjects are arranged alphabetically—departmental abbreviations, with course and section numbers—and prices are printed on the shelf tag below. Each title has the designation of *Required*, *Preferred*, *Optional* or *Available*. You can also buy books online at www.aurariabooks.com.

The Auraria Campus Bookstore carries more used textbooks than any other bookstore in Colorado, but shop early as used books are the first to go. A full refund is given for new and used books accompanied by the receipt and returned within the *first two weeks* of class for regular semesters and two days from the first day of class for short terms.

Please read the refund policy on the back of the receipt.

When a course ends, the textbook may still have value and may be bought back by the bookstore. The buy-back policy on used texts is to pay half of the new price on books that will be used again next semester on this campus. Other texts are purchased at lower percentages. The Auraria Campus Bookstore's buy-back services are dedicated to its student customers. A validated Auraria student ID is required to complete a buy-back transaction. Books are bought for this campus throughout the semester; however, buyers from national textbook companies are on hand at the end of each semester to purchase used books that may be required at other schools.

Campus Computers, 303-556-3726, offers the latest in hardware and software technology. An educational discount is offered to Auraria Campus students; a current, validated Auraria ID must be presented at the time of purchase. A full line of computer reference books and accessories are also available, as well as calculators and other small electronics. Campus Computers' is located on the second floor of the Auraria Campus Bookstore.

A current photo ID is required for purchases paid for by check. The bookstore also accepts MasterCard, VISA, American Express and Discover.

The Auraria Campus Bookstore is owned by the State of Colorado and supports the Student Bond Fund.

Auraria Early Learning Center (Child Care Center)

Location: West Colfax and Ninth Street Park

Hours: Mon.–Fri. 7 a.m.–6 p.m.

Telephone: 303-556-3188

Web site: www.tivoli.org/earlylearning

The Auraria Early Learning Center serves the child care needs of Auraria's students, staff and faculty by providing high-quality early childhood education and care programs. The Auraria Early Learning Center is located on the southwest corner of the campus. Its programs are consistently recognized by the educational community for their high-quality early childhood care and education. Developmentally appropriate practices for young children guide the educational programs that are provided. Curriculum planning is flexible and based on children's interests.

Supervising teachers in the Auraria Early Learning Center are all degreed teachers meeting the certification guidelines of the State of Colorado and of the National Academy of Early Childhood programs. Children aged 12 months to 5 years are served at the center. The center also has a fully accredited kindergarten program.

Auraria Event Center/Student Recreation Center

Location: 1255 Tenth Street Mall

Telephone: 303-352-4371 (fitness center); 303-556-3210 (recreation); 303-556-2755 (events)

Web site: www.mscd.edu/~cra

The Auraria Campus PE/Event Center is a 2,800-seat facility for team and individual sport activities, academic programs, events and conferences. Funds from student recreation fees support the use by students of the many health and recreation facilities found within the building. Adjacent to the building are softball fields, tennis courts and a track.

Auraria Library

University Librarian/Director: Mary M. Somerville

Associate University Librarians/Directors: Meg Brown-Sica, Marical Farner, Ellen Greenblatt, Cynthia Hashert, Denise Pan

Office: 1100 Lawrence Street, Denver, CO 80204-2041

Telephone: Directory and Hours: 303.556.2740

Ask Us Desk 303.556.2639

Research Help 303.556.2585

Web site: <http://library.auraria.edu>

Professors: Mary M. Somerville, MLS, University of Hawaii Manoa, MA, Goddard College, PhD, Union Institute and University

Associate Professors: Ellen Greenblatt, MA, University of Denver; Assistant Professors: Jeffrey Beall, MLS, University of North Carolina at Chapel Hill; Meg Brown-Sica, MS, University of South Florida; Ignacio Ferrer-Vinent, MLIS, University of Denver, PhD, University of Miami; Nina McHale, MA/MSLS, Catholic University of America; Denise Pan, MLS, San Jose State University, MA, University of Colorado Boulder; Karen Sobel, MLS, University of North Carolina

Senior Instructors: Orlando Archibeque, MA, University of Denver; Thomas J. Beck, MLS, Emporia State University; Gayle Bradbeer, MLS, Emporia State University; Lorraine Evans, MLS, University of Maryland; Vera Gao, MLS, University of South Carolina; Cynthia Hashert, MLS, North Texas State University; Elaine Jurries, MA, University of Minnesota; Nikki McCaslin, MA, University of Denver; Ellen Metter, MS, Drexel University; Marit S. Taylor, MLS, Vanderbilt University; Linda Tietjen, MA, University of Denver; Louise Treff-Gangler, MA, University of Denver; Diane Turner, MLS, University of Pittsburgh; Judith Valdez, MLS, Emporia State University

Instructors: Eric Baker, MLS, Indiana University at Bloomington; Rosemary Evetts, MLS, Indiana University

About the Auraria Library. The Auraria Library provides a wide range of learning resources, research services and study environments to support academic programs.

Whether you're looking for a quiet place to read and reflect, a source of authoritative academic information or a computer-enabled collaborative work space, the library offers a variety of spaces to meet your needs.

Learning Materials Collection. The Auraria Library collection contains nearly a million volumes of print books and ebooks, subscribes or links to more than 130,000 journals and offers in-house and online films. The library is also a selective depository for U.S. government publications and a depository for Colorado state documents. This collection is supplemented by access to other libraries within the state and across the nation through interlibrary loan services.

Access and Discover Library Resources. The library provides on- and off-campus access to a wide variety of electronic and print materials via the library's home page (<http://library.auraria.edu>). Nearly 400 databases provide access to full text articles, journal citations, statistics, laws and business data in a multitude of disciplines. Locally available items can be found with the Skyline catalog, while the WorldCat @ Auraria Library catalog facilitates finding print and electronic book, article and media holdings at the Auraria Library, regional and United States libraries, and beyond. You can customize WorldCat @ Auraria Library by adding keywords to records, submitting comments and creating lists of resources for quick access later.

Information and Research Services. When in doubt, visit the Ask Us desk for assistance with basic research questions, borrow items for your class (Course Reserves) or from the Library's collection, request materials from regional libraries (Prospector) or national libraries (Interlibrary Loan). For more in-depth research inquiries, you may be referred from the Ask Us desk to the Research Help desk. Librarians are also available for walk-in, appointment, telephone and online help.

Library Research Instruction. Throughout the semester, students can learn essential skills needed to conduct scholarly research through classroom sessions, online tutorials, specialized workshops and personal consultations. During individual and classroom learning experiences, find out about powerful library search tools and Web-based resources that inform research papers, support class projects and provide career information.

Learning Spaces and Computer Resources. The Computer Commons and Learning Commons offer computer resources and scanning and printing capabilities. The Tech Help desk assists with troubleshooting hardware and software computer problems. In general, the first floor of the library is dedicated to collaborative learning and research, and the second floor is devoted to quiet study and collections. Photocopiers, microform reader/printers, a copy center and study rooms are also available.

Services for Persons with Disabilities. The library is committed to making its resources and services available to all students. Library services to assist persons with disabilities include orientation to the physical layout of the library building and assistance with the retrieval of materials.

Auraria Media Center and Classroom Support Services

Location: 1100 Lawrence Street (Auraria Library), 015

Telephone: 303-556-2426

Web site: <http://mediacenter.ahec.edu>

The Auraria Media Center and Classroom Support Services offers a full range of media services and classroom support:

- distance learning technologies including video conferencing, webinars, audio conferencing, video over IP and ISDN and videotaping of course delivery
- circulation of a wide range of audio, video and data (AVD) presentation equipment for one-time use
- long-term classroom equipment check-out
- production of content on digital tape, DVD, CD and videotape by an award-winning staff using state-of-the-art digital editing, graphics and animation systems
- quantity duplication of DVD, CD, audio and videotape media
- equipment maintenance and repair
- equipment/systems consultation and installation

The Auraria Media Center's 34-channel closed-circuit campus cable system can be used in the classroom to broadcast channels such as CNN, MSNBC, History, Discovery, A&E, PBS, CSPAN, NASA and local television networks. One channel is dedicated to and managed by each institution for distribution of programming of their choice.

Auraria Media Center staff are available to train faculty in the use of equipment in "smart" classrooms on campus and offer consulting services to faculty and other clients in such areas as media design and production, effective use of media types and effective use of distance learning technologies, effective use of those technologies and equipment selection to best meet instructional needs.

Auraria Media Center and Classroom Support Services will handle all of your classroom needs regarding furniture, projector screens, whiteboards, smart classroom equipment and ADA furniture placement.

Clicks! Copy and Printing Services

Locations:

Tivoli Student Union, 211, 303-556-3702

North Classroom, 1811, 303-556-2291

South Classroom, 119A, 303-556-2679

Auraria Library, 303-556-2751

Hours: Vary by location

Clicks! is an on-campus copying, printing and graphic design department. Four full-service copy centers around campus provide high-speed copying, color copies, laminating, binding and school supplies. Services vary by location.

Emmanuel Gallery

Curator: Shannon K. Corrigan

Location: 1205 Tenth Street Mall

Hours: Tues.–Fri. 10 a.m.–6 p.m.; Sat. 11 a.m.–5 p.m.

Telephone: 303-556-8337

Web site: www.emmanuelgallery.org

Emmanuel Gallery is a tri-institutional, nonprofit art facility committed to enhancing the understanding of the visual arts. Through the presentation of high-quality art exhibits, lectures and events our purpose is to encourage critical thinking, creative research and training in gallery practices. Programs at Emmanuel Gallery promote excellence, education and enrichment to the diverse cultural community of the Auraria Campus and the Denver metropolitan area.

Health Center of Auraria

Location: Plaza Building, 150 (lower level)

Hours: Vary (see below)

Telephone: 303-556-2525

Web site: www.mscd.edu/healthcenter

All Denver Campus students are entitled to medical services at the Health Center at Auraria, and student health insurance is NOT required to use this facility. The Health Center is approved to provide emergency triage care to persons covered by Medicare and/or Medicaid. Other medical conditions will be referred to approved Medicare /Medicaid providers. Physicians, physician assistants, nurse practitioners, radiological technologists and medical assistants staff the facility. Students will be asked to complete a sign-in sheet and show a current semester ID card each time they check in.

Services include:

- treatment of illness and injuries
- lab testing
- medications
- physicals
- annual GYN exams
- sexually transmitted disease information/testing
- birth control information/services
- minor surgery

- immunizations
- HIV testing
- blood pressure checks
- casting
- suturing
- X-ray

All services listed above are low cost. The Health Center is an “in-network” medical provider for Blue Cross/Blue Shield (BC/BS) insurance plans (including out-of-state plans) and for all college-sponsored student health insurance plans. Patients participating in any of these plans simply pay their applicable co-payments at the time of service. Charges will be submitted by the Health Center directly to the insurance company. Patients not enrolled in one of the above plans are also eligible for services, but are required to pay at time of service. Classes regarding health-related topics are taught each semester and are offered free to all students. Scheduled and walk-in appointments are available. Walk-in services begin at 8 a.m., Monday – Friday. Access is on a first-come, first-served basis. Walk-in varies daily, contingent upon when all patient slots have been filled; thus, the daily closure time for walk-in care is variable. Patients are encouraged to check in as early as possible. Brochures with additional information are available at the Health Center.

King Academic and Performing Arts Center

Location: 855 Lawrence Way

Telephone: 303-556-2179

Web site: www.ahec.edu/kingcenter

The King Center houses six performing spaces: three permanently assigned production studios, a 197-seat recital hall; 520-seat concert hall; and the 168-297 seat (depending on stage configuration) Eugenia Rawls Courtyard Theatre. There are dressing rooms, green room, recording studio, lighting lab, music electronics lab, classroom space, box office, scene shop, paint shop and costume shop. All spaces are fully equipped with state-of-the-art equipment and a variety of spaces for exhibiting fine art. The entire facility has more than 180,000 square feet dedicated to the education of the student and development of the student who wishes to study performance/arts. The center can support many forms of entertainment, anywhere from legit theatre to large choral ensembles and other forms of performances.

Tivoli Student Union

Location: 900 Auraria Parkway (Ninth and Auraria Parkway)

Telephone: 303-556-6330

Web site: www.tivoli.org/tivoli/

The Tivoli Student Union, managed by Student and Auxiliary Services, provides a wide variety of services for the Auraria community. The student union houses student government and student life offices, two credit unions and tri-institutional services such as the GLBT student services.

If you want a break or a quiet place to study, the Tivoli Student Union is just the place. With a food court, coffeehouse, deli and convenience store, you'll find a place to suit your appetite, schedule and budget. If you'd rather retreat than eat, you can watch TV in the Roger Braun Student Lounge, play a game of pool at Sigi's Pool Hall and Arcade, meet a study group in the multicultural lounge or study in total silence in the Garage Quiet Study Lounge.

Additional student services at the Tivoli Student Union include the Auraria Campus Bookstore, the Club Hub, Click's! Copy Center, event services and the ID program and Commuter Resource Center.

Club Hub

Suite 346, 303-556-8094

This uniquely designed club space on the third floor of the Tivoli features work space for more than 60 clubs, mailboxes for campus clubs, a limited number of lockers, club bulletin boards and a lounge area for group meetings. This office works closely with the Student Advisory Committee to the Auraria Board (SACAB) and the student activities/life offices.

Auraria Campus Event Services

Suite 325, 303-556-2755

Through the event services office, meeting and conference space at the Tivoli Event Center, St. Francis and St. Cajetan's can be reserved for nonacademic purposes, including meetings, weddings and receptions. Events services has five caterers to choose from for all off-campus catering needs.

ID Program/Commuter and Housing Services

Suite 269, 303-556-8385

Auraria staff, faculty and students go here to get their ID cards, which are necessary for parking in some campus lots and for checking out library books. Student IDs also serve as an RTD bus and light rail pass with a semester validation sticker. The center provides off-campus housing resources, RTD bus information, campus and Tivoli information, lost and found and a microwave oven.

Sigi's Pool Hall and Arcade

Suite 145, 303-556-3645

Sigi's, named after Tivoli Brewery founder Moritz Sigi, houses 15 video game machines and six billiard tables. Sigi's is open to the entire Auraria Campus population as well as

the public. The student-friendly atmosphere encourages community socialization and relaxation.

Student Housing

University Policy and Support: Tivoli Student Union, 260

Telephone: 303-556-3682

E-mail: housing@ucdenver.edu

Web site: www.ucdenver.edu/life/Pages/Housing.aspx

Leasing and Payment Options: Campus Village Apartments, 318 Walnut Street

Telephone: 303-573-5272

E-mail: mgrdenver@edrtrust.com

Web site: www.campusvillageliving.com

The University of Colorado Denver, Denver Campus, has a live-in requirement for first-time undergraduate students

Benefits of living on-campus

Research has shown that living in student housing during the first year has numerous benefits for students both academically and socially. Students who live on-campus their first year experience:

- Higher graduation rates than students who live off campus.
- A higher level of satisfaction with their college experience.
- A higher level of involvement in clubs and activities on campus.
- More frequent interaction with faculty members and peers.

Live-in Policy

The University of Colorado Denver is a residential campus, and all first-year students live in the Campus Village Apartments at Auraria. No other apartments or buildings meet the live-in policy requirement. First-year students live together in a dedicated wing of Campus Village. This wing includes the following additional amenities:

- Additional Staff – This wing of the complex will have a higher ratio of staff to students to help provide additional support, guidance and resources for first-time students.
- Special Programming – Many of the programming efforts sponsored by the university will be taking place in the first-year student wing of Campus Village. Programs will focus on study skills, navigating the university and community, living with a roommate and a variety of other topics.
- Connections with other first-year students - First-year students share many of the same challenges and anxieties as they begin their college careers. Living in a

community of students going through the same types of experiences provides a built-in support network and can lead to lasting friendships.

Exemptions

First-time freshmen students wishing to live with their parent(s) or legal guardian(s) or who qualify under at least one of the exemptions listed below must submit the "Exemption Form" to be considered for exception from the live-in policy. Exemptions to this policy will be evaluated and made on a case-by-case basis. For further information, please contact the Office of Student Life at 303.556.3399 or via e-mail at housing@ucdenver.edu.

Exemptions to the first-time freshmen live-in requirement:

1. You will be living at home with parent(s) or legal guardian(s).
2. You are a veteran of the armed forces.
3. You are married or a parent with dependent(s).
4. You are a part-time undergraduate student enrolled for less than 10 credit hours per semester.
5. You are deemed medically excusable by the Office of Community Standards and Wellness (must be supported in writing by a doctor and with appropriate medical documentation).
6. You are over 21 years of age.
7. All other requests will be evaluated on a case-by-case basis.

Exemptions be evaluated and made on a case-by case basis. Exemption forms are available through the Office of Community Standards and Wellness, Tivoli Student Union, 259, or online at www.ucdenver.edu/housingexemption. For further information, please contact the Office of Community Standards and Wellness at 303-556-2444 or via e-mail at housing@ucdenver.edu.

Campus Village Frequently Asked Questions

Amenities

At Campus Village at Auraria, students will find a community to support their academic and personal interests. It's convenient, comfortable and affordable. Features include:

- apartment-style living with kitchenettes or full kitchens for all students
- lease rates that include heating, cooling, electricity, water, cable and high-speed Internet service
- on-site tutoring and academic support
- a variety of floor plans (from individual studios to four bedroom apartments) to meet the needs of all students
- individual lease agreements for shared units

- fully furnished apartments
- various affordable meal plans

Diagrams of floor plans, details about meal plans, pricing, applications and exemption forms are available on the Web site at www.campusvillageliving.com.

Important Dates and Information

June 1, 2010: ^[L]_[SEP]UC Denver First-Year Student Priority Deadline^[L]_[SEP]

Freshman students are required to live in Campus Village for two academic-year semesters but this policy is subject to availability of space. Most residence hall assignments are made on a first-come, first-served basis, so you are encouraged to apply for housing as soon as possible after you confirm your enrollment.

Payment and Billing

Campus Village housing and dining fees will be billed to your UC Denver student account. If you receive financial aid, your award(s) will be credited directly to your student account. Financial aid awards are used to pay your tuition and fees first; any remaining award(s) are then used to pay your housing charges. You are responsible for any and all charges not covered by financial aid and scholarships. You must provide Campus Village with proof/verification of funds by September 15, 2010.

Campus Safety

The University of Colorado Denver places a priority on the safety and security of its faculty, staff, students and visitors. Please visit the University Policies chapter of this catalog for additional information related to campus safety.

Emergency Notification System

The Emergency Notification System allows students, faculty and staff to register to receive alerts about threats of imminent danger at or near any UC Denver location. This service is used in conjunction with other communication channels including: public address systems, broadcast e-mail and voice-mail messages to campus telephone extensions, electronic signage, a coordinated use of public media outlets and 24-hour recorded emergency and information hotlines (Denver/Auraria Campus 303-556-2401; Anschutz Medical Campus in Aurora 303-724-4636). Participants can receive various notifications including text messaging, e-mail and phone calls. Visit the UC Denver Web site for details.

Auraria Campus Police Department

Office: Administration Building, Suite 110

Telephone: 303-556-5000 (Police Dispatch)

Emergency: 911 from a campus phone or 303-556-5000

Web site: www.ahec.edu/acpd.htm

On the Denver Campus, UC Denver works with the Auraria Campus Police Department to ensure campus safety. The Auraria Campus Police Department provides campus services 24 hours a day, seven days a week including:

- security patrols, bicycle patrols and foot patrols
- crime prevention programs
- night escorts to a vehicle
- vehicle unlocks
- informational services

Auraria Police fulfill the campus responsibilities for reporting crime as required by the Clery Act. Clery statistics are available online at www.ahec.edu/campuspolice/ucd-clery.pdf.

Student Right To Know and Disclosure Information

Crime Statistics

In compliance with the federal Student Right-to-Know and Campus Security Act, the Auraria Campus publishes crime statistics on campus in the Auraria Campus Clery Report. In an emergency, please contact Auraria Campus Police at 303-556-5000 or dial 911 from a campus phone.

Persistence and Completion Data

Section 103 of Title 1 of Public Law 101-542 as amended by Public Law 102-26 (the Federal "Student Right-to-Know" Act) requires that institutions produce and make available to current and prospective students the completion rate of first-time, full-time, degree-seeking undergraduate students entering the institution. Six years after entering, 36.6 percent of the fall 2002 cohort graduated, another 12.2 percent transferred to other public higher education institutions in Colorado and 12.8 percent were still enrolled at the Downtown Campus for a total six-year combined persistence and completion rate of 61.6 percent.

UC Denver's Denver Campus' one-year fall-to-fall retention rate is 70 percent for the fall 2008 cohort. That is, of the first-time, full-time, degree-seeking undergraduate students who entered the university in fall 2008, 70 percent were enrolled at the Denver Campus in fall 2009.

Riot Law (Student Riot Bill)

Student enrollment-prohibition-public peace and order convictions: 1) No person who is convicted of a riot offense shall be enrolled in a state-supported institution of higher education for a period of twelve months following the date of conviction; 2) a student who is enrolled in a state-supported institution of higher education and who is convicted of a riot offense shall be immediately suspended from the institution upon the institution's notification of such conviction for a period of twelve months following the date of conviction, except that if a student has been suspended prior to the date of conviction by the state-supported institution of higher education for the same riot activity, the twelve month suspension shall run from the start of the suspension imposed by the institution; 3) nothing in this section shall be construed to prohibit a state-supported institution of higher education from implementing its own policies and procedures or disciplinary actions in addition to the suspension under (2) of this section, regarding students involved in riot.

Sex Offender Information (Campus Sex Crimes Prevention Act)

Sex offenders are required to list the locations of all institutions of post-secondary education where he or she volunteers or is enrolled or employed. The Colorado Bureau of Investigation maintains a database identifying all such persons and makes it available to all law enforcement agencies in which jurisdiction the institution of postsecondary education is located. The campus community can obtain this information by contacting the Auraria Campus Police Department at 303-556-5000.

Voter Registration (National Voter Registration Act)

In compliance with the National Voter Registration Act, the state of Colorado voter registration application form and information is available online at www.sos.state.co.us/pubs/elections/ or www.fec.gov/votregis/vr.shtml.

Student Services

Academic Success and Advising Center

Office: North Classroom, 2024

Telephone: 303-352-3520

Web site: <http://www.ucdenver.edu/life/services/asac/advising/Pages/default.aspx>

Academic advising is the foundation of a successful college experience and an important component in both choosing a major and career planning. The Academic Success and Advising Center (ASAC) assists students in the development of meaningful educational plans that will be compatible with their aspirations. This office serves as the first point of contact and provides academic advising for students who are prebusiness, preengineering, nondegree and undecided in the College of Liberal Arts and Sciences and all freshmen and undecided in the College of Arts & Media. Students assigned to the ASAC meet with an advisor every semester to plan a schedule, discuss academic support services and assist with referrals to other on-campus resources. In addition, the center provides general information and resource referrals to all students.

New student orientation for freshmen/first year students is coordinated through the ASAC. Fall and spring welcomes for transfer, nondegree and graduate students are also coordinated through the center.

American Indian Student Services

Office: North Classroom, 2013

Telephone: 303-556-2860

Web site: www.ucdenver.edu/life/services/studentlife/Pages/StudentLife.aspx

The American Indian Student Services program provides access and educational opportunities to American Indian students through specialized recruitment and retention efforts. The program provides academic advising, scholarship information, cultural programs, advocacy, student organization sponsorship and other supportive services tailored to the specific needs of the students. American Indian student services also serves as a resource to the campus, providing current information on issues and concerns of the American Indian community.

Asian American Student Services

Office: North Classroom, 2014

Telephone: 303-556-2578

Web site: www.ucdenver.edu/life/services/studentlife/Pages/StudentLife.aspx

Asian American Student Services serves as a resource to the campus and community. The office seeks to support student success by providing services in an welcoming environment, which include:

- academic advising
- scholarship information
- cultural programming
- advocacy
- resource information
- student leadership development opportunities

Black Student Services

Office: North Classroom, 2010

Telephone: 303-556-2701

Web site: www.ucdenver.edu/life/services/studentlife/Pages/StudentLife.aspx

The Black Student Services program provides access, educational opportunities and information to students through specialized recruitment and retention efforts. The program provides academic advising, scholarship information, cultural programs, advocacy, student organization sponsorship and other supportive services tailored to the specific needs of the students. Black student services also serves as a resource to the campus, providing current information on issues and concerns affecting the community.

The Career Center

Office: Tivoli Student Union, 267

Telephone: 303-556-2250

Web site: www.ucdenver.edu/careercenter

The Career Center offers a full array of services that prepare students for the transition from college to career. Students are encouraged to participate in career-related programs and services as early as their freshman year to begin to consider career options and gain the skills and experience necessary to be successful upon graduation.

The Career Center's brand is **Just ASK! Access-Search-Knock!**

- **ASSESS:** Understand and leverage student's abilities, skills, personality, values, and interests for an excellent choice of an academic major or to determine a career direction.
- **SEARCH:** Preparation for job search, including development of career collaterals such as resumes, interviewing and negotiating skills, and developing job search strategies.
- **KNOCK:** Connects students with employers through services including: online job posting, resume referrals, on-campus interviewing, career fairs, employer presentations, and networking events.

Just ASK! is designed to compliment a student's educational program and help student's achieve their career goals.

Community Standards and Wellness

Location: Tivoli Student Union, Suite 259

Telephone: 303-556-2444

Web sites: www.ucdenver.edu/wellness; www.ucdenver.edu/standards;
www.ucdenver.edu/housing

The Office of Student Conduct and Community Standards serves as a resource to the entire university community through its efforts to meet the developmental and educational needs of students related to community expectations, civility and respect for self and others. We function to support community members with conflict management and resolution and by responding to inappropriate and threatening behaviors. We provide student-centered educational services, which promote personal development and individual responsibility. We strive to create a dynamic, open and just environment where civility, cultural competence and learning are expected and celebrated.

Overall Office Goals

- To develop, disseminate, interpret campus policies and procedures related to community standards and expectations
- Protect the rights of students in the administration of the student conduct program
- Respond to student behavioral concerns in a fair, reasonable and efficient manner
- To promote a campus environment that encourages dialogue, mutual respect and cultural sensitivity
- Initiate and encourage educational activities that serve to reduce violation of campus regulations and increase the health and wellness of the campus community
- To foster collaborative partnership that allow for a holistic approach to supporting and developing healthy, engaged and productive students and citizens

Disability Resources and Services office

Location: North Classroom, 2514

Telephone: 303-556-3450

TTY: 303-556-4766

E-mail: DisabilityResources@ucdenver.edu

The Office of Disability Resources and Services (DRS) is committed to providing equal opportunities and fostering the personal growth and development of students with disabilities. The DRS staff strive to meet the needs of a large and diverse community of students with disabilities. We are available to provide assistance and to arrange for reasonable accommodations that will address specific educational needs.

Accommodations may include but are not limited to the following:

- priority registration for classes
- assistance in identifying volunteer notetakers
- alternative testing (private room, additional time, reader/scribe)

- alternate textbook formats (scanned, enlarged print, Braille)
- interpreter services or captioning services

Gay, Lesbian, Bisexual, Trans (GLBT) Student Services at Auraria

Office: Tivoli Student Union, 213

Telephone: 303-556-6333

Web site: www.glbttss.org

Gay, Lesbian, Bisexual, Transgender Student Services is open to all Auraria Campus students as a resource for exploring sexual orientation or gender identity issues. This program offers a variety of support, education and advocacy services for the entire campus community:

- support for those who may have questions about their own sexual orientation/gender identity or that of a friend or family member
- advocacy for students experiencing discrimination or harassment based on a real or perceived GLBT identity
- speakers for events, workshops and classes on various aspects of sexual orientation and gender identity
- programs and workshops about working with the gay, lesbian, bisexual and transgender communities
- resource library of 500 books and 90 videos (documentary and cinema) available for research and leisure, as well as a multitude of free literature regarding other organizations and services throughout Denver and Colorado that provide outreach, services and advocacy
- programs such as Speakers Bureau and other forums providing information and dialogue about GLBT issues

The GLBT Student Services office is staffed by a director with the support of student employees and volunteers. Input and involvement from the entire campus community are welcomed.

Global Education, Study Abroad

Director: John Sunnygard

Telephone: +1-303-315-2230

Web site:

ucdenver.edu/academics/InternationalPrograms/OIA/StudyAbroad/Pages/StudyAbroad_GlobalEducation.aspx

Global Education is the university's central office that supports all students seeking to internationalize their education and gain professional preparation to more effectively serve and compete in a global world. The office advises and prepares students, faculty

and staff to safely navigate the full range of global academic and learning opportunities. Global Education has a network of study abroad programs, international internship, volunteer and service learning opportunities in more than 80 countries. Graduate, professional and undergraduate students from both campuses also conduct international research also benefit from Global Education's support services. Study abroad programs are offered in a variety of terms, costs and disciplines to suit the full spectrum of UC Denver students. Students may choose to immerse themselves in a more traditional academic year or semester program abroad; or to conduct research on field studies sites. Many students chose to study with UC Denver faculty on one of the many affordable, focused travel-study programs over winter break, Maymester or summer. The International College Beijing semester program is of particular interest to communication and economics students. While many students study abroad to learn or perfect language skills, most students participate in English-taught programs in non-English and English-speaking countries. Either UC Denver or transfer credit may be earned on approved programs abroad, giving students the opportunity to fulfill degree requirements while living, learning and growing in another culture. Considerable effort is made to keep global educational opportunities affordable for all UC Denver students. Additionally, scholarships and financial aid may be available depending upon the program and location. Information and advice on scholarships such as Fulbright, NSEP, Gilman and others is also available. For the most current information on programs, policies and the benefits of global education, please visit the Global Education Web site at ucdenver.edu/academics/InternationalPrograms/OIA/StudyAbroad/Pages/StudyAbroad_GlobalEducation.aspx.

Hispanic Student Services

Office: North Classroom, 2012

Telephone: 303-556-6209

The Hispanic Student Services program provides access and educational opportunities to Hispanic students through specialized recruitment and retention efforts. The program provides academic advising, scholarship information, cultural programs, advocacy, student organization sponsorship and other supportive services tailored to the specific needs of the students. Hispanic student services also serves as a resource to the campus, providing current information on issues and concerns of the Hispanic community.

Information Technology Services

Office: Lawrence Street Center, 1350

Telephone: 303-724-4357

Web site: <http://ucdenver.edu/admin/its/>

Information Technology Services (IT Services) provides central support of the telecommunications, computing and network infrastructure for the Denver Campus and the Anschutz Medical Campus. IT Services also provides computing resources such as computer accounts, e-mail, file storage, server hosting, Internet, Internet2 and National Lambda Rail.

The IT Services Help Desk is a single point-of-contact for reporting computer-related problems or requesting services. Faculty and staff are encouraged to contact the Help Desk for general questions about computing at UC Denver.

IT Services also provides student computing services to currently enrolled students within the computer labs located in the North Classroom 1206, St. Cajetans 101 and the Tivoli 241. The computer labs have Macintosh and Windows-based computers with Internet access available for student use on a first-come first-served basis.

For more information, call the IT Services Help Desk at 303-724-HELP.

International Affairs

Assistant Vice Chancellor: Carolyn North

Courier Address: International Affairs, 1380 Lawrence Street, 9th floor, Denver, CO 80204-2029, USA

Mailing Address: International Affairs, Campus Box 185, P.O. Box 173364, Denver, CO 80217-3364, USA

Telephone: +1-303-315-2230

Fax: +1-303-315-2246

The Office of International Affairs (OIA) serves the university by providing administrative support, expert advice, technical services, educational programs and related services that contribute to the strategic international goals of UC Denver. The Office of International Affairs addresses international policy issues, has oversight of international risk management protocols, serves as a resource for best practices in the internationalization of higher education, maintains central data bases pertaining to international activities of the university, advises on the development of international affiliations and agreements, assists departments/programs and schools/colleges with the development of comprehensive international strategic planning and seeks to promote and support initiatives that advance international research, education and global cooperation.

OIA serves as a resource for faculty seeking international research opportunities, provides a comprehensive list of international scholarship/fellowship information and serves as the institutional liaison for the CIES Fulbright Scholars Program. OIA provides visa and orientation services to international students and scholars, provides expertise in the development and maintenance of undergraduate, graduate and professional global

education, assists with brokering and designing bilateral international educational programs and offers comprehensive international recruitment and admissions services.

The four divisions of OIA include International Admissions, International Student and Scholar Services, Global Education and International Colleges.

Graduate Student and Faculty Fulbright Information

OIA maintains listings of opportunities and other information on various scholarships and fellowships for study and research abroad, including Fulbright graduate student and faculty visiting lectureships at foreign universities.

Community Outreach Services

During the year, OIA sponsors periodic guest lectures and special seminars focused on topics of current international interest. Many of these activities are open to the public as well as the UC Denver community. OIA is also an active participant in a number of Denver community international programs and events. For more information about these and other programs, contact OIA at 303-315-2230.

International Colleges

Telephone: +1-303-315-2240

The International Colleges Unit in the Office of International Affairs is designed to assist UC Denver schools/colleges, departments and faculty design and implement unique educational partnerships abroad. We have the expertise to assist with both educational and financial modeling, program marketing and in-country support of students and faculty.

International College at Beijing

Currently the International Colleges Unit supports an International College in Beijing, China, in partnership with the College of Liberal Arts and Sciences. This program is maintained by a formal agreement between the University of Colorado Denver and China Agricultural University. The International College at Beijing (ICB) provides a rich, cultural learning experience in an English-speaking environment for Chinese students and UC Denver faculty.

The ICB mission is to educate and empower future leaders of China. This mission is accomplished by promoting knowledge and understanding of human culture and its diversity, teaching essential global work force skills such as English language, critical thinking, communication and decision making and enhancing student's capacity to make informed and responsible choices.

ICB offers a carefully designed program leading to a baccalaureate degree from UC Denver in either economics or communication. The courses cover the same subject matter as the courses taught on the UC Denver Denver Campus. In addition, ICB students have the option to study at UC Denver for one to two years. This unique degree program was accredited by the North Central Association (NCA) of the United States in fall 1995.

International Student and Scholar Services

Director: Laura Welch

Telephone: +1-303-315-2230

The International Student Services unit provides a variety of services and programs to international students with a special emphasis on F-1 and J-1 students. The unit provides check-in sessions, orientations, work clinics and immigration advising, and we often partner with other UC Denver departments to offer programs and events to our international student population. For more information related to immigration matters, programs and advising services for international students, please visit our Web site at www.ucdenver.edu/international.

Internships & Experiential Learning

Director: Lissa Gallagher

Office: Tivoli Student Union, 260

Telephone: 303-556-6656

Web site: <http://www.ucdenver.edu/life/services/ExperientialLearning>

Live your learning at UC Denver! Students have many opportunities to explore academic fields through direct experience including internships, service in the community, undergraduate research and international experiences. Link your studies to the real world and put your knowledge into practice. You will develop new skills, grow personally and professionally and enrich your academic experience.

INTERNSHIPS AND COOPERATIVE EDUCATION

Hundreds of UC Denver students engage in degree-related work experiences with corporations, government and nonprofit agencies in the Denver-metro area and around the world. Students can earn academic credit, pay or both while gaining relevant experience related to their career interests.

SERVICE LEARNING

Students gain a better understanding of community issues, develop practical skills and make a difference in the world around them when they engage in service activities. From the first-year experience course to senior capstone classes, faculty weave service projects into their courses, giving students a wider view of the world. Many volunteer opportunities are also available through the center. Students can also earn AmeriCorps education awards for service.

UNDERGRADUATE RESEARCH

Whether assisting faculty with research or pursuing their own research under faculty supervision, UC Denver students can experience what it means to be involved in the creation of knowledge. Students may apply for research grants through the Undergraduate Research Opportunities Program (UROP) and showcase their research projects at the annual *Research and Creative Activities Symposium*.

Learning Resource Center

Office: North Classroom, 2006

Telephone: 303-556-2802

The Learning Resource Center is designed to promote student success in the academic setting. Available to undergraduate and graduate students, services include:

- individual and open lab (group) tutoring
- study skills courses
- study strategies seminars
- a resource library
- supplemental instruction (SI) for courses in physics, chemistry and biology
- ESL (English as a second language) support through workshops, conversation and pronunciation groups

Ombuds Office

Office: CU-Denver Building, 107P

Telephone: 303-556-4493

E-mail: Mary.ChavezRudolph@ucdenver.edu

Web

site: www.ucdenver.edu/about/departments/OmbudsOffice/Pages/OmbudsOffice.aspx/

The Ombuds Office is a designated neutral and independent resource available to all members of the university community to provide informal and confidential assistance in

resolving conflicts, complaints and disputes. An ombuds person does not advocate for any party but is an advocate for fair process.

The ombuds person can provide information about policies, procedures, practices or decisions at UC Denver and can assist individuals and groups in resolving their concerns by listening; probing for understanding; and helping to understand options. The ombuds person will make referrals as necessary and can serve as an informal mediator or shuttle diplomat.

The Ombuds Office works toward positive change within the university, serving as a consultant in the preparation and review of policies and procedures and assisting in the solution of problems. While keeping names and cases confidential, the ombuds person reports trends and pervasive problems to the appropriate resolution channels.

The Ombuds Office can also assist with large group issues by providing group facilitation, conflict management training and personality profile assessments. In addition, the office has a lending library comprised of books and videos available for check-out.

Due to its informal, confidential and independent role outside the administrative structure of the university, notice to the ombuds about a problem does not result in the generation of records, nor does it constitute legal notice to the university about the existence of a problem. For those interested in making official complaints to the university about a problem, the Ombuds Office can assist by making appropriate referrals.

Center for Pre-Collegiate and Academic Outreach Programs

Office: Administration Building, 360

Telephone: 303-556-2322

E-mail: pcdp@ucdenver.edu

Web site: www.ucdenver.edu/academics/degrees/pre-collegiate/Pages/default.aspx

The programs offered by the Center for Pre-Collegiate and Academic Outreach Center serve to motivate middle- and high-school students to pursue post-secondary education and provide them the academic skills necessary to be successful in their college endeavors.

Pre-Collegiate Development High School Program

The Pre-Collegiate Development High School Program is a systemwide, institutionally funded academic enhancement program for high school students. The primary focus of the program is to prepare youth (grades 9–12) who are first-generation and from an underrepresented group in higher education to successfully complete high school on a

timely basis and possess the necessary skills to successfully enter and graduate from their choice post-secondary institution. During the academic year, students will take part in relevant Saturday Academies in basic study skills, interpersonal skills development and college entrance exam preparation designed to acclimate them to the university and prepare them for college study. In addition, students are provided with either a two-week (sophomores) or five-week (juniors) intense summer academic program. During this experience, students are exposed to various academic courses, which are designed to enhance and augment their college entry requirements (e.g., mathematics, sciences, writing and seminar) once they return to their host high school for either their junior or senior year. For further information you may contact us at 303-556-2322.

Pre-Collegiate Middle School Academic Program

The Pre-Collegiate Middle School Academic Program is an academic enhancement program. The program is designed to adequately prepare potential first-generation college students in grades seven to eight to successfully complete their pre-secondary school career, enroll in a college preparatory high school curriculum and ultimately enroll to their choice college/university with the necessary skills and academic preparation to succeed at and graduate from that institution. The Pre-Collegiate Middle School Academic Program serves as a precursor to the Pre-Collegiate Development High School Program. Students who successfully complete the Pre-Collegiate Middle School Academic Program with a cumulative GPA of 2.75 or better will then be admitted to the Pre-Collegiate Development Program at the end of their 8th grade year.

During the academic year, the students are provided relevant Saturday Academies in areas such as basic study skills, academic skills enhancement, leadership and interpersonal skills development. Parents of the participating students will also be offered relevant workshops during the Saturday Academy sessions, which include effective parenting strategies, as well as strategies on how to prepare financially for their student's college education. Tutoring services will also be provided on an ongoing basis during the academic year at their middle school. The academic year Saturday Academies are designed to augment middle school curriculums (e.g., mathematics, writing, sciences, computer skills, etc.) and enhance parenting skills and strategies designed to more fully support their student. For further information you may contact the program coordinator, Junior Reina, at 303-556-2322.

Upward Bound Program Power-Up Project

The Upward Bound program, a federally funded TRIO program, is an educational pre-collegiate program for selected students from Sheridan and Jefferson High Schools. Upward Bound's mission is to prepare and help motivate students with potential for success in postsecondary education. Participants are selected based on their academic

performance, motivation for success, recommendations from teachers and counselors and additional criteria.

Upward Bound aims to provide program participants with the necessary skills needed to successfully graduate from high school and complete a four-year college degree. Students participate in after-school and weekend programs that include supplemental education, academic themed workshops, field trips and college campus tours. Every student also participates in a six-week summer program designed to prepare them for their high school classes and the college application process. Additionally, all students participate in a shadowing program with current college students and working professionals in the Denver metro area. The program is 100 percent funded by the U.S. Department of Education.

CU Succeed

The CU Succeed program enables juniors and seniors to earn fully transferable college credit while still in high school. There are two programs for students to choose from: CU Succeed Gold and CU Succeed Silver.

CU Succeed Gold: Courses are taught during regular school periods by specially qualified high school teachers who hold honorarium faculty appointments at UC Denver.

CU Succeed Silver: Courses may be taught during school periods and after school hours and are taught by UC Denver full-time or part-time faculty.

Courses taken through the CU Succeed programs are eligible for transfer to University of Colorado campuses, as well as to many other universities and colleges. More information about the CU Succeed programs is available at ucdenver.edu/academics/continuing-education/CUSucceed/Pages/default.aspx.

Scholars Program

The Scholars Program is an early college enrollment program for college-bound, high-achieving students who are potential first-generation who are *current graduating high school seniors*. The program allows students to begin their college studies by taking one course on the University of Colorado Denver Downtown Campus during the fall and spring semester of their senior year. The credit earned in the course can be applied toward a bachelor's degree at UC Denver or at another institution.

Prior to and during their fall and spring enrollment, scholars engage in orientation, admissions and financial aid seminars and other workshops, *along with their parents*, designed to acclimate them to the university and prepare them for full-time college study. Assistance with course selection, educational planning and tutoring is provided.

Who may participate in the program? Students who are potential first-generation college students, and/or underrepresented in higher education may apply to the program. Applicants must be current juniors who are graduating from their respective high schools at the end of the following spring semester.

Applicants must meet the following criteria:

- A minimum GPA of 3.0 at the time of application
- Completion of at least two years of math (two years of algebra or one year of algebra and one year of geometry) with an average grade of B or better
- Completion of two years of English (one year must be composition) with an average grade of B or better
- A commitment to participate in all of the program's orientations and workshops prior to and during enrollment

NOTE: *Interested students are cautioned that college work requires considerable time and discipline.* Therefore, only students who have completed the majority of their high school requirements, who do not work after school and who are **not** heavily involved in extra-curricular activities are encouraged to apply. Since UC Denver courses are available throughout the day and into the early evening, students will have many options in choosing a course that best fits their schedule.

What are the student's responsibilities?

The UC Denver Scholars Program is committed to providing students with every opportunity to enhance their academic skills and to succeed in the college courses they take at UC Denver. However, students will gain the most benefit from their experience at UC Denver if they commit themselves to the goals of the program and actively participate in its activities. Therefore students will be expected to:

- Commit themselves to actively participating in the program for the semester
- Attend their college class faithfully, completing assignments and participating fully (tutors or teaching assistants will be made available)
- Attend all tutorial sessions as required by instructors and staff

The program involves a serious commitment by students because college is a serious commitment. If a student earns a failing or a low grade in a college class, a prospective college or university may be reluctant to grant admission to that student. Students who are already involved in extra-curricular activities should apply to the program only if they are sure that these activities will not interfere with their full participation in the program.

How much does the program cost?

UC Denver covers most of the direct educational expenses, which includes tuition and matriculation fees. Students will be responsible for the following:

- Books (ranging from \$50 - \$100)
- A student identification card (\$10), available in the Tivoli Student Union upon acceptance into the program
- Parking (\$3.75 to \$10 per day)

NOTE: Students must arrange their own transportation to and from the Auraria Campus. Those who choose to drive may park in the student lots for an hourly or daily fee.

How do students apply?

Application to the UC Denver Scholars Program must be made through a high school counselor. Applicants should ensure that their counselor submits the following materials/credentials to the Scholars Program.

- A University of Colorado Denver **nondegree** application form; **Non-USA citizens** must attach photocopy of VISA or permanent resident card
- A *completed* application packet, including student general information form, counselor recommendation form and two teacher recommendation forms
- An unofficial copy of the student's high school transcript

Students should be advised that no application will be considered if it is incomplete.

Completed applications should be turned in to your high school college counselor. For additional information contact:

Abenicio D. Rael, Assistant Director
University of Colorado Denver Scholars Programs
Campus Box 147
P.O. Box 173364
Administration Bldg., Suite #360
Denver, CO 80217-3364
303-556-2322
abenicio.rael@ucdenver.edu

Student Activities Office

Office: Tivoli Student Union, 303

Telephone: 303-556-3399

Web site: www.ucdenver.edu/events

The Office of Student Activities offers a comprehensive student activities program that helps bring about a positive college experience for every student. Our goal is to integrate what students learn from the full range of their experiences and to engage them in active learning both inside and outside the classroom. We are committed to bringing new and exciting activities, events and workshops that provide innovative opportunities for student learning, especially in the areas of self-knowledge, leadership, diversity, communication, service, civic engagement and social responsibility. Through

participation in co-curricular activities, we help students enhance interpersonal, leadership and critical thinking skills and help prepare them for active citizenship beyond college.

Student Advocacy Center

Office: North Classroom, 2012

Telephone: 303-556-2546

The Student Advocacy Center provides support services to UC Denver students, particularly during their first year on campus. Services are designed to help students make a smooth transition to life at UC Denver and to succeed in their college studies. Professional staff and student peer advocates provide information about campus resources and assist students with class scheduling, academic policies and procedures and problem solving. The center also houses an extensive scholarship library.

Student and Community Counseling Center

Director: Dr. Patricia Larsen

Office: North Classroom, 4036

Telephone: 303-556-4372

Web site: www.ucdenver.edu/counselingcenter

The Student and Community Counseling Center provides 10 counseling sessions per fiscal year at no charge to students attending the Denver Campus. We serve individuals, couples, families and groups for mental health concerns including but not limited to:

- stress management
- substance abuse
- relationships
- depression
- anxiety
- crisis intervention
- learning disabilities and Attention Deficit Hyperactivity Disorder testing

If appropriate, we refer students to additional on-campus and/or community resources. Also, by request, staff provide consultations, lectures and workshops to student, faculty and staff groups on mental health topics, diversity, center services and organizational and student development.

Student Government Association

Office: Tivoli Student Union, 301
Telephone: 303-556-2510
Web site: www.ucdenver.edu/sga

The Student Government Association serves as a voice for students. Similar to the structure of the U.S. government, SGA has executive, legislative and judicial branches. Executives are elected each year in the spring. SGA assists students with information concerning student clubs and organizations, campus events, issues concerning student status and other information of general interest to students. SGA also provides students assistance with grievances and the opportunity to become more closely involved with the university community through active participation in student government itself or through service on university, tri-institutional and Auraria committees.

Student Health Insurance Office

Office: Tivoli Student Union, 303
Telephone: 303-556-3399
Web site: www.ucdenver.edu/studenthealthinsurance

The Student Health Insurance Office strongly encourages all students to have adequate health insurance coverage. The university health plan is designed to coordinate services with the Health Center at Auraria to provide quality health care at the lowest possible cost. For domestic students, the university health plan is voluntary. International students with F-1 and J-1 student visas are required to carry the health insurance plan provided by the university.

Student Life

Office: Tivoli Student Union, 303
Telephone: 303-556-3399
Web site: www.ucdenver.edu/studentlife

It is the mission of the Office of Student life to complement the academic programs of study at UC Denver and enhance the overall educational experience of students through the development of, exposure to and participation in social, cultural, intellectual, recreational, leadership and governance programs. The Office of Student Life is the

advising, coordinating, resource and general information center for student organizations, the academic honor societies student government and the student newspaper.

The office is responsible for the administration of the student fee budget and monitors all student fee expenditures to assure compliance with UC Denver and state of Colorado regulations and procedures. The director of student life represents the assistant vice chancellor for university life on selected UC Denver, tri-institutional and Auraria committees and maintains effective lines of communication with Metropolitan State College of Denver, Community College of Denver and Auraria Higher Education Center.

Student Newspaper: The Advocate

Office: Tivoli Student Union, 345

Telephone: 303-556-2535

Web site: www.ucdadvocate.com

The purpose of the *The Advocate* is to provide students with information about campus issues and events. The newspaper strives to include good investigative reporting, feature articles and items of general interest to its campus readership. In addition, the newspaper is a tool to encourage and develop writers, journalists, artists and other student members of its general management and production staff.

Transfer Initiative, Denver

Office: 1027 Ninth Street Park

Telephone: 303-352-3309

The Denver Transfer Initiative (DTI) is a cooperative project between the Community College of Denver (CCD) and the University of Colorado Denver (UC Denver) aimed at increasing the graduation rate and completion of bachelor's degrees for traditionally underserved populations, specifically first-generation, low-income and Hispanic. The project is designed to provide assistance and support to students throughout their course work and educational careers. Students attend their first two years at Community College of Denver then transfer to UC Denver for their last two years of course work.

DTI students receive continuous assistance in the form of:

- support, guidance and advocacy
- financial aid and scholarship application assistance
- two-year to four-year transfer degree planning
- career assessment, exploration and counseling
- peer mentoring and tutoring services
- connection to campus and community resources
- attendance to informational workshops

- the opportunity to attend student events and multicultural activities

DTI is a Title V grant project funded by the Department of Education's Developing Hispanic-Serving Institutions Program, which helps eligible institutions of higher education enhance and expand their capacity to serve Hispanic and low-income students by providing funds to improve and strengthen the academic quality, institutional stability, management and fiscal capabilities of eligible institutions (www.ed.gov/programs/developingservinginstitutions/index.html).

TRIO Program: Student Support Services

Office: North Classroom, 2506

Telephone: 303-556-3420

TRIO/Student Support Services is a federally funded by the Department of Education. The program for first-generation, low-income, and disabled students provide services which include:

- academic support
- preparation for graduate school
- career planning, workshops
- scholarship information
- tutoring
- book scholarships
- peer mentoring

Veteran Student Services

Office: CU-Denver Building, 107A/B

Telephone: 303-556-2630, 303-556-2745

E-mail: vaoffice@ucdenver.edu

Web site: <http://ucdenver.edu/life/services/Veteran>

The University of Colorado Denver Office of Veteran Student Services (OVSS) has been charged with representing veteran and veteran-dependent students on campus and in the Denver metropolitan area. Our mission is to improve and enrich the educational experience of our servicemen, servicewomen and their dependents through advocacy, as well as appropriate and responsive services.

The Office of Veterans Student Services is the initial contact point for eligible veterans and dependent students wishing to seek a postsecondary education or UC Denver students who wish to utilize Veterans Administration educational benefits. This office services include:

- assistance in filling out VA paperwork

- assistance in solving problems associated with the receipt of VA-related educational benefits
- maintaining proper certification for eligible students to ensure that each student meets Veterans Administration requirements for attendance, course load and content, and other regulations necessary to receive educational benefits payments
- providing VA vocational rehabilitation referrals,
- serving as a campus resource
- providing information on VA tutorial assistance
- offering VA work/study positions for qualified veterans.

Writing Center

Director: Justin J. Bain

Office: North Classroom, 4014

Telephone: 303-556-4845

Web site: clas.ucdenver.edu/writing/

The UC Denver Writing Center equips our community of writers (students, staff, faculty, alumni) with the necessary skills of composition to expand their academic opportunities and further their careers. We view writing as a process and all texts as works in progress. We build confident and accomplished writers through the development of strong cognitive and writing abilities. Our mission is to empower writers through collaborative work.

Services include one-on-one and small-group writing consultations in areas such as:

- Generating, organizing and developing ideas
- Establishing effective proofreading skills
- Analysis, synthesis and argument
- Summary, paraphrase and documentation
- Error pattern analysis
- Information literacy and research strategies

Computers are provided for writers' use, and online consultations are available. All consultations are by appointment; to schedule an appointment, please visit our Web site.

University Policies

Every organization, large and small, runs more smoothly when policies and procedures are in place. This chapter touches briefly on policies that are most important to students and their academic pursuits. The University of Colorado Denver's Policies and Guidelines Web site, www.ucdenver.edu/admin/policies/, provides a complete list of policies for every facet of the organization, including those from other organizations that

affect the Downtown Campus, such as the Laws of the Regents and policies of the Auraria Higher Education Center.

Academic Honor Code and Discipline Policies

Policies related to academic credit and grades are explained in the Registration and Records chapter of this catalog.

Academic Honesty

A university's reputation is built on a standing tradition of excellence and scholastic integrity. As members of the UC Denver academic community, faculty and students accept the responsibility to maintain the highest standards of intellectual honesty and ethical conduct in completing all forms of academic work at the university.

Forms of Academic Dishonesty

Students are expected to know, understand and comply with the ethical standards of the university. In addition, students have an obligation to inform the appropriate official of any acts of academic dishonesty by other students of the university. Academic dishonesty is defined as a student's use of unauthorized assistance with intent to deceive an instructor or other such person who may be assigned to evaluate the student's work in meeting course and degree requirements. Examples of academic dishonesty include, but are not limited to the following:

A. Plagiarism

Plagiarism is the use of another person's distinctive ideas or words without acknowledgment. The incorporation of another person's work into one's own requires appropriate identification and acknowledgment, regardless of the means of appropriation. The following are considered to be forms of plagiarism when the source is not noted:

- word-for-word copying of another person's ideas or words
- the mosaic (the interspersing of one's own words here and there while, in essence, copying another's work)
- the paraphrase (the rewriting of another's work, yet still using their fundamental idea or theory)
- fabrication (inventing or counterfeiting sources)
- submission of another's work as one's own
- neglecting quotation marks on material that is otherwise acknowledged

Acknowledgement is not necessary when the material used is common knowledge.

B. Cheating

Cheating involves the possession, communication or use of information, materials, notes, study aids or other devices not authorized by the instructor in any academic exercise or communication with another person during such an exercise. Examples of cheating are:

- copying from another's paper or receiving unauthorized assistance from another during an academic exercise or in the submission of academic material
- using a calculator when its use has been disallowed
- collaborating with another student or students during an academic exercise without the consent of the instructor

C. Fabrication and Falsification

Fabrication involves inventing or counterfeiting information, i.e., creating results not obtained in a study or laboratory experiment. Falsification, on the other hand, involves the deliberate alteration or changing of results to suit one's needs in an experiment or other academic exercise.

D. Multiple Submission

This is the submission of academic work for which academic credit has already been earned, when such submission is made without instructor authorization.

E. Misuse of Academic Materials

The misuse of academic materials includes but is not limited to the following:

- stealing or destroying library or reference materials or computer programs
- stealing or destroying another student's notes or materials or having such materials in one's possession without the owner's permission
- receiving assistance in locating or using sources of information in an assignment when such assistance has been forbidden by the instructor
- illegitimate possession, disposition or use of examinations or answer keys to examinations
- unauthorized alteration, forgery or falsification of academic records
- unauthorized sale or purchase of examinations, papers or assignments

F. Complicity in Academic Dishonesty

Complicity involves knowingly contributing to another's acts of academic dishonesty.

Procedures in Cases of Suspected Academic Dishonesty

All matters of academic policy, including academic dishonesty, are under the jurisdiction of each of the university's schools and colleges pursuant to Article 4.A.2 and Article 5.E.5 of the Laws of the Regents. Accordingly, each school and college has established procedures for addressing matters of academic dishonesty and for determining the severity and consequences of each infraction. Students should contact their school or college dean's office for procedures specific to their school or college.

Academic Probation and Suspension Policies

Students at the University are expected to maintain progress in their degree program, as defined by being in "good academic standing." Good academic standing requires minimally a cumulative grade point average (GPA) of 2.0 on all University of Colorado course work.

Academic Probation

- Academic probation is a warning to students that they are not progressing toward completion of their degree in a satisfactory manner.
- Students are placed on academic probation when their cumulative CU GPA falls below a 2.0 at the end of any academic term.
- Students are informed in writing (via University-assigned email and postal letter) of their academic probation status.
- Students on Academic Probation will be required to complete the Academic Success Plan during their first semester on Academic Probation.
- Students will be required to schedule an appointment and meet with their academic advisor to discuss the completed Academic Success Plan before they will be allowed to register for the subsequent term.
- Students on Academic Probation will be required to schedule an appointment and meet with their academic advisor every semester that they are on Academic Probation before they will be allowed to register.
- Academic Probation requires that students achieve a minimum 2.3 semester GPA each subsequent term until their cumulative CU GPA is at least a 2.0 to

return to good academic standing. Students must achieve a minimum 2.0 cumulative CU GPA to meet graduation requirements.

- Students who fail to earn the 2.3 semester GPA during any semester of Academic Probation will be placed on Restricted Academic Probation.
- Students have five semesters or 30 credits (whichever happens sooner) to raise their cumulative GPA to above a 2.0, or they will be placed on Academic Suspension.
- Once a student has raised his/her cumulative CU GPA to at least a 2.0, s/he will be removed from Academic Probation and notified via University-assigned email that s/he is in Academic Good Standing.

Restricted Academic Probation

- Students who fail to earn the 2.3 semester GPA during any semester of Academic Probation will be placed on Restricted Academic Probation.
- Students are informed in writing (via University-assigned email and postal letter) of Restricted Academic Probation status.
- Students on Restricted Academic Probation will be allowed to enroll for a maximum of 6 credits/2 classes per semester (whichever is more). A course and its attached lab are considered to be one course in this case.
- Students on Restricted Academic Probation will be required to schedule an appointment and meet with their academic advisor in order to register for courses.
- Students on Restricted Academic Probation will not be able to register online; they will need to register for courses using a Schedule Adjustment Form, which must be submitted to the Service Center (North Classroom #1003) for processing.
- Restricted Academic Probation requires that students achieve a minimum 2.3 semester GPA each subsequent term until their cumulative CU GPA is at least a 2.0. Students must achieve a minimum 2.0 cumulative CU GPA to return to good academic standing and to meet graduation requirements.
- Students on Restricted Academic Probation who do not meet the 2.3 minimum semester GPA will be placed on Academic Suspension.
- Students who fail to raise their cumulative GPA to 2.0 or above in five semesters or 30 credit hours on Academic Probation and Restricted Academic Probation will be placed on Academic Suspension.

Academic Suspension

- Students on Restricted Academic Probation who do not meet the 2.3 minimum semester GPA will be placed on Academic Suspension.
- Students are informed in writing via certified/registered letter of their Academic Suspension status.
- The minimum duration of Academic Suspension is for a period of one year (three semesters, including summer term). Students placed on Academic Suspension will be unable to take courses from any CU campus during this time.
- Should a student be placed on Academic Suspension while registered for the next semester, s/he will be administratively dropped from their courses by the University.
- A student's Academic Suspension status is permanently indicated on his/her official University of Colorado transcript.
- During the one-year Academic Suspension period, students who wish to return to the University should consider one (or both) of the following actions:
 - Attend another regionally-accredited college/university.
 - Students who choose to attend another institution while on Academic Suspension can take as many or as few credits as they choose, but must earn a 2.75 cumulative GPA in all transferable course work.
 - Students should consult their academic advisor to discuss appropriate course work.
 - Use the time off to directly address and resolve the factors that contributed to the academic difficulty.
- After the one-year suspension period has elapsed, students must petition the appellate committee (of the school or college they wish to enter) for readmission and meet and document at least one of the following criteria:
 - Attendance at another regionally accredited college/university where they earned a minimum cumulative GPA of 2.75 in transferable credit.
 - Explanation of their previous academic difficulty, demonstration of what has changed, and how this will allow them to now achieve and maintain Good Academic Standing (including a semester GPA of at least 2.3 and a cumulative GPA of at least a 2.0).
- Students who choose to petition their college's appellate committee for readmission must submit their petitions by the following deadlines:
 - For fall admission: June 1
 - For spring admission: December 1
 - For Maymester/summer admission: April 1

- If a student is granted readmission and his/her CU GPA is below a 2.0, s/he will be readmitted on Restricted Academic Probation. These students must meet the condition of Restricted Academic Probation every semester until their cumulative CU GPA is at least a 2.0.

Second Suspension

- Students who are readmitted after their first Academic Suspension and fail to meet the conditions of Restricted Academic Probation for a second time are placed on a second suspension for an indefinite period of time.
- Students on a second suspension may be readmitted to the University only by petition to the college's appellate committee.
- Students will not be considered for readmission unless they have demonstrated *significant* improvement in academic performance at the college/university level, and/or considerable and positive change in personal circumstances.

Code of Student Conduct - Community Standards and Wellness

Director: Larry Loften

Office: Tivoli Student Union, 260

Telephone: 303-556-3682

Preamble

As members of the University community, students are expected to uphold university standards, which include abiding by state civil and criminal laws and all University policies and standards of conduct. These standards assist in promoting a safe and welcoming community.

The university strives to make the campus community a place of study, work and residence where people are treated, and treat one another, with respect and courtesy. The university views the student conduct process as a learning experience that can result in growth and personal understanding of one's responsibilities and privileges within both the university community and the greater community. All students must follow these standards. Students who violate these standards will be subject to the actions described below. These procedures are designed to provide fairness to all who are involved in the conduct process.

Philosophy of Student Conduct

The Office of Community Standards and Wellness views the conduct process as a learning experience that helps students to understand their responsibility to both

themselves and their living and learning community. We strive to learn from one another in an educational environment that holds mutual respect for individuals and community in high regard and self-responsibility for behaviors. Behavior that conflicts with established standards, policies and guidelines may be referred for conduct proceedings.

Every member of the student community must assume responsibility for becoming educated about the various university and housing standards, policies and guidelines. It is against the basic nature of this community for anyone to demean or discriminate against another human being. A caring, educational community does not tolerate physical or psychological threats, harassment, intimidation, or violence directed against a person. Such behavior is subject to the university conduct processes.

Diversity

We are committed to a campus community where diversity is appreciated and valued, and where all individuals are treated fairly and with respect. We encourage curiosity, open communication, continuous learning, and community service as ways to create a socially just environment. We support the right of everyone to respectfully disagree with ideas and philosophies different from their own. However, we do not permit any form of behavior that places anyone in dangerous, discriminatory, or harassing environments. As a community, we expect all to work towards these same goals.

Article I – Authority

Article 7, Part B, of the Laws of the Regents requires each campus to develop a student code of conduct. The Office of Student Life is authorized to establish and administer this policy. Any questions regarding interpretation of this code or any of its provisions should be directed to the Vice Chancellor for Student Affairs or his/her designee for final determination.

1. The Chief Student Conduct Administrator shall develop policies for the administration of the student conduct system and procedural rules for the Student Conduct Process that are not inconsistent with provisions of the Student Code.
2. Decisions made shall be final, pending the normal appeal process.

Article II – Jurisdiction

1. The University of Colorado Denver (UC Denver) Student Conduct Code shall apply to conduct that occurs on University premises, University-sponsored programs or activities, Campus Village Apartments, and to off-campus conduct that adversely affects the University community, poses a threat to safety of persons or property, or damages the institution's reputation or relationship with

- the greater community. In addition, UCDenver, in collaboration with the Denver and Aurora communities, may respond to student violations of community-based laws and ordinances designed to protect civility and quality of life. The Chief Student Conduct Administrator shall decide whether the Student Conduct Code shall be applied to conduct occurring off campus on a case-by-case basis.
2. Each student shall be responsible for his/her conduct from the time of application for admission through the actual awarding of a degree, even though conduct may occur before classes begin or after classes end, as well as during the academic year and during periods between terms of actual enrollment. The disciplinary process may proceed even if the student withdraws from school while a disciplinary matter is pending.
 3. It is the duty of all students who are potential parties or witnesses to an alleged violation of the code to participate conscientiously. Students have a duty to cooperate and discuss the incident with an investigator and conduct officer over the telephone or in person, adhere to stated deadlines, attend scheduled meetings, and participate in all proceedings. Failure to meet these duties may result in a decision being made without the benefit of the student's participation or may result in a student being charged with failing to comply with the direction of a university official. It is the responsibility of a charged student to seek modification to any criminal or civil restraining orders to allow for the completion of any conduct process defined in the Student Conduct Code.
 4. Proceedings initiated under this policy are separate from civil or criminal proceedings that may relate to the same incident. Investigations or conduct proceedings by the university are not postponed while criminal or civil proceedings are pending unless otherwise determined by the conduct officer.
 5. The unexcused failure of a student to appear and/or respond to the conduct process does not prevent the university from proceeding with the conduct process.

Article III – Definitions

1. Acceptance of Responsibility. The charged student agrees that their behavior constitutes a violation of the code of conduct, as outlined in the conference letter.
2. Aggravating Factor. Any circumstances accompanying the commission of misconduct that add to its seriousness. Examples may include the use of violence or force, violation of a trust or duty, premeditation of an incident, the existence of a previous conduct violation, and elements of hate and bias.
3. Complainant. Any person who submits a charge alleging that a student violated this Student Code.
4. Conduct Process. Any processes outlined in this Student Conduct Code Policies and Procedures.
5. Designation. A student's classification; i.e., graduate, undergraduate, continuing education, degree seeking or non-degree-seeking.

6. Faculty Member. Any person hired by the University to conduct classroom or teaching activities or who is otherwise considered by the University to be a member of its faculty.
7. Member of the University and Campus community. Includes any person who is a student, faculty member, University official or any other person employed by the University. This term also applies to students, faculty members, and University officials of the other institutions on the Auraria Campus, including but not limited to; the Metropolitan State College of Denver (MSCD), the Community College of Denver (CCD), and the Auraria Higher Education Center (AHEC). A person's status in a particular situation shall be determined by the Chief Student Conduct Administrator.
8. Mitigating Factor. Extenuating circumstances that may be taken into account to reduce a sanction. They do not constitute a justification or excuse for the offense in question.
9. Parent. A student's parent or legal guardian.
10. Peace Officer. A person designated by the University of Colorado or the state or federal government with the responsibility of enforcing laws or policies.
11. Policy. The written regulations of the University as found in, but not limited to, the Student Code of Conduct, Resident Handbook, the University web page and computer use policy, and Graduate/Undergraduate Catalogs.
12. Preponderance of Evidence. What happened more likely than not, or "50% plus a feather." This shall be the standard of proof used in all conduct proceedings under this code.
13. Respondent. Any student accused of violating this Student Code.
14. Student. The term student includes all persons taking courses at the university, either full time or part time, pursuing undergraduate, graduate, or professional studies, as well as non-degree students. This also includes individuals admitted, those attending orientation sessions, and those that were enrolled at the date of an alleged incident. Persons who withdraw after allegedly violating the student conduct code are also considered "students." This Student Code applies at all locations of the University, including the Downtown Denver, Anschutz and 9th and Colorado Boulevard campuses.
15. University. The University of Colorado Denver.
16. University Official. A university employee working in the performance of his or her duly authorized duties. University officials may be full or part time, or may be student staff members.
17. University Premises. Includes all land, buildings, facilities, and other property in the possession of or owned, used, or controlled by the University (including adjacent streets and sidewalks and all AHEC facilities).
18. Witness. Any individual who may have information relating to a conduct case.
19. Working Day. Monday through Friday, except for official university holidays.

Article IV – Rules, Regulations and Statement of Community Expectations

The conduct listed below is prohibited, as are attempts to commit and aiding, abetting, or inciting others to commit conduct prohibited by this code.

Engaging in retaliatory acts against a person who reports an alleged violation of the code or testifies, assists, or participates in a conduct proceeding or investigation is a violation of this code.

1. Assaulting or physically abusing another person or being involved in brawling.
2. Intimate partner violence. Intimate partner violence is conduct between people who are or were involved in a sexual or romantic relationship when one person in the relationship causes harm or significant alarm or distress to the other person. This includes but is not limited to threats, assault, or other action against the person or their property when used as a method of coercion, control, punishment, intimidation, or revenge.
3. Threatening or endangering the health or safety of a person (one's self or others).
4. Sexual Misconduct: Sexual Misconduct includes Non-consensual sexual intercourse, Non-consensual sexual contact and Sexual exploitation or exposure.
 - Non-consensual sexual intercourse: Non-consensual sexual intercourse is any sexual intercourse (anal, oral or vaginal), including sexual intercourse with an object, however slight, by one person upon another without consent.
 - Non-consensual sexual contact: Non-consensual sexual contact is any sexual touching (including touching with an object) however slight, by one person on another without consent.
 - Sexual exploitation and/or exposure: Sexual Exploitation is when a student takes non-consensual, unjust or abusive sexual advantage of another for his/her own pleasure, advantage or benefit, or to pleasure, benefit or advantage anyone other than the one being exploited. Sexual Exposure occurs when a student engages in lewd exposure of the body done with the intent to arouse or satisfy the sexual desire of any person.
5. Indecently exposing one's body.
6. Stalking. Repeated conduct which reasonably and subjectively causes another person to fear for his/her safety or repeated conduct which causes a person to alter his/her activities in response to the repeated conduct. Such repeated conduct may include but is not limited to any of the following: following or approaching a person or a member of that person's family or household; contacting a person or a member of that person's family or household whether or not conversation ensues; and placing a person or a member of that person's family or household under surveillance.

7. Hazing. Any action or situation that recklessly or intentionally endangers the health, safety, or welfare of an individual for the purpose of initiation, participation, admission into or affiliation with any organization at the university. Hazing includes, but is not limited to, any abuse of a mental or physical nature, forced consumption of any food, liquor, drugs, or substances, or any forced physical activity that could adversely affect the health or safety of an individual. Hazing also includes any activity that would subject the individual to embarrassment or humiliation, the willingness of the participant in such activity notwithstanding. (See Appendix 2)
8. Abusive Conduct. Unwelcome conduct by an individual(s) that is sufficiently severe or pervasive that it alters the conditions of education or employment and creates an environment that a reasonable person would find intimidating, hostile or offensive. The determination of whether an environment is "hostile" must be based on all of the circumstances. These circumstances could include the frequency of the conduct, its severity, and whether it is threatening or humiliating. Simple teasing, offhand comments and isolated incidents (unless extremely serious) will not amount to abusive conduct.
 - This policy should not be construed, and will not be enacted, to deny any student the right of free speech and expression.
9. Violating any federal, state, or local law or university regulation or policy, which includes but is not limited to:
 - Violating the University's Administrative Policy Statement entitled, "Sexual Harassment Policy Campus Appendix." (See [http://ucdhsc.edu/admin/policies/hr/Sexual Harassment Policy Campus Appendix.pdf](http://ucdhsc.edu/admin/policies/hr/Sexual%20Harassment%20Policy%20Campus%20Appendix.pdf).)
 - Violating the University of Colorado Denver policy entitled, "Non Discrimination Policy." (See <http://www.uchsc.edu/diversity/nondiscrimpolicies.htm>)
 - Violating the University of Colorado Denver policy entitled, "Computing Policy Statement" (See <http://www.cudenver.edu/Resources/ITS/policiesAndProcedures.htm>)
10. Interfering with, obstructing or disrupting a university activity.
 - University activities include, but are not limited to, all normal university activities, such as teaching, research, recreation, meetings, public events, and disciplinary proceedings.
 - This prohibition includes, but is not limited to, interference, obstruction or disruption of the freedom of expression or movement of students or other members of the university community and their guests.
11. Interfering with, obstructing or disrupting police or fire responses. This prohibition includes, but is not limited to:
 - Resisting arrest.
 - Failing to abide by the directions of a peace officer.
 - Tampering with, impairing, disabling, or misusing fire protection systems such as smoke detectors, fire extinguishers, sprinklers, or alarms.

- Failing to evacuate during a fire alarm.
 - Arson/setting fires.
12. Failing to comply with the direction of university or housing officials who are performing their duties. Students are required to comply with instructions or directions given by university or housing officials, including, but not limited to, an instruction to present identification and an instruction to appear at conduct proceedings or other mandatory meetings.
 13. Failing to abide by or complete a university sanction in a satisfactory manner, including violating the Student Conduct Code while on university probation or suspension in abeyance.
 14. Providing false information to university officials, student conduct administrators, the Conduct Review Board (CRB), or peace officers in performance of their duties or forging, altering, falsifying or misusing documents or records, or knowingly using/possessing forged, altered or false documents or records.
 15. Retaliating against or discouraging an individual from participating in a university process, acting to improperly influence a university conduct body, or the unauthorized release of confidential student or university information/records.
 - Direct contact with an individual or conduct body or contact through a third party may constitute a violation of this provision.
 16. Violating any Policy or Procedure listed in the Campus Village Apartments Resident Handbook while in Campus Village. See a complete list of Campus Village Policies and procedures at:
<http://www.aoinc.com/ros/universal/handbook/index.cfm?fuseaction=section&section=9&page=1>
 17. Unauthorized entry into or exit from a university facility or property.
 18. Damaging university property or property belonging to another.
 19. Engaging in, inciting, or arming someone for a riot or public disturbance.
 20. Use of electronic or other devices to make an audio or video record of another person without that person's express consent and/or knowledge when such a recording is likely to cause injury or distress to the individual being recorded.
 21. Possessing firearms, explosives, fireworks, incendiary devices, ammunition, or other weapons on campus.
 - Possession of a harmless instrument designed to look like a firearm, explosive, or dangerous weapon is also prohibited by this policy (including but not limited to BB guns, pellet guns, martial arts equipment, and knives with a blade over 3" in length).
 - As mandated by Regent's Policy, in the case of a student who is found responsible via the Student Conduct Code process to have intentionally or recklessly used or possessed a weapon in a way that would intimidate, harass, injure, or otherwise interfere with the learning and working environment of the university, the minimum disciplinary sanction shall be expulsion. (See <http://www.cu.edu/regents/Policies/Policy14.html#14-I>)

- In the case of a harmless instrument as described in section 21a., the minimum sanction shall be expulsion if the student used the item with the intent to cause fear in or assault to another person.
 - Mere possession of firearms, explosives, fireworks, incendiary devices, ammunition, other weapons, or instruments designed to look like any of the above will result in suspension unless mitigating factors are present.
- 22. Theft, including but not limited to, possessing property known to be stolen, or taking property of another without consent, even with an intent to return the property.
- 23. Possessing, using, providing, manufacturing, distributing, or selling drugs or drug paraphernalia in violation of law or university policies.
 - If the violation occurs in Student Housing, this prohibition includes a student who knew, or reasonably should have known, s/he was in the presence of illegal drugs or drug paraphernalia.
 - In the case of a student who is found responsible via the student conduct code process to have endangered the health, safety, or welfare of an individual through the provision of drugs, the minimum disciplinary sanction shall be suspension.
 - Although possession and use of marijuana for certain medical conditions consistent with the requirements of the Colorado Constitution is no longer a crime in the State of Colorado, the possession and use of marijuana remains illegal under federal law. Consistent with federal law, including the Controlled Substances Act and the Drug-Free Schools and Communities Act, the use and/or possession of marijuana continues to be prohibited while a student is on campus, including while in campus housing.
- 24. Possessing, using, providing, manufacturing, distributing, or selling alcoholic beverages in violation of law or university policies.
 - If an underage student is in Student Housing, this prohibition includes a student who knew, or reasonably should have known, s/he was in the presence of alcoholic beverages, or possessed, displayed, or was in the presence of alcohol containers. In the case of a student who is found responsible via the student conduct code process to have endangered the health, safety, or welfare of an individual through the provision of alcohol, the minimum disciplinary sanction shall be suspension.

NOTICE TO STUDENTS CONCERNING PENALTIES FOR DRUG VIOLATIONS.

(1) NOTICE UPON ENROLLMENT.—Each institution of higher education shall provide to each student, upon enrollment, a separate, clear, and conspicuous written notice that advises the student of the penalties under section 484(r).

(r) SUSPENSION OF ELIGIBILITY FOR DRUG-RELATED OFFENSES.—

(1) IN GENERAL.—A student who has been convicted of any offense under

any federal or state law involving the possession or sale of a controlled substance shall

not be eligible to receive any grant, loan, or work assistance under this title during the period beginning on the date of such conviction and ending after the interval specified

in the following table:

If convicted of an offense involving:

The possession of a controlled substance: Ineligibility period is:

First offense 1 year

Second offense 2 years

Third offense Indefinite

The sale of a controlled substance: Ineligibility period is:

First offense 2 years

Second offense Indefinite

Article V – Student Conduct Code Procedures – Individual Students

A. Charges

1. The discipline process can be initiated by police reports, student housing incident reports, or a report from any faculty, administrative staff, student, or other member of the University/Campus community. This process is initiated through the submission of a written account of the incident to the Office of Community Standards and Wellness.
2. Upon the receipt of a written report, the Conduct Officer may determine that there is sufficient reason to charge the student with a violation of the Student Conduct Code and a University disciplinary hearing is warranted. The Conduct Officer may also seek or conduct an additional investigation.
3. In some cases, alternative dispute resolution such as Restorative Justice or mediation may be offered by mutual consent of the parties involved and on a basis acceptable to the Conduct Officer. A written summary of these agreements are provided to all parties. These agreements are binding and once entered are not subject to appeal. Failure to abide by the agreements could result in the situation being returned through the conduct process for possible disciplinary action.

B. Hearing Notification

1. All charges shall be presented to the Respondent in written form via electronic mail to the Respondent's official University email account. This letter of notice will provide the Respondent a copy of the initiating report(s) or information on

- how to obtain them, and set a time for the hearing. Hearings are scheduled not less than three (3) business days (less than the three day minimum would require mutual agreement between the student and Conduct Officer) nor typically more than fifteen (15) business days after the student has been notified of the charges (maximum time may be extended at the discretion of the Conduct Officer taking into consideration scheduled breaks, etc.).
2. The letter of notice may contain specific requirements or restrictions, pending the resolution of the matter through the hearing process as needed to protect the interests of involved students or the University. These requirements could include but are not limited to, temporary relocation in student housing, restriction from specific campus locations, or orders prohibiting contact with complainants or witnesses. The notice letter will be sent to the student's University e-mail address.

C. Options for Resolution of Disciplinary Charges

After review of the information contained with the letter of notice, the Respondent has the following options:

1. Accept responsibility for the charges: When the Respondent substantially agrees with the contents of the complaint and accepts responsibility for the infraction, the hearing will involve an administrative meeting with the Conduct Officer to determine the appropriate level of discipline and other sanctions or restorative resolution outcomes.
2. Dispute the charges: In the event that the student does not accept responsibility for the charges or substantially disagrees with information contained within the report, a University discipline hearing will be conducted.

The student must notify the Office of Student Life by the date indicated in the letter of notice of his/her intent to accept or dispute the charges. Since cases involving disputed charges may require additional investigation or preparation time, either the student or the Conduct Officer may ask for limited additional time to prepare for the hearing and an appropriate hearing date and time may be re-scheduled typically within one additional week.

D. Hearings

Student conduct conferences shall be conducted by University Conduct Officers according to the following guidelines:

1. The Complainant and the Respondent may be accompanied by an advisor or support person they choose, at their own expense. Such advisor may be an attorney. Since the direct interaction with the students involved is essential to the educational relationship with the University, the advisor is limited to counseling the student and may not act as a representative of the student, speak on the student's behalf, or participate directly in any hearing. Advisors may not serve in a dual role as a witness in the hearing. University Conduct Officers may also consult with or choose to have University Counsel, in an advisory capacity, present at a hearing.
2. University student conduct conferences and administrative meetings are considered private educational interactions between the student(s) and the University. The Complainant, Respondent and their advisors, if any, shall be allowed to attend the entire hearing at which information is received (excluding deliberations). Admission of any other person to the hearing shall be at the discretion of the Conduct Officer.
3. Pertinent records, exhibits, and written statements, including student impact statements, may be accepted as information for consideration. The Complainant and the Respondent shall be allowed to review and respond to any reports or statements the Hearing Officer will consider as the basis for the charges or determination of evidence related to the hearing.
4. The Complainant and the Respondent will have the opportunity to present his/her own version of the incident or events by personal statements, as well as through written statements and witnesses.
5. If a Respondent, with notice, does not appear for the hearing, a decision may be reached taking into consideration the totality of the information related to the charges available at the time of the hearing.
6. There shall be a single verbatim record, such as a tape recording, made only in hearings in which the charges are disputed. This recording shall be the property of the University. In cases in which the charges are not disputed, the Conduct Officer will provide a brief summary and a listing of sanctions which resulted from the hearing. It is the student's responsibility to notify the Hearing Officer of his/her intent to dispute the charges in advance of the hearing.
7. In disputed cases, the Complainant, the Respondent, and the Conduct Officer may bring witnesses and/or ask for relevant witnesses to be called. The University Conduct Officer will try to arrange upon reasonable request (at least two (2) business days prior to the hearing) witnesses who were identified by or contributed to the report. Witnesses shall be present only during the time they are presenting information in the hearing. Witnesses will provide information to and answer questions directed from the Conduct Officer. Questions may be suggested by the Respondent and/or Complainant to be answered by each other or by witnesses. In order to preserve the educational tone of the hearing and to appropriately manage the proceedings, the Conduct Officer may ask that all questioning be directed through him/her and use discretion related to limiting

- repetitive information/statements. All procedural questions are subject to the final decision of the Conduct Officer.
8. If information presented in the hearing creates additional need for clarification or investigation, or to accommodate irresolvable scheduling conflicts with key witnesses, the Conduct Officer may reschedule the hearing.
 9. If the hearing involves more than one Respondent, the Conduct Officer, in his or her discretion, may permit the hearings concerning each student to be conducted either jointly or separately.
 10. The Conduct Officer may accommodate availability and/or remote location of witnesses through conference phone calls or other alternate means. Accommodations may also be made related to concerns for the personal safety, well-being, and/or fears of confrontation of the Complainant, Respondent, and/or other witness during the hearing by providing separate facilities, by using a visual screen, and/or by permitting participation by telephone, videophone, closed circuit television, video conferencing, videotape, audio tape, written statement, or other means, where and as determined in the sole judgment of the Conduct Officer to be appropriate.
 11. Formal rules of process, procedure, or evidence as established and applied in the civil or criminal justice system do not apply to this process.

E. Decisions

1. After the hearing concludes, the Conduct Officer will review all pertinent information and make a determination related to each of the charges specified from the Student Conduct Code. The determination is based on the preponderance of evidence standard - whether it is more likely than not that the Respondent violated the Student Conduct Code.
2. Conduct Officers have the authority to determine the appropriate level of discipline action taking into consideration the severity of the infraction, impact on individuals or the community, and the past record of discipline. In addition to the sanctions listed below, the Conduct Officer may place limits or conditions, require relocation in or removal from student housing, restitution, community service, and/or specify participation in educational programs and interventions including but not limited to those related to alcohol or drug use, ethical decision making, personal counseling, community issues, and restorative justice.
3. Written notice of the Conduct Officer's decision will generally be sent to the student within ten (10) business days of the hearing. The notification shall consist of the determination of responsibility, level of discipline imposed, and a complete description of any sanctions or requirements. In disputed cases, when the Respondent is found responsible for the charges, the notification will also include a summary of the basis for the determination. A copy of the decision may also be sent to other appropriate University offices.

4. Decision letters that include information identifying persons listed as victims may not be released by the Respondent to unauthorized third parties. Failure to comply with this requirement could result in additional disciplinary charges.

F. Sanctions

The following sanctions may be applied when appropriate to individual students. More than one of the sanctions listed below may be imposed for any single violation. Failure to complete disciplinary sanctions within required deadlines will result in a “hold” on the student’s registration status.

1. *No Action*: The Conduct Officer finds that the charges are unsubstantiated or exonerates the student. The decision letter specifies that the charges are cleared and no disciplinary action is taken.
2. *Warning or Written Reprimand*: A student may be given a warning or written reprimand for minor infractions.
3. *General Disciplinary Probation*: Probation is for a designated period of time during which the student is required to show appropriate changes in attitude and behavior. Specific sanctions or restrictions may be imposed as a part of this sanction but do not result in loss of good standing with the University. A violation of the terms of General Disciplinary Probation, or subsequent misconduct after discipline, is grounds for further disciplinary action, including loss of good standing, suspension, or expulsion.
4. *Disciplinary Probation/Loss of Good Standing*: Probation is for a designated period of time in which appropriate changes in attitude and behavior are expected to occur. Specific sanctions or restrictions may be imposed as a part of this probation. A student on this disciplinary probation is not in good standing with the University. Good standing shall include but not be limited to a requirement for eligibility to represent the University, to serve on a University committee, to participate in intercollegiate or Sports Club athletics, and for recognition by the University including any office held in a student organization. A violation of the terms of disciplinary probation, or subsequent misconduct, is grounds for further disciplinary action, including suspension, or expulsion.
5. *Discretionary/Educational Sanctions*: Educational programs or assignments, Restorative Justice, mediation, community service, individual assessment, counseling, substance abuse education, intervention or treatment, or other related discretionary sanctions may be offered or required.
6. *Restitution*: Compensation for loss, damage, or injury. This may take the form of appropriate service or monetary or material replacement.
7. *Residential Reassignment*: A student may be reassigned to another student housing room when disruption has occurred in the residential community or in order to appropriately separate persons. The student will be responsible for all costs and fees associated with relocation as a result of this sanction.

8. *Residential Expulsion/Eviction*: Permanent separation of the student from student housing as a result of a University discipline hearing. The University expects first-year students to live in student housing and manage their behavior to comply with community standards. If a first year student is expelled from the student housing, the Chief Conduct Officer will determine if the student may be allowed to continue as a student without complying with the University's live-in regulations.
9. *Disciplinary Suspension*: Suspension for a distinct period of time and/or the specification that a student must fulfill certain requirements before re-admission or re-instatement will be considered. While suspended, the student is not entitled to attend classes, use University facilities, participate in University activities, or be employed by the University. Special conditions may be stipulated for reinstatement at the conclusion of the period of suspension.
10. *Deferred Suspension*: A suspension may be deferred under special conditions in which the student participates in a designated program as a condition to remain in school under a strict probationary status.
11. *Disciplinary Expulsion*: Expulsion is permanent removal from the University with no opportunity to return.
12. *Revocation of Admission or Degree*: Admission to or a degree awarded from the University may be revoked for fraud, misrepresentation, or for other serious violations committed by a student prior to matriculation or graduation.
13. *Withholding Degree*: The University may withhold awarding a degree otherwise earned until the completion of the process set forth in this Student Conduct Code, including the completion of sanctions imposed.
14. *Parental Notification*: Parents may be notified of disciplinary decisions when a student under the age of 21 is found responsible for engaging in an infraction(s) involving alcohol, drugs, or the threat or use of violence and the disciplinary decision involves disciplinary probation, suspension, or expulsion and/or student housing relocation or expulsion. Letters are sent to the primary parent address provided to the University.
15. *Interim Suspension*: The Chancellor, Provost and the Associate Vice Chancellor for Student Affairs, and their designee(s) have the authority to suspend summarily, pending final disposition of the case, any student when, in the opinion of these officials, such a suspension is necessary to:
 - a. Maintain order on the campus;
 - b. Preserve the orderly functioning of the university;
 - c. Stop interference in any manner with the public or private rights of others on university premises;
 - d. Stop actions or potential actions that threaten the health or safety of any person; or
 - e. Stop actions or potential actions that destroy or damage property of the university, its students, faculty, staff, or guests.

Interim suspension will also include excluding the student from campus. Interim suspension begins immediately upon notice from the appropriate university official,

without a conference with a conduct officer. A conference with a conduct officer is then scheduled as soon as possible (usually within 10 calendar days) to determine how the case will continue and to begin the conduct process. In extreme matters, a summary suspension may be put in place until a student receives a final disposition in a court process after having been charged with a serious crime.

G. Appeal of a Disciplinary Decision

1. A decision reached by a Conduct Officer may be appealed to the University Appellate Board by either the Respondent(s) or Complainant(s). The appellant shall submit a written request for an appeal to the Dean of Students. The letter requesting an appeal must be very specific and clearly state the reasons for the request. Administrative support for the Appellate Board is provided through the Office of Student Life. The appeal request shall be delivered to that office within seven (7) business days of the date the appellant is notified of the decision rendered by the Hearing Officer. Failure to submit a request for appeal in writing within the specified time will render the decision of the Conduct Officer final and conclusive.

Except as necessary to explain the basis of new information, an appeal shall be limited to a review of the record of the hearing and supporting documents for one or more of the following reasons:

- a. To determine whether the hearing was conducted fairly in light of the charges and information presented, and in conformity with prescribed procedures giving both the Respondent and complaining parties the opportunity to prepare and present relevant information to be considered in the determination of an appropriate outcome. Minor deviations from designated procedures will not be a basis for sustaining an appeal unless there is an adverse effect on the outcome of the hearing.
- b. To determine whether the decision reached regarding the Respondent was based on substantial information. That is, whether there was information presented in the case that, if believed by the Conduct Officer, was sufficient to establish that a violation of the Student Conduct Code occurred.
- c. To determine whether the sanctions(s) imposed were appropriate for the violation of the Student Conduct Code which the student was found to have committed.
- d. To review the decision, which involves separation of the student from the University, through disciplinary suspension or expulsion.
- e. To consider new information, sufficient to alter the decision or other relevant facts not brought out in the original hearing, because such information and/or facts were not known to the person appealing at the time of the original hearing.
- f. To petition for removal of a disciplinary transcript notation or for eligibility for re-admission to the University following completion of the terms of a disciplinary suspension. Appeals are directed to the panel only in those cases where the

University Conduct Officer determines the original terms were not satisfactorily completed.

2. The Dean of Students, or his/her designee, will review the written request for appeal to determine if the acceptable grounds for the appeal are met. After review of the appellant's request, which may include but is not limited to review of the record and/or meeting with the parties involved and/or the Conduct Officer, shall take one of the following actions:

- a. Deny the appeal.
- b. Return the case to the Conduct Officer or Chief Conduct Officer for further consideration; while the case is being re-considered, the student must continue to abide by any stated conditions.
- c. Convene an Appeals Committee to review the record of the original case.
- d. Grant a hearing with an Appeals Committee to consider new information.

3. If an appeal is granted, the Dean of Students will review the record or arrange for a hearing if one is necessary to hear new information. While the decision of the Dean of Students is pending, the Respondent must comply with all conditions of the decision of the University hearing related to University owned or operated housing, no contact orders, restrictions from particular facilities, interim suspensions, or other conditions deemed necessary for the safety or orderly functioning of the campus as determined by the Chief Conduct Officer. Unless otherwise specified, a student may continue to attend classes while the appeal is pending.

4. When questions of law arise, the Chair may consult with University Legal Counsel.

5. If a hearing is granted to consider new information, the general process outlined under hearing procedures will be used.

6. The Dean of Students may make one of the following decisions:

- a. Reverse the decision: the committee does not agree with the Conduct Officer's evaluation of evidence in support of the charges. In the case of the Respondent, the disciplinary decision would be changed to "No Action". In the case of the Complainant, the case would be referred back to the Conduct Officer or Chief Conduct Officer for appropriate sanctioning.
- b. Affirm the decision: the committee agrees that the information before the committee supports the decision reached by the Conduct Officer.
- c. Return the case to the Conduct Officer or Chief Conduct Officer for further consideration: the committee believes that additional considerations should be made which could include increasing or decreasing the penalty or addressing additional issues raised through the appeals process. While the case is being re-considered, the student must continue to abide by any stated conditions.

7. The Dean of Students will communicate its decision in writing in a timely manner. Except where the matter is returned to the Conduct Officer for further consideration, the matter shall be considered final and binding upon all involved.

Article VI – Student Records

A. Student Records

1. Student disciplinary records will be maintained in keeping with the Federal Family Educational Rights and Privacy Act of 1974 (FERPA) and subsequent amendments and the guidelines for implementation.

The record of disciplinary actions will be kept in the Office of Community Standards and Wellness. Disciplinary records are maintained for a period of five years from the date of the last disciplinary decision if the student is no longer enrolled at the University and then destroyed except in cases of expulsion. Information regarding a student's disciplinary record is available to persons or offices internal to the University who have a "demonstrated educational need to know". Disclosure of disciplinary records to entities outside of the University generally requires a written release from the student.

2. Notations of disciplinary action on the student's transcript will be made only by the Office of Community Standards and Wellness. Disciplinary expulsion will be permanently noted on the academic transcript. Disciplinary suspension is noted on the student record during the period of suspension and/or until the conditions for re-admission have been met. In the case of suspension, when the conditions for re-admission have been met, the student may petition for admissions clearance and/or removal of the notation whether or not the student intends to return to UC Denver. If the petition is denied the student may appeal the decision to the University Appellate Board in accordance with the established procedure for appeal as set forth in this policy.

Article VII – Victims

A. Records

In situations involving both a Respondent Student(s) (or group or organization) and a student claiming to be the victim of another student's conduct, the records of the process and of the sanctions imposed, if any, shall be considered to be the education records of both parties because the educational career and chances of success in the University of each may be impacted. This provision allows for alleged victims/complainants to participate in the hearing process and be informed of the determination and sanctions imposed, if any. In addition, at the victim's request, be informed (to the extent permitted

by law) of the impending return of the respondent student to campus, if the conditions of the suspension were met prior to the victim's departure/graduation from campus.

B. Support for Victims:

1. The University is committed to providing appropriate support and referrals to persons who have been the victims of crimes or violations of the Student Conduct Code. A student who has experienced being the victim of another person's unlawful or prohibited actions may choose to seek personal support, explore options, and report the incident.
2. Strictly confidential services are available through the University Counseling Center, and Student Health Center. Other University agencies may be required by law and University policy to take appropriate action when notified.
3. Victims also have the option to receive assistance from other appropriate University resources. This could include assistance in relocation within or to campus housing if desired; referral for academic support services; notification of appropriate persons/agencies; and at the victim's request, to receive University cooperation in using University procedures to deter harassment or retribution.
4. Students are encouraged to report complaints of:
 - sexual harassment or discrimination to the Office of Equal Opportunity and Diversity
 - crimes to the Auraria Campus Police or Denver Police
 - violations of the University Conduct Code to Housing Staff and/or the Office of Student Life
 - interpersonal and sexual violence to the Office of Student Life and Auraria Campus police
 - violations of their right to free speech in the classroom directly to the faculty member involved or his/her department chair or the Office of Student Life

Article VIII: Interpretation and Revision

Under the authority of the Board of Regents, any question of interpretation or application of the Student Conduct Code shall be referred to the Associate Vice Chancellor for Student Affairs or his or her designee for final determination.

The Student Conduct Code shall be reviewed every five years under the direction of the Chief Conduct Officer, in consultation with Legal Counsel.

Use of University/Auraria Property or Facilities

Nothing in this code of conduct shall be construed to prevent peaceful and orderly assembly for the voicing of concerns or grievances. The university is dedicated to the

pursuit of knowledge through a free exchange of ideas, and this shall be a cardinal principle in the determination of whether or not a proposed use of university facilities is appropriate.

The Auraria Higher Education Center has established campus regulations and procedures governing the use of UC Denver/Auraria grounds, buildings and other facilities. Such regulations are designed to prevent interference with university functions and activities. Except where otherwise specifically authorized, or when members of the public are invited, the use of UC Denver/Auraria facilities shall be limited to faculty, staff and students of the UC Denver/Auraria Campus and to organizations having chapters, local groups or other recognized university-connected representation among faculty, staff or students of the three academic institutions on the Auraria Campus.

Classroom Conduct

Students are expected to conduct themselves appropriately in classroom situations. If disruptive behavior occurs in a classroom, an instructor has the authority to ask the disruptive student to leave the classroom. Should such disorderly or disruptive conduct persist, the instructor should report the matter to the Auraria Campus Police Department and/or the appropriate dean's office. The appropriate dean or his/her representative may dismiss a student from a particular class for disruptive behavior, while the Student Discipline Committee may recommend to the Director of Community Standards and Wellness to withdraw, suspend, permanently expel and/or permanently exclude the student from the campus. Appeal questions concerning disruptive behavior should be directed to the academic dean's office when withdrawal from a class is involved and to the Director of Community Standards and Wellness when suspension or expulsion from the university is involved.

Tri-Institutional Violations

Procedures in deciding violations of the code of student conduct involving students from other academic institutions on the Auraria campus have been developed by the Downtown Campus and the institution(s) involved. In such cases, the assistant director of student life should be contacted.

Amorous Relationships

Amorous relationships exist when two individuals mutually and consensually understand a relationship to be romantic and/or sexual in nature. The policy requires only that direct evaluative authority not be exercised in cases where amorous relationships exist or existed within the last seven years between two individuals whether the same or opposite sex.

The policy is intended to establish a reporting structure to protect participants in these relationships from violations of university conflict-of-interest guidelines (when a direct

evaluative relationship exists between two employees or between an employee and a student). The relationship must be disclosed to the unit head, department chair, dean or head of the primary unit with all parties present. The person to whom disclosure is made must take action to resolve the conflict and must keep the information confidential. The individual in the evaluative position shall recuse her or himself from all future evaluative actions. The parties may choose to have this disclosure in written form placed in their own personnel files. (This information is removed and destroyed seven years after the time of disclosure if requested and if the relationship has ended.) The responsibility to disclose rests with the person in the evaluative position. A report of the action taken to resolve the conflict must be made to the chancellor or designee who may require other action.

When a relationship exists, either current or within the last seven years, between an individual and an employee who, although not his/her direct supervisor but is in a direct line of report (e.g., dean involved with a faculty member in his/her college or a second or higher level supervisor who is involved with a staff member in the unit), the higher-level employee may not act in an evaluative capacity. When these individuals are parties to a personnel action (appointments/hiring, firing/layoff, promotions/demotions, tenure decisions, salary setting, performance appraisals, grievance and disciplinary procedures), the evaluative authority must recuse himself/herself from participating in the action. The action taken to resolve the conflict must be reported to the chancellor or designee.

Antiviolence

The University of Colorado Denver strives to maintain a campus free of and prohibits violent behavior, including but not limited to verbal and/or physical aggression, attack, threats, harassment, intimidation or other disruptive behavior in any form or by any media, which causes or could cause a reasonable person to fear physical harm by any individual(s) or group(s) against any person(s) and/or property. This policy applies to academic, administrative, research and service departments, programs activities and/or services wherever university business is conducted, including extended studies and international locations.

Employees, students and visitors who engage in prohibited behavior shall be held accountable under university policy, as well as local, state and federal law. Any employee or student who commits or threatens to commit violent behavior shall be subject to disciplinary action, up to and including dismissal or expulsion, as well as arrest and prosecution. Any visitor who commits or threatens to commit violent behavior shall be subject to exclusion from the campus, termination of business relationships and/or arrest and prosecution.

Prohibited Behaviors

Examples of prohibited behaviors may include but are not limited to: (1) disturbing the peace by violent, tumultuous, offensive or obstreperous conduct; (2) engaging in intimidating, threatening or hostile statements or actions; (3) making gestures that convey threats; (4) raising one's voice in anger or using fighting words; (5) uttering ethnic, racial or sexual epithets; (6) using unseemly, profane, offensive or obscene language or making obscene gestures; (7) making bizarre comments about or references to violent events and/or behaviors; (8) waving fists, pushing, stalking, bullying, hazing; (9) engaging in the abusive exercise of legitimate authority; (10) destroying personal property in the workplace; (11) destroying university property; (12) throwing objects at persons or property; (13) physically assaulting or attacking persons or property; (14) engaging in vandalism, arson or sabotage.

Weapons

The possession, display or use of any weapon, including any firearm, or the display or use of any object as a weapon, by any person other than a law enforcement officer in the course of his/her duty, in any location where university business is conducted, is in violation of Regental Policy (14-I) and is strictly prohibited. Possession of a firearm or weapon on University of Colorado Denver-owned property or the Auraria Campus is cause for immediate termination of employees or expulsion of students.

Reporting Procedures

Emergency or Life-Threatening Situations

In the case of an emergency or life-threatening situation, immediately call 911. A call to 911 will go to the appropriate campus, city or county law enforcement agency. A call to 911 from any campus telephone automatically registers the location of the telephone on which 911 a call was placed, even if no words are spoken.

Nonemergency Situations

In all other situations, notify the Office of Human Resources, 303-315-2700. Before or after normal business hours or if human resources is otherwise unavailable, notify the Anschutz Medical Campus Police at 303-724-4444 or Auraria Campus Police at 303-556-3271.

Responsibility to Report

Anyone witnessing or receiving a report of prohibited behavior, or possession, display or use of any weapon shall immediately notify the appropriate authority as listed above.

Emergency Notification System

The Emergency Notification System allows students, faculty and staff to register to receive alerts about threats of imminent danger at or near any UC Denver location. This service is used in conjunction with other communication channels including: public address systems, broadcast e-mail, voice-mail messages to campus telephone extensions, electronic signage, a coordinated use of public media outlets, and 24-hour recorded emergency and information hotlines (Anschutz Medical Campus in Aurora 303-724-4636; Downtown/Auraria Campus 303-556-2401). Participants choose from various notification options including text messaging, e-mail, phone, instant messaging, pager, fax and BlackBerry devices. Visit the UC Denver Web site for details, www.ucdenver.edu.

Drugs and Alcohol

UC Denver recognizes the health risks associated with the use of illicit drugs and the abuse of alcohol and is committed to providing a drug-free educational and drug-free workplace that supports the research, teaching and service mission of the university. The university is concerned about substance abuse and needs to ensure that the university community complies with the Federal Drug-Free Workplace Act of 1988 (the "Drug-Free Workplace Act") and the Drug-Free Schools and Communities Act Amendments of 1989 (the "Drug-Free Schools Act"). These acts require the university as a recipient of federal funds to take measures to combat the abuse of drugs and alcohol. The continuation of federal financial support for our students, as well as our academic programs and academic support service programs is based upon compliance with these statutes and their regulations.

As a result, the unlawful manufacture, distribution, dispensation, possession or use of any controlled substance (illicit drugs of any kind or amount) and the abuse of alcohol by students and employees on university property or as part of any of its activities is prohibited. This prohibition covers any individual's actions that are part of any university activities, including those occurring while on university property or in the conduct of university business away from the campus.

Any member of the faculty, staff or student body may not jeopardize the operation or interest of the university through the use of alcohol or drugs. Those individuals found to do so are engaged in serious misconduct and are subject to legal sanctions under local, state or federal law and are also subject to disciplinary action consistent with the *Code of Student Conduct*, the *Faculty Handbook* and applicable rules of the State Personnel

System. Sanctions that will be imposed by the university for employees who are found to not adhere to these federal requirements may include requiring satisfactory participation in a substance abuse treatment, counseling or education program as a condition of continued employment, suspension or termination of employment and referral for prosecution.

The Web address for the Colorado Department of Human Services' director of licensed treatments programs is www.cdhs.state.co.us/adad/.

Health risks associated with the use of illicit drugs and the abuse of alcohol include but are not limited to the following:

- Violence—Fights, vandalism, sexual assaults, homicide and suicide are far more likely to occur when drinking is involved.
- Unprotected Sex—Individuals are less likely to use safer sex practices when drinking, which can result in unplanned pregnancy and infection with a sexually transmitted disease.
- Serious Injury—More than 53 percent of all fatal automobile accidents in the U.S. involve alcohol use.
- Death from overdose.
- Addiction—Although anyone can become addicted, those with a family history of alcohol or other drug addiction are at least four times more likely to develop alcoholism.
- Lowered Resistance to Disease/Illness—Increased risk of ulcers, heart disease and cancers of the liver, mouth, throat and stomach.
- Fetal Alcohol Syndrome/Fetal Alcohol Effects (FAS/FAE)—Women who drink during pregnancy may give birth to infants with physical deformities, brain damage and/or mental retardation. If a woman is pregnant, trying to become pregnant or suspects she is pregnant, she should abstain from alcohol and other drug use.

All university faculty and staff members, as well as any students employed at the university, acknowledge that they will as a condition of their employment abide by these federal requirements. In addition, any employee who is convicted of a violation of any criminal drug law occurring in the workplace must report that conviction to his or her immediate supervisor within five days. The Drug-Free Workplace Act makes a strict compliance with this policy statement a condition of employment on all federal grants and contracts. Within 10 days of learning of a drug conviction resulting from workplace activities of any individual engaged in work under grants or contracts funded by a federal agency, the university is required to notify the relevant funding agency that a violation of this policy statement has occurred.

University employees may contact the Office of Human Resources at 303-315-2700 (Lawrence Street Center, 1050) for more information regarding resources, programs and services available. Students may contact the Student and Community Counseling Center at 303-556-4372 (North Classroom, 4036) or the Student Health Center at 303-

556-2525 (Plaza Building, 150) for confidential information and/or referrals. Information may also be obtained by calling the U.S. Department of Health and Human Services national drug and alcohol treatment referral service at 1-800-662-HELP.

This statement will be issued each year as part of the university's continuing effort to increase awareness about the dangers of substance abuse. These actions are based on the belief that well-informed members of the university community will choose wellness over illness and effectiveness over impairment. We ask your support in this important campus effort.

NOTICE TO STUDENTS CONCERNING PENALTIES FOR DRUG VIOLATIONS.

(1) NOTICE UPON ENROLLMENT.—Each institution of higher education shall provide to each student, upon enrollment, a separate, clear, and conspicuous written notice that advises the student of the penalties under section 484(r).

(r) SUSPENSION OF ELIGIBILITY FOR DRUG-RELATED OFFENSES.—

(1) IN GENERAL.—A student who has been convicted of any offense under any federal or state law involving the possession or sale of a controlled substance shall

not be eligible to receive any grant, loan, or work assistance under this title during the period beginning on the date of such conviction and ending after the interval specified

in the following table:

If convicted of an offense involving:

The possession of a controlled substance: Ineligibility period is:

First offense 1 year

Second offense 2 years

Third offense Indefinite

The sale of a controlled substance: Ineligibility period is:

First offense 2 years

Second offense Indefinite

Inclusiveness and Nondiscrimination

The University of Colorado Denver is committed to enhancing the inclusiveness of its work force and its student body. Inclusiveness among students, faculty, staff and administrators is essential to educational excellence and to accomplishing UC Denver's urban mission. Inclusiveness among faculty, staff and administrators provides role models and mentors for students, who will become leaders in academe and in the larger

society, and ensures that a broad array of experiences and world views informs and shapes teaching, research, service and decision making at UC Denver.

Pursuant to Article 10, Laws of the University of Colorado Board of Regents, the university does not discriminate on the basis of race, color, national origin, sex, age, disability, creed, religion, sexual orientation or veteran status in admission and access to, and treatment and employment in, its educational programs and activities. The university takes action to increase ethnic, cultural and gender diversity, to employ qualified disabled individuals and to provide equal opportunity to all students and employees.

All students shall have the same fundamental rights to equal respect, due process and judgment of them based solely on factors demonstrably related to performance and expectations as students. All students share equally the obligations to perform their duties and exercise judgments of others in accordance with the basic standards of fairness, equity and inquiry that should always guide education.

A statement of Article 10 may be found online at www.cu.edu/regents/Laws/Article10.html. UC Denver procedures for investigating complaints of discrimination may be found online at ucdenver.edu/faculty_staff/employees/policies/Policies%20Library/HR/Nondiscrimination.pdf.

To report a violation of Article 10 or for additional information, contact the UC Denver Equal Opportunity/Affirmative Action Compliance Officer at 303-315-2700; mailing address: EO/AA Compliance Office, UC Denver, P.O. Box 173364, Campus Box 130, Denver, CO 80217-3364.

Disability Accommodation

The Americans with Disabilities Act (ADA) provides that individuals who are otherwise qualified for jobs or educational programs will not be denied access simply because they have a disability. Its goal is to guarantee that individuals with disabilities are not discriminated against or denied equal access to the same programs, services and facilities available to others. The ADA prohibits employers, including UC Denver, from discriminating against applicants and workers with disabilities in all aspects of employment. The act also prohibits the university from discriminating on the basis of disability in access to its programs and services.

The ADA requires that UC Denver provide reasonable accommodations to qualified individuals with disabilities who are employees or applicants for employment, and for persons who participate in or apply for participation in the university's programs and activities. Exceptions to the obligation for providing accommodation may be made if doing so would cause undue financial or administrative burdens, fundamental alteration to a program or activity, or significant risk to health or safety to self and/or others.

Additional information regarding the ADA may be obtained online at www.usdoj.gov/crt/ada/adahom1.htm.

If you are a student at UC Denver and need assistance with access to or participation in the academic curriculum, contact the Office of Disability Resources/Services at: 303-556-3450; TTY 303-556-4766; mailing address P.O. Box 173364, Campus Box 118, Denver, CO 80217-3364.

Reporting Disability Discrimination

Article 10 of the laws of the University of Colorado Board of Regents prohibits discrimination on the basis of disability (or on the basis of membership in other protected classes) in admission and access to, and treatment and employment in, University of Colorado educational programs and activities. To report discrimination or to obtain additional information, contact the UC Denver ADA coordinator, 303-315-2724; mailing address: P.O. Box 173364, Campus Box 130, Denver, CO 80217-3364. Complaints of discrimination based upon disability will be processed according to the provisions of the UC Denver nondiscrimination procedures, which may be found online at: ucdenver.edu/faculty_staff/employees/policies/Policies%20Library/HR/Nondiscrimination.pdf.

Sexual Harassment

The University of Colorado is committed to maintaining a positive learning, working and living environment. In pursuit of these goals, the university will not tolerate acts of sexual harassment or related retaliation against or by any employee or student.

Sexual harassment: consists of interaction between individuals of the same or opposite sex that is characterized by unwelcome sexual advances, requests for sexual favors and other verbal or physical conduct of a sexual nature when: (1) submission to such conduct is made either explicitly or implicitly a term or condition of an individual's employment, living conditions and/or educational evaluation; (2) submission to or rejection of such conduct by an individual is used as the basis for tangible employment or educational decisions affecting such individual; or (3) such conduct has the purpose or effect of unreasonably interfering with an individual's work or academic performance or creating an intimidating, hostile or offensive working or educational environment.

Hostile environment sexual harassment: (described in subpart (3) above) is unwelcome sexual conduct that is sufficiently severe or pervasive that it alters the conditions of education or employment and creates an environment that a reasonable person would find intimidating, hostile or offensive. The determination of whether an environment is "hostile" must be based on all of the circumstances. These circumstances could include the frequency of the conduct, its severity and whether it is threatening or humiliating.

Retaliatory acts: It is a violation of this policy to engage in retaliatory acts against any employee or student who reports an incident of alleged sexual harassment or any

employee or student who testifies, assists or participates in a proceeding, investigation or hearing relating to such allegation of sexual harassment.

The University of Colorado System Administrative Policy Statement (APS) on sexual harassment policy and procedures may be obtained from the UC Denver sexual harassment officer (see "Reporting Sexual Harassment") or found online at: ucdenver.edu/faculty_staff/employees/policies/Policies%20Library/HR/SexualHarassment.pdf.

Reporting Sexual Harassment

If you need to report sexual harassment or if you have any questions regarding sexual harassment or policy above, please contact the UC Denver sexual harassment officer at 303-315-2724; send correspondence to Human Resources, P.O. Box 173364, Campus Box 130, Denver, CO 80217-3364.

Who to Call When You Need Help

ADA Coordinator

Contact: Human Resources
Office: Lawrence Street Center, 1050
Telephone: 303-315-2700

Contact the ADA coordinator to report disability discrimination.

Auraria Police Department

Office: Administration Building, 110 (1201 5th Street)
Telephone: 303-556-5000
Emergency: 911

Contact the Auraria Police Department to report on-campus criminal conduct, including sexual assault or other serious allegations of sexual harassment in which the complainant believes that his or her safety is threatened. Allegations of serious sexual harassment should be reported to the Auraria Police Department if they occur after hours or on weekends.

Disability Resources and Services

Director: Lisa McGill
Office: Arts Building, 177

Telephone: 303-556-3450

TTY: 303-556-4766

The Office of Disability Resources and Services provides equal opportunities and fosters the personal growth and development of students with disabilities. Contact DRS for priority registration for classes, assistance in identifying volunteer note takers, alternative testing, oral/sign language interpreters, real-time captioning and textbooks in alternative formats.

Disruptive/Threatening Behavior

Chair: Larry Loftin ^[11]_[SEP]

Office: Tivoli Student Union, 259^[11]_[SEP]

Telephone: 303-817-2813^[11]_[SEP]

Web site: www.ucdenver.edu/beta

The Behavioral Evaluation and Threat Assessment Team (BETA) is a resource on the University of Colorado Denver campus that can provide support and information to faculty, staff or student community members who are confronted with individuals who may be threatening, disruptive, or otherwise problematic. The Team provides guidance and consultation

and may make referrals to appropriate campus or community resources.

Equal Opportunity/Affirmative Action

Contact: Human Resources

Office: Lawrence Street Center, 1050

Telephone: 303-315-2700

Contact the compliance officer to report discrimination on the basis of race, color, national origin, sex, age, disability, creed, religion, sexual orientation or veteran status.

Human Resources

Office: Lawrence Street Center, 1050

Telephone: 303-315-2700

Contact the Office of Human Resources for a referral and to speak to someone immediately about your problem.

Ombuds Office

Associate Director: Mary Chavez Rudolph
Office: CU-Denver Building, 107P
Telephone: 303-556-4493
E-mail: mary.chavezrudolph@ucdenver.edu

Web

site: www.ucdenver.edu/about/departments/OmbudsOffice/Pages/OmbudsOffice.aspx/

The Ombuds Office is a confidential and impartial resource for students, faculty and staff. Contact the Ombuds Office: as a first step if you don't know where to turn, as a last resort, or anywhere along the way; when you are confused about university policy or procedure and would like clarification; to explore your options, share your concerns, evaluate your situation, and plan your next step; when you feel as if you have been treated unfairly; and for information and identification of resources to resolve issues.

Sexual Harassment

Contact: Human Resources
Office: Lawrence Street Center, 1050
Telephone: 303-315-2724

Contact the sexual harassment officer with questions about or to report sexual harassment.

Student and Community Counseling Center

Contact: Patricia Larsen
Office: North Classroom, 4036
Telephone: 303-556-4372
Web site: www.ucdenver.edu/life/services/counseling-center/Pages/default.aspx

The Student and Community Counseling Center provides mental health counseling services to the student body as well as the metropolitan community. UC Denver students receive 10 counseling sessions at no cost per fiscal year as part of their student fees.

College of Architecture and Planning

Dean: Mark Gelernter

Associate Deans of Academic Affairs:

Denver: Yuk Lee
Boulder: Hans Morgenthauer

Contact

Office

UC Denver Building
1250 14th Street, 3rd floor
303-556-3382
Fax: 303-556-3687

Mailing Address

College of Architecture and Planning
Campus Box 126
P.O. Box 173364
Denver, CO 80217-3364

Advising and Admissions

Undergraduate: 303-492-2804

Peggy.Gordon@colorado.edu

Graduate Professional: 303-556-3382

CAP@ucdenver.edu

PhD: 303-556-6042

michael.t.harper@ucdenver.edu

Application Deadlines

Fall Semester

PhD in design and planning—February 1

All professional programs—February 15

Spring Semester

All programs—October 1

(In architecture and landscape architecture, students starting in the spring will only be able to select from a reduced set of courses and will get on track starting the next fall.) Applications received after these dates will be considered only if space is still available.

If you're interested in a career in architecture, urban and regional planning, landscape architecture or urban design, you'll want to get acquainted with the College of Architecture and Planning on the Downtown Campus of UC Denver. We offer the only undergraduate and graduate education in these fields in the state of Colorado. Many students intending to enter the design and planning professions complete the college's undergraduate degree as preparation for our graduate-level professional programs. Our graduate programs also are available for those who already hold an undergraduate

degree in an unrelated field. Our graduate programs in architecture, landscape architecture, urban and regional planning and urban design, and our graduate certificates in preservation, design build and GIS, are taught on the Downtown Campus, in the heart of a vital downtown. Our undergraduate program is offered in Boulder, an environment ideally suited to the needs of undergraduates (see the University of Colorado at Boulder catalog for details). We offer a multidisciplinary PhD in design and planning based in Denver. With a diverse faculty committed to excellence in teaching, research, scholarship and creative work, the college provides students with a broad range of learning opportunities.

The College's Vision

To help students prepare for an engaging, productive career in the design and planning professions, the College of Architecture and Planning has developed a bold vision called Integrative Design. This vision directs the college to:

- Engage design and planning challenges that are significant for our society. We are not an ivory tower. Learning experiences address real issues facing designers and planners as they create healthier, more sustainable, more meaningful environments for the 21st century. In recent years, among many other socially important projects, our students have: designed alternatives to suburbia; built award-winning solar-powered homes; written new codes to encourage livelier, safer cities; discovered ecological design principles in Colorado ranches; proposed ways for neighborhoods to recover from natural disasters; and invented new ideas for affordable housing.
- Engage these challenges in partnerships among the disciplines and with our external communities. No one discipline can address these issues alone. Architects, landscape architects, planners, urban designers and developers must work together to create holistic, healthy, sustainable environments.

In our college, students have opportunities to:

- Participate in multi-disciplinary teams, modeling the practices of today's successful design and planning firms.
- Interact with outstanding practicing designers and planners in the Denver metro area through internships, mentorships, design juries, lectures and student professional organizations.

Communities of Interest

To implement this vision, the college has organized many of its activities around "communities of interest." These bring together faculty, students and practitioners across

the disciplines who share an interest and expertise in a particular theme, building synergistic relationships as they explore new design and planning ideas.

The college's communities of interest currently include:

- **Emerging Practices in Design**
Exploring how the digital design revolution and sustainable design practices are reshaping the professions. These include sustainable design and design/build practices as well as digital visualization and building information modeling (BIM) technologies.
- **Sustainable Urbanism**
Exploring new ideas about creating livable cities in the midst of intense pressures for growth and fragile ecosystems.
- **Healthy Environments**
Exploring how to build healthier buildings, cities and landscapes.
- **Cultural Heritage**
Understanding, interpreting and preserving our cultural heritage in design and planning, including historic buildings, landscapes and intellectual and cultural ideas.

Special Activities and Programs

The college provides a diverse range of opportunities that enrich and enhance the education of its students. Through activities and functions—including a lecture series, a visiting critic series, exhibits, publications and active student organizations—the college encourages contact among students, faculty and members of the design professions. Each summer, the college offers foreign study travel programs, which in recent years have traveled to Prague, Rome, Helsinki, Paris, Beijing and Madrid. In addition, for the past seven summers the college has offered an integrated urban design studio in Turkey. The college makes available a range of scholarships and fellowships, some of which are based on need, others on performance and still others of which are specifically intended to provide enrichment opportunities. The college supports an active and focused internship program for its students, giving them access to elective internship opportunities in the Denver metropolitan area and beyond. Finally, the college encourages students to take control of their own education and supports, within its ability, any reasonable proposals from students that would enrich their own educational experiences.

College Facilities

The college's administrative headquarters and graduate programs are located at 1250 14th Street in downtown Denver, on the northeastern edge of the Auraria Campus. This favorable location gives easy access both to the extensive campus facilities and to the urban amenities of Denver's lively lower downtown. Most of the major professional

design offices in Denver and many planning firms and agencies are within easy reach of the college. These provide many opportunities for contact between students and practitioners. College facilities include studio spaces for students, lecture and seminar rooms, design jury spaces, exhibition spaces and faculty offices. The college also provides a portfolio photography studio room, a model and furniture-making woodshop with laser cutters and a 3-D printer, and an extensive computer laboratory whose focus is computer aided design (CAD), computer 2-D and 3-D imaging and analytic tools for planning. The computer lab includes Windows PCs and G4 Macintoshes, small and large format scanners, large format plotters, laser printers and computer data projection devices. All systems are 100base T Ethernet / Internet savvy and accessible 24 hours a day in a secure room. Also associated with the college is a geographic information system (GIS) computer laboratory, which is open to all UC Denver students.

Scholarships/Financial Aid

Students in the college have access to a number of scholarships and other financial assistance funds. Some of these funds are provided by the institution itself, while others are provided by external sources like the American Institute of Architects Education Fund, the American Planning Association, the American Society of Landscape Architects and the Rocky Mountain Masonry Institute. For further information on these scholarships and graduate tuition awards, visit the college's Web site or request a list via e-mail at patricia.mckissock@ucdenver.edu. For information on federal and state financial aid, contact the Office of Financial Aid, University of Colorado Denver, Campus Box 125, P.O. Box 173364, Denver, CO 80217-3364, 303-556-2886 or visit their Web site.

Admissions

General Requirements

Applicants to the College of Architecture and Planning are required to submit the following credentials:

- University of Colorado application for graduate admission form
- Two official transcripts from each institution the applicant has attended. Transcripts must be mailed by the institution directly to the college. A certified literal English translation also must be submitted for documents that are not in English.
- Letters of recommendation: U.S. residents, three letters; international applicants, four letters.
- Statement of purpose: Applicants to all programs must submit a statement summarizing career objectives and reasons for pursuing the intended program of study. Applicants to the MURP program should indicate their area of concentration. Applicants to the PhD program should discuss the intellectual and

policy challenges they hope to address, methodological skills they plan to pursue, and briefly note any tentative dissertation research topics and, if possible, overlap of research interests with program faculty.

- Supporting materials for architecture and landscape architecture: Applicants to the graduate architecture and landscape architecture programs are required to submit a portfolio (6-12 bound pages, 8.5 × 11 inches). Slides are not accepted. A portfolio is an orderly presentation of one's work. This includes examples of creative and analytical work including but not limited to essays, papers, photographs and photographic reproductions of artistic work such as sculptures, drawings, paintings, musical compositions and other fine arts. A stamped, self-addressed envelope must be included for return of the portfolio. Applicants to architecture and landscape architecture are encouraged to submit GRE scores if their GPAs are below 3.0.
- Supporting materials for urban and regional planning: Applicants to the urban and regional planning program should submit, in an 8.5 × 11-inch bound document, their statement of purpose, a resume and a copy of a student or professional paper or project. Applicants to the urban and regional planning program are encouraged to submit GRE (general) scores; those whose undergraduate GPA is below 3.0 are required to submit GRE scores.
- Supporting materials for the PhD: Applicants to the PhD program must submit a sample of written work and any other evidence relevant to admission to the program, in accordance with submission guidelines that can be obtained from the college. Applicants to the PhD program are required to submit GRE scores.
- Application fee. Nonrefundable (\$50, U.S. residents; \$75, international applicants).

Confirmation Deposit

A nonrefundable confirmation deposit of \$200 is required to secure an applicant's place in the architecture, landscape architecture and PhD programs. The deposit is due at the time the applicant accepts the program's offer of admission. The deposit will be applied to the first semester's tuition when the student registers for classes.

Computing in the College

The College of Architecture and Planning requires all incoming graduate students to acquire and use their own computers and software applications in their studies. To assist students with procurement of their personal computers, the IT committee formulated performance-based computing specifications. These are listed online here. Please note that UC Denver neither endorses nor requires students to procure a machine from a particular vendor. While desktop configurations are listed, students are urged to procure laptops mainly for reasons of security and mobility in studios and classrooms. Software application (program) requirements relate to specific course curricula. In general, students widely use products such as Microsoft Office for word processing, e-mail, presentations and spreadsheet applications. Consult with instructors or refer to course

syllabi regarding applications for imaging, CAD, GIS, modeling or rendering before buying them. In addition, not all programs are needed during the first semester; certain release versions may be preferable over others. The college intends to provide computer IT orientation sessions at the beginning of each semester.

Academic Policies

Academic Standing

Students must maintain a minimum overall GPA of 3.0 in the graduate programs to remain in good standing and to graduate. If a student's GPA falls below a 3.0, then he or she will be placed on academic probation beginning the following semester. If the GPA remains below a 3.0 after the probationary semester, then he or she may be dismissed from the college.

Appeals

Any student may appeal the grade he or she receives in a class within 30 days from the issuance of the grade. The student should first discuss the issue and adjustment sought with the relevant course instructor. If the course instructor does not reply within 30 days, the student submits a written appeal to the department chair. Within 30 days, the department chair shall process the appeal and prepare a written report explaining the reason(s) for the department recommendation. If the grade appeal still remains unresolved at the department level, the student submits a written request to the associate dean of academic affairs, who will direct the Academic Affairs Committee to review the appeal. If the grade appeal remains unresolved at the college level, the student may appeal to the dean.

Attendance and Timeliness of Work

Students are expected to attend all meetings of classes. Excessive unexcused absences may result in a grade reduction at the discretion of the instructor. Absence from a class will be excused for verified medical reasons, religious obligations or for extreme personal emergencies. The student may be required to furnish evidence.

Students' assignments are to be completed in a timely manner. Any assignment turned in late may have its grade reduced by an amount set at the discretion of the instructor. An assignment may be turned in late without penalty for verified medical reasons, religious obligations or for extreme personal emergencies. Students must have their instructor's written permission to turn an assignment in late. Students with excused late work may turn in the assignment by the end of finals week without penalty. Otherwise, the grade "I" will be assigned at the discretion of the faculty.

Course Sequencing and Advancement

Programs in the college are structured so that certain courses must be taken concurrently, others sequentially. Students will not be allowed to enroll in a course if its co-requisites or prerequisites have not been satisfied.

Originality of Work

Students must submit their own work. Where other sources are used in a student submission, they are to be clearly identified and referenced. The university considers plagiarism and similar acts of falsification to be a serious matter that may result in suspension or expulsion. Information on codes of conduct and grievance procedures are available from the Office of Enrollment and Engagement on the Downtown Campus.

Retention of Student Work

The College of Architecture and Planning may, with a student's written permission, retain student work submitted in fulfillment of class requirements for a period of time. This retained work is normally used to provide accrediting agencies with tangible evidence of performance, to serve as additional visual aid material in presentations to other students and to contribute to possible educational exhibits requested by the university community and the general public.

Departments and Programs

Programs

Certificate

Design Build Graduate Certificate

Contact: Erik (Rick) Sommerfeld

Telephone: 303-556-6160

E-mail: sommere@colorado.edu

The College of Architecture and Planning offers a graduate certificate in the emerging area of design build as an extension of the MArch program. It requires a total of 18 semester hours, some of which also count toward the MArch program, some of which do not. Course work in this extension emphasizes the designer's point of view.

Certificate Requirements

Five courses totaling 18 semester hours can be applied to the MArch graduation requirements:

- ARCH 6370 - Introduction To Design Build Summer 2010 Registration: **ARCH 6370**
- ARCH 6371 - Maintaining Quality and Managing Risks: Design Build Summer 2010 Registration: **ARCH 6371**
- ARCH 6372 - Architecture in a Single Source Project Delivery Summer 2010 Registration: **ARCH 6372**
- ARCH 6373 - Construction in Design Build Summer 2010 Registration: **ARCH 6373**
- ARCH 6170 - Advanced Design Studio Summer 2010 Registration: **ARCH 6170** taken with
- ARCH 6171 - Advanced Design Seminar Summer 2010 Registration: **ARCH 6171**

Total: 18 Hours

Geospatial Information Science Graduate Certificate

Contact: Brian Muller

Telephone: 303-556-5967

E-mail: brian.muller@ucdenver.edu

The College of Architecture and Planning offers a certificate in geospatial information science through participating departments. The emphasis of this certificate is on applications of GIS in urban and environmental planning and design fields. The certificate is available to any student earning one of our graduate degrees; to students earning cognate degrees, for example in the School of Public Affairs, College of Engineering and Applied Science or from the Department of Geography; and to nondegree students who have already earned such a degree.

Certificate Requirements

1. A minimum of 18 semester hours (with at least 12 related planning and design hours to be earned in residence at UC Denver or University of Colorado at Boulder);
2. A minimum B (3.0) average and a minimum grade of B- (2.7) in any course, as outlined in the certificate curriculum:
 - *One required introductory class:* Introduction to GIS (both theory and methods) (3 semester hours)

- *At least three additional courses in GIS or remote sensing methods* to be approved in advance by the GIS committee (9 semester hours). Such courses may include:
 - Cartography (Boulder and Denver, geography)
 - GIS Analysis (Denver, civil engineering)
 - GIS II (Boulder, geography)
 - Advanced GIS Workshops (Boulder and Denver, multiple departments)
 - GIS Management (Denver, civil engineering)
 - Quantitative Methods in Geography (Boulder, geography)
 - Remote Sensing (Boulder and Denver, multiple departments)
- *Applications Option 1:* Studio or thesis project involving application of planning and design GIS-based methods to be approved by the faculty GIS committee (6 semester hours)
- *Applications Option 2:* Internship or other work experience is strongly encouraged for all students and may at the discretion of the committee be substituted for other courses (6 semester hours)

It is not possible or desirable to specify every course that should count toward a certificate. CAP and other participating programs will continue to generate new GIS-related courses as the curriculum evolves, and CAP delivers much of its instruction through studio courses that vary in content each semester. A certificate program must include an ongoing structure for managing course requirements and determining when individual students have met them.

Historic Preservation Graduate Certificate

Contact: Christopher Koziol

Telephone: 303-556-6516

E-mail: christopher.koziol@ucdenver.edu

The College of Architecture and Planning together with the Department of History in the College of Liberal Arts and Sciences offers a graduate certificate in historic preservation. The goal is to instill a culture of interdisciplinary collaboration through course work (and beyond the classroom), through engagement with the community. This certificate builds upon the extraordinary preservation community and opportunities in Colorado. It requires a total of 18 semester hours.

Certificate Requirements

The historic preservation certificate can be earned as part of any of the following degrees:

- Master in History (Public History)
- Master of Architecture

- Master of Landscape Architecture
- Master of Urban Design
- Master of Urban and Regional Planning
- PhD in Design and Planning

The certificate requires a total of 18 semester hours, including:

- Two required core courses (3 semester hours each) on preservation theory and practice from the architect's and planner's perspective of intervening through design and regulation and from the historian's perspective of how the past might guide the future:
 - HIST 5232 HIST 5232 - Historic Preservation
 - URPL 6634 URPL 6634 - Preservation Theory and Practice
- At least three credits in history of architecture, landscape architecture or historic places. Among recent and current offerings:
 - ARCH 5220, 5230: History of Architecture I, II
 - LDAR 5521: History of Landscape Architecture
 - HIST 5229: Colorado Historic Places
- At least three credits in preservation methods, including preservation technology, documentation of sites and structures, visual research methods, and other subjects. Among recent and current offerings:
 - HIST 5240: National Parks History
 - ARCH 6490: Historic Ranch Documentation & Preservation
 - ARCH 6290: Chautauqua Historic Preservation
 - DSPL 7686: International Preservation Practice
 - ARCH 6490: Vernacular Stuff
 - ARCH 6520: Documentation (summer program in Rome)
 - ARCH 6520: Historic Materials (summer program in Rome)
- A thesis or preservation studio (6 semester hours) is required. Preservation studio rotates among architecture, landscape architecture and planning and Urban Design.

Students are encouraged to take an internship in preservation. New offerings and special topics courses are added each semester. Students may work with an advisor in their specialized field to develop a program appropriate to individual interests (which must be approved by the Faculty Preservation Committee).

Required Core Courses

- HIST 5232 - Historic Preservation *Summer 2010 Registration: HIST 5232*
- URPL 6634 - Preservation Theory and Practice *Summer 2010 Registration: URP 6634*

Total: 6 Hours

Master of Urban Design

Urban Design MUD

► Graduate School Rules apply to this program

Program Information: Jeremy Németh

Telephone: 303-556-3688

The master of urban design (MUD) is an intensive, one-year, interdisciplinary postprofessional degree program intended for talented persons already holding a professional degree in architecture, landscape architecture or urban and regional planning (e.g. BArch, BLA, MArch, MLA, MURP/MUP or equivalents).

Urban design is an integrative activity focused on creating beautiful, vital, functional, environmentally sustainable and socially just public places. By contextualizing architecture while providing a means of implementation for planners and landscape architects, urban design occupies a realm supportive of these fields while simultaneously generating its own responses to the most pressing urban issues. Although urban designers often intervene on the neighborhood scale, the program fosters mastery of inclusive and participatory community design processes and the attendant means for effectively implementing physical plans at the metropolitan, neighborhood, district, corridor, street and block scale.

The MUD program focuses on creating sustainable urban infrastructure and interprets the city as a set of overlaid and integrated systems. The program views urban designers playing a vital role in the production of the built environment because of their dual responsibility to illustrate preferable design solutions and shape the regulatory patterns governing future development. The inherent interdisciplinarity of this approach brings students into frequent contact with professors, practitioners and experts in urban planning, architecture and landscape architecture, and encourages students to forge their own tailored degree by pursuing an independent study and a variety of electives in the college. Students relate their independent study projects to one of the college's fields of expertise, such as participatory design in distressed communities, postindustrial landscapes, "green streets," vernacular design or historic preservation.

Denver and the American West provide an exciting urban laboratory as we face a number of complex and difficult challenges (e.g. water scarcity, urban sprawl). Students undertake at least one studio in the Denver metropolitan region while remaining cognizant that similar systems and challenges exist in a variety of domestic and international contexts. As a capstone project during their final term, students enroll in an

international studio course, preparing for this studio by taking a mandatory seminar in global design history and practice.

The MUD program is informed by innovations in practice. Tested techniques and methods are brought into classroom and studio settings to be evaluated, refined and disseminated in ways that prepare graduates for highly innovative work as critical, reflective urban designers employed in both the public and private sectors. In addition, each spring semester brings a visiting urban design fellow to the college. This practitioner-in-residence is selected from a highly competitive pool of designers from around the world. The selected practitioner teaches an advanced urban design studio and supervises independent study projects.

Prerequisites

Students are required to hold a first professional degree in architecture, landscape architecture or urban and regional planning (e.g. BArch, BLA, MArch, MLA, MURP/MUP or equivalents).

Admissions

The Master of Urban Design Admissions Committee accepts applications for Fall semester entry. Right now, the program does not allow entry to the program in any Spring semester. The general requirements the Admissions Committee considers are:

- Evidence of a professional degree (BArch, BLA, MArch, MLA, MURP/MUP) or equivalent
- At least a 3.0 undergraduate or graduate cumulative GPA
- A portfolio (8.5 × 11-inch bound document) that includes:
 - Your statement of purpose (which should include your educational and professional goals and objectives)
 - Résumé (which describes your educational and professional background)
 - Examples of student or professional projects
 - A list of courses that you have taken that relate to design and planning
- A writing sample from previous professional or academic work

Program Requirements

The requirements for the postprofessional master of urban design (MUD) degree depend on your current standing and educational background. The basic study plan is a 36-semester-hour plan that includes two elective courses. Students obtaining a first professional degree in University of Colorado Denver College of Architecture and

Planning may receive up to 12 semester hours of advanced standing.

Core Requirements

- URBN 6610 - Infrastructure Studio Summer 2010 Registration: U D 6610
- URBN 6611 - Regulatory Studio Summer 2010 Registration: U D 6611
- URBN 6612 - Urban Synthesis Studio Summer 2010 Registration: U D 6612
- URBN 6640 - History of the City Summer 2010 Registration: U D 6640
- URBN 6641 - Design Process/Practice Summer 2010 Registration: U D 6641
- URBN 6642 - Design Policy/Regulation Summer 2010 Registration: U D 6642
- URBN 6840 - Independent Study: URBN Summer 2010 Registration: U D 6840
or
- URBN 6930 - Urban Design Internship Summer 2010 Registration: U D 6930

Total: 30 hours

Course Sequence

Fall

- URBN 6610 - Infrastructure Studio Summer 2010 Registration: U D 6610
- URBN 6640 - History of the City Summer 2010 Registration: U D 6640
- URBN 6641 - Design Process/Practice Summer 2010 Registration: U D 6641

Spring

- URBN 6611 - Regulatory Studio Summer 2010 Registration: U D 6611
- URBN 6642 - Design Policy/Regulation Summer 2010 Registration: U D 6642
- URBN 6840 - Independent Study: URBN Summer 2010 Registration: U D 6840
or
- URBN 6930 - Urban Design Internship Summer 2010 Registration: U D 6930

Summer

- URBN 6612 - Urban Synthesis Studio Summer 2010 Registration: U D 6612

Doctor of Philosophy

Design and Planning PhD

► Graduate School Rules apply to this program

Program Director: Kevin J. Krizek

Telephone: 303-315-2422

The PhD in design and planning from University of Colorado Denver trains scholars for careers in higher education, research and high-level policy positions. It is a research-oriented doctoral degree with a flexible, interdisciplinary focus. Students actively draw from the rich intellectual resources of the University of Colorado campuses in both Denver and Boulder for classes, personalized instruction, teaching opportunities and research appointments. Graduates of the program work in universities, government, nonprofits and the private sector, both in the U.S. and around the world.

Planning and design form a well-established and expanding field of knowledge and practice regarding the relationships of natural, behavioral, technological, political, economic and cultural factors to the organization of physical space, and their combined influence on the quality of life in general. Housed within the college, the departments of architecture, landscape architecture, and planning and design share the idea that the complex problems of the built environment are best addressed through collaboration among the various design and planning disciplines. As a result of this collaboration, the departments jointly offer the advanced research degree, a PhD in design and planning.

Areas of Specialization

The PhD program serves as the intellectual driver of the College of Architecture and Planning; its mission is to provide a scientific foundation for planning and design. Unique and distinguishing characteristics include the physical environment as the domain of interest, the interdisciplinary and integrative orientation of study and the applied nature of prescriptions. Being broad in its offerings, available study covers issues ranging from highly technical urban modeling to the history of architecture. Students in the program are encouraged to embrace tenets embodied in one of the following areas of specialization. Each broad specialization area is represented by its own core curriculum specific to the domains of expertise and faculty interests; in exceptional circumstances, advanced study on a related topic (e.g., historic preservation, green buildings) is available to bridge the two specialty areas.

Sustainable and Healthy Environments (SHE)

Studies in SHE are concerned with the design making by public agencies to guide the pattern and timing of land development that advance goals of sustainable and healthy environments. Subfields include land use planning, growth management, transportation, urban design, housing and community development, environmental planning and management of urban, rural and natural areas. Primary work in this area focuses on land use controls, design

review processes and the development of models and tools to understand and support decision processes and design practices.

History of Architecture, Landscape and Urbanism (HALU)

Studies in HALU include the history and theory of architecture, landscape and urbanism considered within socioeconomic and political contexts, intellectual history and cultural studies, as well as questions concerning the evolution of technology, technique and materiality. Interdisciplinary and cross-cultural collaboration is encouraged. In this manner, the disparate range of ideologies and methodologies within the discipline itself are introduced. It is critical for the contemporary scholar and teacher to be aware of the tradition of strategies and perspectives in order to operate in an intellectually responsible manner in the present. A background in a professional design field is desirable for all applicants.

As part of studies in either specialty area, students work on diverse topics, advancing the intellectual environment of the college by participating in a common colloquium, organizing workshops, presenting at conferences and writing publications.

Admission Requirements

As a candidate for admission to the PhD program, you must meet the requirements of the Office of Vice Chancellor of Academic and Student Affairs of UC Denver. These include but are not limited to:

- Matters of provisional admission
- Transfer credit restrictions
- Residency requirements
- Eligibility of courses for graduate-level credit
- Foreign language requirements
- Examination schedules

Residency

To be accepted, you will have to meet the academic residency requirement, which requires six semesters of scholarly work beyond the attainment of an acceptable bachelor's degree.

Two semesters of residence credit may be allowed for a master's degree from another institution of approved standing.

At least four semesters of resident credit, two of which must be consecutive in one academic year, must be earned from this university.

Specific Requirements

The specific admission requirements for the PhD program in design and planning are as follows:

1. Degree

Minimally, to be a successful applicant, you must have a bachelor's degree, however, it is strongly advised that students entering the program will have completed both a bachelor's and a master's degree. Field specialization and background are open. However, you will preferably have completed a professional (master's or bachelor's) program in planning or a design-related field, such as:

- Architecture
- Landscape Architecture
- Architectural Engineering
- Urban Design

In combination with a degree in an area, such as:

- Geography
- Urban Economics
- Environmental Law
- Urban Sociology
- Real Estate
- Management Science
- Computer Science
- Public Administration
- Environmental Psychology

2. Knowledge from Prior Course Work

The applicability of your prior course work will be decided by the program committee upon review of your transcript and additional materials. If you do not have the requisite educational background, grade point average or GRE scores, you may be admitted on a conditional or provisional basis and additional course work may be required in accordance with Graduate School Rules.

A. Design and Planning: You can satisfy this requirement by virtue of having completed either a professional or a pre-professional degree program in these areas.

If you do not have such prior qualifications, you must complete 12 hours of upper level undergraduate course work in the College of Architecture and Planning, while obtaining in each of these courses a grade of 'B' or higher. These courses are to be chosen from a selected list, in consultation with your faculty advisor, and are to be completed within two years after admission to the Program, and may count towards fulfilling the degree requirements.

B. Undergraduate Work: You must have completed 12 semester hours of undergraduate work in one of the following areas:

Social and Behavioral Sciences
Environmental and Natural Sciences
Engineering
Humanities

C. Prerequisites: You must also have completed one of the following prerequisites with a grade of "B-" or above (the choice depends on your area of specialization):

Statistics. Including probability theory, parametric and nonparametric methods, and acquaintance with basic multivariate techniques. A minimum of 3 hours.

Mathematics. Including differential equations, finite mathematics, algorithms, data structures or other appropriate courses. A minimum of 3 hours.

Language. Ability to read at least one foreign language relevant to the area of specialization.

Computer Applications. Background in computer aided Design (CAD) or Geographic Information Systems (GIS). A minimum of 3 hours.

3. Demonstrated Academic Achievement

- Academic achievement as evidenced by an undergraduate grade point average of 3.0 (on a 4.0 scale) or better, and a graduate grade point average of 3.5 or better.
- A 575 TOEFL (Test of English as a Foreign Language) score is required if you are a foreign applicant whose native language is not English.

Curriculum

Degree requirements are set both by the Graduate School at the University of Colorado Denver and the PhD program within the college. Degree requirements are divided into two parts: pre-candidacy and candidacy/dissertation research. The former involves

course work, qualifying examinations and a dissertation prospectus. Candidacy is certification that all requirements have been met except the dissertation. The doctor of philosophy (PhD) degree in design and planning is granted upon the successful completion and defense of the dissertation.

Students meet these requirements through course work and exams over a two year period. During this time, a student's cumulative grade point average may not fall below a 'B' without academic discipline or probation.

Degree Completion

Students in the PhD program in design and planning have up to eight years to complete all requirements for the degree. It is possible to take a leave of absence (referred to as a 'time out,' however, such circumstances should be pursued in tandem with your advisor and/or your committee). A leave of absence form, obtained from PhD program administrative coordinator, must be completed to ensure your place in the program.

Three Components

The PhD curriculum consists of three components:

- Core curriculum
- Additional course work
- Dissertation

1. Core Curriculum (12 semester hours)

Students in the program are encouraged to embrace tenets embodied in one of the following areas of specialization. Each broad specialization area is represented by its own core curriculum that is specific to the domains of expertise and faculty interests. The core curriculum includes 12 semester hours of course work and consists of a series of theory and methods and application courses, which all students must complete during their first two years of residence, plus an additional three hours of programwide colloquia.

The core curriculum for the specialization in SHE includes:

DSPL 7011 - Research Design: the Logic of Inquiry. **Semester Hours: 3**

DSPL 7013 - Environment and Behavior. **Semester Hours: 3**

DSPL 7012 - Theories of Planning, Government Intervention and Implementation: Means and Ends. **Semester Hours: 3**

The core curriculum for the specialization in HALU includes:

DSPL 7686 - Special Topics. Historiography: History of the Scholarly Discipline.

Semester Hours: 3

DSPL 7686 - Special Topics. History of Theory: History of the Ideas Informing Practice.

Semester Hours: 3

DSPL 7686 - Special Topics. Pro-Seminar: Advanced Seminar on Faculty Research Interests. **Semester Hours: 3**

Advanced study on related topics (e.g., historic preservation, green buildings) is available to bridge the two specialty areas, in which case a core curriculum would consist of one of the above tracks complemented by select offerings from the other track. Such circumstances are addressed in close consultation with your initial advisors and/or your committee.

All students are also required to complete three sessions of the colloquium (DSPL 7014 - Colloquium in Design) during their first two years in the program (1 semester hour, pass/fail credits only). You also have the option of taking more than the three required credits. The colloquium includes presentations by speakers (internal to the program, external to the program/university, students), workshops on research/scholarship skills, and perhaps even more social-type activities.

The year-long colloquium has three primary objectives:

1. It exposes students to various approaches to research related to design and planning.
2. It enables students to formulate and test out researchable topics among faculty and student peers.
3. Finally, it serves as a bridge between the two specializations offered within the program, HALU and SHE.

2. Additional Course Work (total 34 semester hours)

In addition to the core curriculum, each student must take at least 12 semester hours of course work in classes broadly conceptualized as “methods” indicative to your field of research. The type of research methods courses varies considerably depending on your chosen area of study. Students must also have 12 semester hours of course work in their minor field of study and will typically take 10 semester hours of support electives. Courses outside the core curriculum may be chosen from outside the college on either the Denver or Boulder campus. Up to 18 semester hours of graduate-level course work can be transferred into the program to qualify for advanced standing.

3. Dissertation (30 semester hours)

It is most important that you continue to work closely with your advisor while you are doing your dissertation research. Meet at least once a month to discuss your progress and be sure to communicate with your other committee members as well. It is a continual process that should be a joint effort to assure that your committee will be well informed and prepared at your defense.

Required Semester Hours

The required semester hours are as follows:

Core Curriculum	12 semester hours
Specialization	12 semester hours
Minor	12 semester hours
Electives	10 semester hours
Dissertation	30 semester hours
Total	76 semester hours

The average course load is 15 semester hours per academic year, especially for the first two years.

Suggested Timing of the Program

(for full-time students without advanced standing):

Year One

- Develop your degree plan
- Complete any prerequisite courses
- Enroll in 11 semester hours of the required core curriculum and additional courses in your specialty area
- Finish the preliminary examination

Year Two

- Enroll in one semester of Colloquium
- Continue or begin to take electives in your minor and specialty areas as described in your degree plan
- Begin literature review papers
- Prepare for your comprehensive exam

Years Three and Beyond

- Complete your literature review papers
- Prepare a dissertation proposal
- Take the comprehensive exam
- Establish your dissertation committee

The remainder of the third and fourth years you will spend researching and writing the dissertation, under the supervision of the dissertation committee.

Architecture

Chair: Taisto Mäkelä, 303-556-3382

Assistant Chair: Erik Sommerfeld, 303-556-6160

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Fax: 303-556-3687

Faculty

Professors:

- *Mark Gelernter, PhD, Bartlett School of Architecture, University of London
- *Julee Herdt, MArch, Southern California Institute of Architecture
- *George Hoover, BArch, Cornell University
- *Patricia O'Leary, MArch, Arizona State University
- *Peter Schneider, BArch, University of Cape Town
- *Ping Xu, DDesign, Harvard University

Associate Professors:

- *Amir Ameri, PhD, Cornell University
- *Osman Attmann, PhD, Georgia Institute of Technology
- *Robert H. Flanagan, MArch, University of Colorado
- *Phillip Gallegos, DArch, University of Hawaii
- *Michael K. Jenson, PhD, University of Edinburgh
- *Christopher Koziol, PhD, University of Colorado Denver
- *Laurence K. Loftin III, MArch, University of Virginia
- *Taisto H. Mäkelä, PhD, Princeton University
- *Hans R. Morgenthaler, PhD, Stanford University
- *Ekaterini Vlahos, MArch, University of Colorado

Associate Professor (Clinical Teaching Track):

- *Barbara Ambach, MArch, Southern California Institute of Architecture

Assistant Professor:

Matthew Jelacic, MArch, Harvard University

Senior Instructors:

*Joseph Colistra, MArch, University of Colorado
Allen Harlow, MArch, University of Colorado
*Charles MacBride, MS, Columbia University
*Eric Morris, MArch, University of Houston
*Jason Rebillot, MArch, University of Illinois at Chicago
*Ranko Ruzic, MArch, University of Colorado
*Melanie Shellenbarger, PhD, University of Colorado Denver
*Erik Sommerfeld, MArch, University of Colorado

Instructors:

*Kenneth Andrews, MArch, Rice University
Meredith Banasiak, MArch, Arizona State University
Marcel de Lange, MArch, Delft University of Technology
Tamarah Long, MArch, University of Florida
Rob Pyatt, MArch, University of Colorado
Additional information about faculty in this department is available online here.

*Also teach graduate courses.

The architecture department's mission is to lead in the discovery, communication and application of knowledge in the discipline of architecture. The department aims to excel in the education of its students, in the research and creative endeavors of its faculty and in service to the community. To respond to this mission, the department has developed a unique intellectual, educational and architectural culture.

- First, the department celebrates its place in a special environment—urbanized Denver with the Front Range and the spectacular natural landscape of the high plains and the Rocky Mountains. The architecture department focuses not only on the design of buildings, but also on the interactions between buildings and their urban and natural settings.
- Second, the department examines the interplay between architectural form and the complex cultural and technological context in which architects operate. As a result of these dominant concerns, the department has created an academic environment that is intellectually stimulating and educationally challenging and that aims to educate students who will become leaders in the discipline and profession of architecture.
- Third, the Department of Architecture follows the College of Architecture and Planning's mission of integrative design. The faculty research, teach and practice

ways to design environments that are meaningful and beautiful. We plan, shape and interpret those environments in ways that are collaborative, responsible, sustainable, enabling and integrative. Promoting and acknowledging diversity in subject matter, method and orientation are essential to this integrative approach. The faculty teach by integrating different design theories and practices into a curriculum that emphasizes their connectedness, crossdisciplinary interdependence, research orientation and real-world relevance. The department collaborates to produce new knowledge while adding to the understanding of the role and identity of design and research in each architectural project. In this collaborative process, each project asks a critical question, then answers it using an appropriate method. These questions stress environmental, economic, social, cultural, aesthetic and ethical concerns. In this knowledge-based matrix, our understanding of how integrative design shapes environments and settings constantly evolves and changes.

Degrees

The College of Architecture and Planning offers a preprofessional bachelor of environmental design (BEnvd) on the Boulder campus. The Department of Architecture offers a graduate degree on the Downtown Campus: the master of architecture (MArch). The following statement from the National Architectural Accrediting Board (NAAB), which is responsible for accrediting all architecture programs in the United States, should help a student choose the appropriate degree program:

“In the United States, most state registration boards require a degree from an accredited professional degree program as a prerequisite for licensure. The National Architectural Accrediting Board (NAAB), which is the sole agency authorized to accredit U.S. professional degree programs in architecture, recognizes three types of degrees: the bachelor of architecture, the master of architecture and the doctor of architecture. A program may be granted a 6-year, 3-year or 2-year term of accreditation, depending on the extent of its conformance with established educational standards.

“Master’s degree programs may consist of a preprofessional undergraduate degree and a professional graduate degree that, when earned sequentially, constitute an accredited professional education. However, the preprofessional degree is not, by itself, recognized as an accredited degree.”

- The preprofessional degree offered by the College of Architecture and Planning is the bachelor of environmental design (BEnvd). The professional degree offered by the college is the master of architecture (MArch), which is fully accredited by the NAAB.
- The master of architecture, the college’s accredited professional degree for students intending to seek licensure as architects, is offered to students who have completed the college’s BEnvd or any other preprofessional design degree from any NAAB-accredited institution, as well as to students who have completed an unrelated

undergraduate or graduate degree or to students who hold professional architecture degrees from other countries but who seek to obtain an NAAB-accredited architecture degree. Students holding a preprofessional degree from a NAAB-accredited program or professional architecture degree from a foreign institution will be evaluated individually for advanced standing in the MArch program, commensurate with their previous educational experiences.

Master of Architecture

Architecture MArch

The MArch is the college's accredited professional degree for students intending to seek licensure as architects. It is a three-and-one-half-year plan of study on the Denver Campus that has been fully accredited by the National Architectural Accrediting Board (NAAB).

Prerequisites

- Students must complete the prerequisites of college-level trigonometry and physics before enrolling in ARCH 5310, Introduction to Building Technology. Since this class should be taken in the first semester in order to stay on track for graduation, students are strongly encouraged to complete the trigonometry and physics requirements before beginning the MArch program.
- ARCH 5000, Math and Physics for Architects, is offered in the summer on a pass/fail basis. This class meets the prerequisite requirements. This class does not count toward the number of credits required for the MArch degree.
- A graphics workshop is recommended for students who do not have a background in architectural drawing and model building. This class is offered each year before the beginning of the fall semester.
- Students are also expected to have achieved a basic level of computer literacy and should be familiar with PC or Mac operating systems.

Program Requirements

Students with a bachelor's or master's degree unrelated to architecture must complete a seven- or eight-semester sequence of course work and accumulate a minimum of 114 semester hours of credit. Students who have completed the college's BEnvd or any other preprofessional architecture degree from any NAAB-accredited institution and students who have completed a non-NAAB-accredited professional architecture degree in another country, and who wish to obtain the NAAB-accredited degree from this college, will be evaluated individually for advanced standing. These students will work

with the associate chair of the department to develop an individualized plan of study commensurate with their previous degrees and experience, and will have to complete at least 60 semester hours of credit in residence within the College of Architecture and Planning.

Course Sequence

The MArch program is divided into five major components:

- studio design studies, 45 semester hours
- cultural studies, 12 semester hours
- technology studies, 18 semester hours
- professional studies, 6 semester hours
- electives, 33 semester hours

A wide array of electives in these areas allows students to tailor their graduate studies to their own interests.

First Year

Fall

- ARCH 5110 - Design Studio I Summer 2010 Registration: **ARCH 5110**
- ARCH 5111 - Introduction to Drawing Summer 2010 Registration: **ARCH 5111**
- ARCH 5210 - Introduction to Architecture Summer 2010 Registration: **ARCH 5210**
- ARCH 5310 - Introduction to Building Technology Summer 2010 Registration: **ARCH 5310**

Total: 15 Hours

Spring

- ARCH 5120 - Design Studio II Summer 2010 Registration: **ARCH 5120**
- ARCH 5121 - Design Seminar II Summer 2010 Registration: **ARCH 5121**
- ARCH 5220 - History of Architecture I Summer 2010 Registration: **ARCH 5220**
- ARCH 5320 - Building Construction and Methods Summer 2010 Registration: **ARCH 5320**
- LDAR 6632 - Site Planning Summer 2010 Registration: **L A 6632**
Elective* (3 semester hours)

Total: 18 Hours

Second Year

Fall

- ARCH 5130 - Design Studio III Summer 2010 Registration: **ARCH 5130**
- ARCH 5131 - Design Seminar III Summer 2010 Registration: **ARCH 5131**
- ARCH 5230 - History of Architecture II Summer 2010 Registration: **ARCH 5230**
- ARCH 5240 - Human Factors in Design Summer 2010 Registration: **ARCH 5240**
- ARCH 5330 - Environmental Control Systems I Summer 2010 Registration: **ARCH 5330**
Elective* (3 semester hours)

Total: 18 Hours

Spring

- ARCH 5140 - Design Studio IV Summer 2010 Registration: **ARCH 5140**
- ARCH 5141 - Design Seminar IV Summer 2010 Registration: **ARCH 5141**
- ARCH 5340 - Environmental Control Systems II Summer 2010 Registration: **ARCH 5340**
- ARCH 5350 - Structures I Summer 2010 Registration: **ARCH 5350**
Electives* (6 semester hours)

Total: 18 Hours

Summer

- ARCH 6150 - Comprehensive Design Studio Summer 2010 Registration: **ARCH 6150**
- ARCH 6151 - Comprehensive Design Seminar Summer 2010 Registration: **ARCH 6151**
Electives* (6 semester hours)

Total: 12 Hours

Third Year

Fall

- ARCH 5360 - Structures II *Summer 2010 Registration:* **ARCH 5360**
- ARCH 5410 - Professional Practice *Summer 2010 Registration:* **ARCH 5410**
- ARCH 6170 - Advanced Design Studio *Summer 2010 Registration:* **ARCH 6170**
- ARCH 6171 - Advanced Design Seminar *Summer 2010 Registration:* **ARCH 6171**
Electives* (9 semester hours) or
- ARCH 6950 - Thesis Preparation *Summer 2010 Registration:* **ARCH 6950** and
Electives (3 semester hours)

Total: 18 Hours

Spring

- ARCH 6170 - Advanced Design Studio *Summer 2010 Registration:* **ARCH 6170**
- ARCH 6171 - Advanced Design Seminar *Summer 2010 Registration:* **ARCH 6171**
Electives* (9 semester hours) or
- ARCH 6951 - Architecture Thesis *Summer 2010 Registration:* **ARCH 6951**
Electives* (9 semester hours)

Total: 15 Hours

* Students must take 9 elective semester hours in cultural studies, 9 elective semester hours in professional studies (3 semester hours of which must emphasize the computer), 6 elective semester hours in technology studies and 9 elective semester hours in any architecturally related electives on campus.

Landscape Architecture

Chair: Ann Komara, 303-315-2428

Associate Chair: Lori Catalano, 303-352-3613

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Faculty

Professor:

*Lois A. Brink, MLA, University of Pennsylvania

Associate Professors:

*Austin Allen, PhD, Ohio University

*Ann Komara, MLA, M Arch Hist, University of Virginia

Assistant Professor:

*Joern Langhorst, Diploma, University of Hannover

Senior Instructors:

*Lori Catalano, MLA, University of Pennsylvania

*Charles Chase, MA, University of Colorado

*Anthony R. Mazzeo, MLA, University of Pennsylvania

Instructors:

*John Lanterman, MLA, University of Colorado

*Leila Tolderlund, MLA, University of Colorado

Additional information about faculty in this department is available online [here](#).

*Also teach graduate courses.

The master of landscape architecture (MLA) program examines relationships among the landscape, people and culture, and promotes integrated responses to the design challenges presented through this inquiry. In developing design responses, students not only acknowledge the current practice of landscape architecture, they question, invent, create, test and advance their knowledge to engage the profession and address new challenges. The goal of this program is superior education, scholarly research and meaningful service in the discipline and practice of landscape architecture in a rapidly evolving global context.

The program's "laboratories" are diverse. The "local laboratory," found in the urban, suburban, rural and wilderness landscapes mainly associated with the Mountain, Front Range, High Prairie and Western Slope regions of Colorado is partnered with "site-based laboratories" in urban and rural centers outside of the state. Both contexts present diverse cultural and environmental situations and opportunities, which shape regionally responsive landscape design and planning. Imperatives within the public and private realms of these landscapes fuel the academic and research agenda. The knowledge and experience derived in these settings apply globally to multiple scales and cultures.

Sample topics include explorations of:

- Planning and design leading to the making of healthy, sustainable cities and regenerative communities
- Challenges associated with urban and suburban growth and development
- The role and production of civic infrastructure
- The use and conservation of land and water resources
- Reclamation and reinvention of disturbed or marginalized sites and communities
- The preservation of historic landscapes and their role in cultural identity
- The recognition of cultural values of the region and their expression in built form

Within this context, UC Denver's Department of Landscape Architecture links theory with practice, history with change, technology with invention and designers with their constituents.

Program Objectives

The department has developed four broad program objectives in support of our mission. These objectives describe what students should know and be able to do by the time they graduate and are linked to a series of measurable student learning outcomes. The four specific educational objectives are:

- **Design:** Students will be able to formulate questions and arguments about landscape and its role as a significant cultural medium, and determine processes and practices that lead to transformative actions based on ethical, communicative and content knowledge criteria.
- **Communication and Representation:** Students will be able to speak, write, create and employ appropriate representational media to effectively convey ideas on subject matter contained in the professional curriculum to a variety of audiences.
- **Professional Ethics:** Students will be able to critically evaluate local and global ramifications of social issues, diverse cultures, economic and ecological systems and professional practice as guiding principles for design thinking and implementation.
- **Content Knowledge:** Students will be able to develop a critical understanding, and application, of the histories, theories and practices of landscape architecture and its role in reflecting and shaping culture and environments.

Master of Landscape Architecture

Landscape Architecture MLA

Prerequisites

Students are expected to have achieved a basic level of computer literacy and are required to have their own computer.

Program Requirements

The landscape architecture program offers professional and advanced professional graduate degree curricula leading to the degree master of landscape architecture (MLA).

- The first-professional degree program, requiring a six-semester sequence of course work totaling 90 semester hours, is fully accredited by the Landscape Architecture Accreditation Board (LAAB) and recognized by the Council of Educators in Landscape Architecture (CELA).
- Students completing the college's bachelor of environmental design on the Boulder campus—or completing an undergraduate design degree at another institution—may be given advanced standing in the three-year program. Advanced standing will be based on prior academic accomplishment.
- The advanced professional degree program for qualified students having already earned a first professional degree in landscape architecture (BLA) or related discipline requires 48 semester hours. Advanced standing will be based on prior academic accomplishment.

Course Sequence

(90-semester-hour MLA for students without a professional degree in landscape architecture or related profession)

The curriculum consists of core and elective course work. Core courses are grouped into five components:

	<i>Semester hours</i>
Design Studios	36
History and Theory	12
Site Works	15
Media	6

Ethics	3
<i>Total core courses</i>	72
Electives	18
<i>Total courses</i>	90

Typical 90-semester-hour program of study in required courses for the first professional MLA degree

First Year

Fall

- LDAR 5501 - Landscape Architecture Design Studio 1 Summer 2010
Registration: L A 5501
- LDAR 5510 - Graphic Media in Landscape Architecture Summer 2010
Registration: L A 5510
- LDAR 5521 - History of Landscape Architecture Summer 2010 *Registration: L A 5521*
- LDAR 5572 - Landscape Ecology Summer 2010 *Registration: L A 5572*

Total: 15 Hours

Spring

- LDAR 5502 - Landscape Architecture Design Studio 2 Summer 2010
Registration: L A 5502
- LDAR 5532 - Landform Manipulation Summer 2010 *Registration: L A 5532*
- LDAR 6632 - Site Planning Summer 2010 *Registration: L A 6632*
- LDAR 6641 - Computer Applications in Landscape Architecture Summer 2010
Registration: L A 6641

Total: 15 Hours

Second Year

Fall

- LDAR 5503 - Landscape Architecture Design Studio 3 Summer 2010
Registration: L A 5503
- LDAR 6631 - Landscape Construction Materials and Methods Summer 2010
Registration: L A 6631
- LDAR 6670 - Plants in Design Summer 2010 *Registration: L A 6670*
One Elective. **Semester hours: 3**

Total: 15 Hours

Spring

- LDAR 6604 - Landscape Architecture Design Studio 4 Summer 2010
Registration: L A 6604
- LDAR 6605 - Landscape Architecture Design Studio 5 Summer 2010
Registration: L A 6605
- LDAR 6620 - Landscape Architecture Theory and Criticism Summer 2010
Registration: L A 6620
- LDAR 6721 - Regionalism Summer 2010 *Registration: L A 6721* or alternative
approved by chair
One Elective. **Semester hours: 3**

Total: 15 Hours

Third Year

Fall

- LDAR 6606 - Landscape Architecture Design Studio 6 Summer 2010
Registration: L A 6606
Three Electives. **Semester hours: 9**

Total: 15 Hours

Spring

- LDAR 6607 - Landscape Architecture Design Studio 7 Summer 2010
Registration: L A 6607
- LDAR 6608 - Landscape Architecture Design Studio 8 Summer 2010
Registration: L A 6608
- LDAR 6750 - Professional Practice Summer 2010 *Registration: L A 6750*

Two Electives. **Semester hours:** 6

Total: 15 Hours

Course Sequence

(48-semester-hour MLA for students with a professional degree in landscape architecture or related disciplines)

This route requires 48 semester hours and typically two years of full-time study. The core curriculum consists of two groups:

	<i>Semester Hours</i>
Design	24
History and Theory	12
<i>Total core courses</i>	36
Electives	12
<i>Total courses</i>	48

The department chair will advise each student engaged in this program of study.

Thesis

The graduate thesis in landscape architecture provides an opportunity for students to conduct independent research and design investigations that demonstrate their capacity for rigorous original thinking. The thesis is not required for graduation and not all students are approved to write a thesis. Choosing to pursue a thesis project constitutes a significant commitment to the endeavor; the topic must be chosen with care and thoughtfully and critically developed. Topics can explore material that has been previously unstudied, reinterpret existing material in a new light, or engage research and design practices in ways that strengthen and define the final project. For all theses, the research and products must meet the highest standards of academic excellence and contribute significantly to the discipline and/or profession.

Pursuing a thesis requires students to enroll in a three-course sequence for a maximum

total of 12 semester hours. Students are required to formulate their research proposals two full semesters prior to their enrollment for the 6-semester-hour thesis, typically taken in lieu of the final studio. To proceed through the sequence, students must have completed and passed the research tools and methods class (LA6940) and have secured departmental approval of the thesis proposal. The completion of the thesis is dependent on acceptance of the student's work by the faculty member acting as the thesis chair and by the committee. For work to be accepted it must meet the standards established by the University of Colorado Denver for graduate thesis projects.

Dual Degree Options

Students may enroll in a dual degree program with architecture (MArch), with urban design (MUD) or with urban and regional planning (MURP).

Urban and Regional Planning

Chair: Thomas A. Clark, 303-566-3296

Associate Chair: Pamela Wridt, 303-556-3472

Office: UC Denver Building 330

Telephone: 303-556-3382

Fax: 303-556-3687

Faculty

Professors:

*Louise Chawla, PhD, City University of New York

*Thomas A. Clark, PhD, University of Iowa

*Yuk Lee, PhD, Ohio State University

*Fahriye Hazer Sancar, PhD, Pennsylvania State University

*Willem K.T. Van Vliet, PhD, University of Toronto

Associate Professors:

*Bruce Goldstein, PhD, University of California, Berkeley

*Kevin Krizek, PhD, University of Washington

Raymond McCall Jr., PhD, University of California, Berkeley

*Brian Muller, PhD, University of California, Berkeley

Assistant Professor:

*Jeremy Németh, PhD, Rutgers University

Senior Instructor:

*Pamela Wridt, PhD, City University of New York

Instructor:

John T. Barbour, MURP, University of Colorado

Additional information about faculty in this department is available online here.

*Also teach graduate courses.

Urban and regional planners in the United States and other countries seek to identify social needs and environmental capacities, anticipate change and its impact on communities and shape the pattern of human settlements. Studies in planning focus on making a positive and lasting impact on the lives of people, both in Colorado and around the globe. Every society throughout history has addressed the same fundamental questions, which urban and regional planners have the ability to help answer:

- Where should settlements be located?
- What economic, social and political activities fit what places and spaces?
- By what measures should the performance of cities and regions be judged — equity? efficiency? sustainability? diversity? beauty? utility?
- How do urban places and rural regions connect with the wider spaces and more expansive networks that compose the global space-economy?

The Department of Planning and Design, along with the college's other departments — architecture and landscape architecture — offers a four-year bachelor of environmental design (BEnvd) degree on the CU-Boulder campus. The Department of Planning and Design offers the master of urban and regional planning (MURP) graduate degree on UC Denver's Denver Campus. The MURP program is a fully accredited two-year graduate professional degree program that has maintained this standing over many periodic reviews conducted by the Planning Accreditation Board (PAB). It is a "national" program, drawing students from many states and abroad, and sending its graduates on to serve an equally vast geography.

Objectives

Planning's mission is to identify the root causes of urban and regional problems; to fashion strategies that deploy policies, plans, resources and regulatory approaches to create urban and regional environments suited to human and ecological needs; and to develop methods for evaluating the human and environmental consequences of urban problems, programs, policies and plans.

Through research our faculty members have emerged as national, even global, leaders in addressing some of the most vexing problems of the field, regionally, nationally and internationally. Through study students will gain firsthand experience with real-world challenges while addressing essential theories and state-of-the-art methodologies of the field.

Graduates have the ability to advance to positions of great responsibility in Colorado, across the nation and abroad, in both the public and private sectors, in planning per se, and in related fields. University of Colorado Denver graduates continue to maintain a very high pass rate on the national examination administered for entry into the American Institute of Certified Planners (AICP).

The essential tasks of planning require a high order of ability to:

- Amass and manipulate information
- Represent and model essential phenomena and processes
- Stimulate alternative futures and judge outcomes having diverse dimensions
- Portray and communicate key concepts
- Harness knowledge about all the key actors on the scene in order to elicit their input and to understand their needs

Succinctly put, the education of planners can only begin in the university. It must be a life-long pursuit, and planning programs are becoming increasingly supportive of the continuing education needs of professionals. It is the intellectual excitement of this ongoing pursuit of knowledge that draws many to the field —this, and the opportunity to change the world.

Master of Urban and Regional Planning

Urban and Regional Planning MURP

Overview of the Curriculum

The requirements for the master of urban and regional planning degree fall into three categories:

1. core courses required of all students (27 semester hours)
2. concentration courses (15 semester hours)

3. planning related elective courses (9 semester hours)

Completion of at least 51 semester hours is required for graduation, less transfers and other waivers approved during the first semester of study. Students are encouraged to focus primarily on core courses during their first year of study, except Studio II, which would normally be taken in the second year. Studio II serves as a capstone experience. It is offered every semester.

Beyond the core, the graduate planning program offers three 15-semester-hour concentrations around which students normally organize course selections: economic and community development planning, land use and environmental planning and urban place making. These have been carefully constructed to cover the broad terrain of the profession. Students may also, with an advisor's approval, craft their own unique concentrations. The remaining 9 semester hours of the 51-semester-hour MURP requirement are generally used either to deepen expertise within the concentration field or to enable lateral coverage of allied or distinct fields. Those in the MURP-MPA, MURP-MBA, MURP-JD, MURP-MLA and MURP-MArch dual degree programs will find that the core of each serves as the elective base of the other, leaving few free electives. In no instances may remedial study needed to secure course or program prerequisites apply to the basic degree requirement.

The concentration is meant to insure synergy among courses elected and to lay the foundation for a satisfying and productive career and extended learning on the job. Students should bear in mind that planning is a diverse and evolving profession and that personal interests and career options often change after graduation. Moreover, the mix of courses elected normally allows some breadth in the subsequent definition of one's expertise as new graduates attempt to match their qualifications with employer requirements. Highly focused studies sometimes elevate the marketability of expertise in certain niches in the market for entry level planners, but may limit access to others. Excessive breadth may limit claims of specialized expertise; however, many positions do indeed require competent generalists.

Prerequisites

Students are expected to have achieved a basic level of computer literacy prior to enrollment, and should be familiar with PC or Apple operating systems. Acquiring some prior familiarity with digital visualization techniques is recommended for students who do not have a background in graphic communication. A higher level of proficiency is desirable for those seeking to emphasize the design elements of professional practice, most in evidence in our urban place-making concentration. Some assistance in attaining these skills may be provided in advance of the fall semester. Applicants are annually welcomed from virtually every field of prior study.

Advanced Standing

- Entering students who earned the college's bachelor of environmental design (BEnvd) degree offered on the CU Boulder campus, within five years prior to enrollment, and who have maintained a GPA of at least 3.0, will be admitted to the MURP with advanced standing. Those who graduated still earlier may receive advanced standing at the discretion of the department chair, in consultation with the program faculty.
- These students can earn the MURP degree after completing a minimum of 42 semester hours, which will include the core courses (less any waived due to prior study), an approved concentration and additional electives required to meet the overall credit requirement of 42.
- Students holding the college's BEnvd degree who also have completed, in this study, the undergraduate planning option with a GPA of at least 3.0 (and with a grade of at least 3.0 in ENVD 4320, Planning Studio III) will, in addition, receive a waiver with credit for URPL 6630, Planning Studio I. These students will earn the MURP degree upon completion of a minimum of 36 semester hours, including 21 semester hours of core courses and an additional 15 semester hours in an approved concentration.

Program Requirements

The master of urban and regional planning is the college's accredited degree for students intending to pursue careers in planning and in related fields across a wide spectrum of employment niches both within and outside government.

- With no advanced standing, candidates for the MURP degree must complete a minimum of 51 semester hours of graduate work, including all core courses (27 semester hours), a concentration (15 semester hours minimum) and additional electives (9 semester hours). Concentrations currently include: land use and environmental planning, economic and community development planning and urban place making. Students may also devise their own individual concentrations with an advisor's approval.
- Entering students who have engaged in the study or practice of planning elsewhere may petition the faculty prior or during their initial semester to determine whether any credit will be awarded or degree requirements relaxed as a result of these prior activities. A maximum of 9 semester hours of course work can be applied for advanced standing when such work was pursued at other institutions and meets prescribed level, content and quality thresholds. Graduates of the college's own BEnvd program are eligible for up to 15 semester hours of advanced standing.

Advising

Students should, early in their course of study, secure a program advisor. When that advisor also happens to serve as the concentration coordinator for the specific official

concentration that the student wishes to pursue, then the faculty member should continue in both capacities. If the student wishes to pursue an official or self-devised concentration that is outside the program advisor's prime field of expertise, the student may either consult with the concentration coordinator while retaining the original program advisor, or switch all advising duties to the concentration coordinator. It will be important for the concentration coordinator to know of and approve course work in the context of the concentration itself. Monitoring student involvement in each concentration will also help the faculty to gauge demand, adjust offerings and facilitate activities outside the classroom such as visiting speakers and field trips, and to provide related services such as data bases, software libraries and job placement information. Maintaining an active roster of interested students will also help to sustain contacts among students and with graduates in order to build career networks and engage area professionals.

Internships

Internships are encouraged though they are generally not accepted in meeting concentration requirements. Exceptions must be approved in writing by the concentration coordinator prior to commencement of the internship. No more than three credits of internship work may be applied to the 51-semester-hour degree requirement. Any student wishing to undertake an internship must comply with the procedures established in the internship materials available in the program office.

Independent Study, Thesis and Special Topic Courses

To engage in an independent study course, the student must provide the instructor with an outline of the topic, and a time schedule for its completion. The instructor may require additional supporting materials before agreeing to work with the student. Independent study courses (URPL 6840) and thesis work (URPL 6950 and URPL 6951) may meet concentration requirements, depending on the topic, upon the program advisor's approval. Special topics courses (URPL 6686) will be acceptable in at least one of the categories in the three official concentrations. A completed thesis may substitute for Studio II. Students considering thesis work must secure a thesis advisor drawn from our regular faculty, assemble a committee, secure approval of the thesis proposal before work commences, comply with the official campus form guidelines, make a final presentation, win the approval of the committee and file a bound copy in the Auraria Library.

MURP Program Planning Form (PPF)

Each student should have a copy of the Program Planning Form and use it to keep an up-to-date record of his/her program plan and progress. In addition, a copy of this form should be submitted to the program office and retained in the student's file. If you have any questions about how to use the form, contact your program advisor. No student will

be certified for graduation by the department chair until a fully updated Program Planning Form is placed in the student's official file.

Core Curriculum

The core curriculum is composed of the courses listed below. Students are encouraged to focus primarily on core courses during the first year of study, except Studio II, which would normally be taken in the second year. Studio II serves as a capstone experience and is offered every semester. We aspire to offer a diversity of Studio II options befitting the three official concentrations.

- URPL 5501 - Planning Issues and Processes Summer 2010 Registration: **URP 5501**
- URPL 5510 - Planning Methods I Summer 2010 Registration: **URP 5510**
- URPL 5511 - Planning Methods II Summer 2010 Registration: **URP 5511**
- URPL 5520 - Urban Spatial Analysis Summer 2010 Registration: **URP 5520**
- URPL 5530 - Planning Law Summer 2010 Registration: **URP 5530**
- URPL 6630 - Planning Studio I Summer 2010 Registration: **URP 6630**
- URPL 6631 - Planning Studio II Summer 2010 Registration: **URP 6631**

Areas of Concentration

The concentration is meant to insure synergy among courses elected, and to lay the foundation for a satisfying and productive career and extended learning on the job. Students should bear in mind that planning is a diverse and evolving profession and that personal interests and career options often change after graduation. Moreover, the mix of courses elected normally allows some breadth in the subsequent definition of one's expertise as students attempt to match qualifications with employer requirements.

Highly focused studies will sometimes elevate marketability in certain niches for an entry level planner, but may limit access to others. Excessive breadth may limit claims of specialized expertise, however, many positions do indeed require competent generalists.

The program supports three official concentrations:

Economic and Community Development Planning

This concentration focuses on:

- The marriage of community development and urban economic development. Communities, regions and nations suffering economic insufficiency, stagnation or decline—evidenced in under or unemployment, poverty, diminished opportunity,

environmental decline or fiscal decay—often seek remedies for these shortcomings through strategic economic development planning.

- In this concentration, considerable attention will be given to means for assessing economic impact and apportioning growth's gains across people, places and sectors.

Land Use and Environmental Planning

This concentration focuses on:

- Practices and innovations in land use regulation and public investment
- Analytical methods including transportation modeling, land market evaluation, environmental impact analysis and use of decision support systems
- Administration of policies and plans
- Management of collaborative processes across diverse interest groups
- Planning politics and governance

Urban Place Making

This concentration focuses on responding effectively to the following recent trends and demands on the profession:

- Stronger residential real estate markets in urban centers, especially in the Front Range communities
- Planning for mixed-use and high density neighborhoods
- Necessity for understanding of urban form and the interactions between uses, facilities and services within complex urban contexts
- Higher levels of public participation
- Wider scope of in design review and increased level of discretion that necessitates design creativity in review processes.

A set of foundation courses is identified in each concentration, plus additional supporting electives.

Course Sequence

Applicants may be admitted for both the fall and spring semesters. The schedule below posits a fall onset. If study is commenced in the spring the student may not encounter Planning Methods I until the following fall, so Planning Methods would be deferred to the third semester of study since we now encourage students to take these in the numeric sequence. Planning Issues and Processes is currently offered only in the fall and is the usual “door of entry” to the program. It is possible however that we will move to offer sections of this course during both semesters. Students may take more than 12 semester hours of study and so may progress faster than the template below would indicate. Generally taking more than 15 hours is ill-advised. Under some

circumstances—and on a space-available basis—Studio I may be taken during the first semester of study. Both Studio I and II are offered every semester, and additional sections will be added as demand warrants to preserve an acceptable class size. We offer numerous courses beyond the core, and also designate additional options in other departments, elsewhere within our college and across the campus.

First Year

Fall

- URPL 5501 - Planning Issues and Processes *Summer 2010 Registration: URP 5501*
- URPL 5510 - Planning Methods I *Summer 2010 Registration: URP 5510*
- URPL 5530 - Planning Law *Summer 2010 Registration: URP 5530*
Elective course (3 semester hours)

Total: 12 Hours

Spring

- URPL 5511 - Planning Methods II *Summer 2010 Registration: URP 5511*
- URPL 5520 - Urban Spatial Analysis *Summer 2010 Registration: URP 5520*
- URPL 6630 - Planning Studio I *Summer 2010 Registration: URP 6630 **

Total: 12 Hours

Second Year

Fall

Concentration Courses (9 semester hours)
Electives (6 semester hours)

Total: 12 Hours

Spring

- URPL 6631 - Planning Studio II *Summer 2010 Registration: URP 6631 **
Concentration Courses (6 semester hours)

Total: 12 Hours

* Both studios are offered in the fall and spring semesters.

Dual Degree Options

Students may enroll in dual degree programs with public administration (MURP+MPA), law (MURP+JD) and business (MURP+MBA). In addition, dual degree options are also available combining the MURP with landscape architecture (MLA) and architecture (MArch). A new dual degree combining planning and public health (MURP+MPH) is under development combining strengths on both the Denver and Anschutz Medical Campuses of UC Denver. The dual degree with law combines study on the Denver Campus and in the CU Boulder Law School. Interested students should consult the college Web site for additional information regarding these options. Overall, applicants to any dual option must apply to and gain separate admission to each degree program. Once admitted the student can graduate from neither until the work is completed for both degrees. Synergies enable a significant reduction in both the time and credit required to complete these pairings than would be needed if each were separately pursued. If the student should opt to drop either member of the dual set, he/she must then fulfill the stand-alone requirements of the remaining degree.

Certificate Programs

The college offers official certificate programs in design build, geospatial information science and historic preservation. Consult our Web site for details on each of these. The first is more attuned to the requirements of architectural students, whereas the latter two could suffice—with the approval of the department chair—as a basis for a concentration satisfying the MURP concentration requirement. Some students may wish to augment their 51-semester-hour MURP with additional course work in order to complete any one of these certificate programs.

College of Arts & Media

Dean: David Dynak

Associate Dean: Joann Brennan

Assistant Dean: Clark Strickland

Contact

Dean's Office

Office of Advising and Student Services

Physical Location:

Arts Building, Suite 177
1150 10th Street
303-556-2279
Fax: 303-556-2335

Mailing Address:

College of Arts & Media
Campus Box 162
P.O. Box 173364
Denver, CO 80217-3364

"Art Changing Lives"

Mission: The College of Arts & Media (CAM) exists at the intersection of art, technology and commerce, and as such, faculty and students use powerful art making, expansive teaching/learning and strategic service to connect deeply with the arts disciplines and the culture industry—as these currently exist and as they might become.

At the College of Arts & Media, we view the arts as central in enabling people to express and know themselves and understand the world around them. We attract students from the Denver area as well as from across the country and around the world. Our students pursue individualized goals, such as seeking a first degree, making a career change or enriching personal growth. Our faculty bring real-world professional experience and artistic excellence to the classroom. Through connections and workshops with arts professionals and internships, CAM students are able to explore their chosen professions. CAM develops and maintains cooperative relationships with civic groups, regional arts agencies, museums, galleries, performance venues, public schools, community colleges, professional societies and the business community. The College of Arts & Media is developing an international presence.

College Goals

1. The College of Arts & Media instills, inspires and models creativity founded upon the accumulated knowledge of human civilization.
2. The college operates at the intersection of art, technology and commerce.

3. The college develops artists committed to social responsibility and citizens who will advocate for the role of the artist in society.
4. The college is a center of cross-cultural exchange and understanding.
5. The college enriches the quality of life in the larger community, fosters community partnerships and encourages mentorship.
6. The college integrates interdisciplinary modes of learning and creating.
7. The college adapts to meet future needs of diverse student constituencies.

College Values

Experimentation and Innovation
Excellence and Professionalism
Community
Creative Research and Scholarship
Leadership
Entrepreneurship
Technological Innovation
Critical Thinking
Diversity, Accessibility and Equity
Intellectual Freedom and Artistic Integrity
Sustainability
Civic Engagement
Experiential Learning
Social Responsibility

Programs

The College of Arts & Media (CAM) offers MS, BS, BFA and BA degrees in a wide range of arts disciplines in three departments: Theatre, Film and Video Production (TFVP), Visual Arts (VA) and Music and Entertainment Industry Studies (MEIS). Our vision, mission and values guide our teaching and learning, creative research and scholarly discovery, as well as our engagement with the university, the creative industries and professional fields.

Faculty in CAM design their courses with explicit learning outcomes that define knowledge (what students will know), skills (what students will be able to do) and dispositions (how students will change). Sequentially-designed courses enable CAM graduates to engage in art-making of consequence, creative innovations, integration of new technologies and building connections to creative industries. We infuse real-world knowledge in the classroom and create opportunities for students to develop an understanding of how their own art-making and scholarly pursuits impact others. Working sessions with arts professionals, lectures and workshops by visiting artists, internships with entertainment companies and other challenging opportunities let students connect their learning to careers in the creative industries. CAM has also established cooperative relationships with civic groups, regional arts agencies,

museums, galleries, performance venues, public schools and community colleges, professional societies, and the business community.

Application Deadlines

Music and Entertainment Industry Studies Department:

Undergraduate: April 1 (fall admittance only)

Graduate: (Master of Science in Recording Arts): February 15th (Fall admittance only)

Visual Arts Department, Digital Design Program only:

Fall: April 1

Spring: November 1

Visual Arts Department, Digital Animation Program only:

Spring- application deadline to be announced in early spring

Theatre, Film and Video Production Department, as well as other programs in Visual Arts:

Priority Deadlines

Fall—April 1

Spring—October 1

Summer—March 1

Facilities

CAM is committed to both traditional and new technology areas and celebrates the dynamic synergy between the two. CAM students can take advantage of superb studios, laboratories, equipment, galleries and performance spaces on campus. Students across all three CAM departments create work in computer labs where equipment and software are upgraded regularly. Most CAM studios are open for use by enrolled CAM majors, minors and graduate students when classes are not scheduled.

Music Facilities

- Five recording studios with analog, digital and hybrid technology
- Pro Tools in every studio
- Computer lab for music composition and recording arts

- Three sound reinforcement systems
- Mastering studio
- Audio forensics station
- National Center for Media Forensics
- Teaching and practice studios for solo and ensemble performers

Visual Arts Facilities

- Photography labs with black-and-white, non-silver, digital imaging and color capabilities, and large-format color and black and white printing
- Sculpture lab with wood shop and metal shops and a foundry
- Drawing and painting studios with natural light
- Digital animation center computer labs and motion capture studio
- Printmaking and visual arts foundations studios
- Auraria Visual Resources Center digital collection of contemporary and historical images, music and video
- Emmanuel Gallery, a tri-institutional arts space for student and faculty exhibitions and special exhibition events
- Partnership Gallery in the Downtown Denver Courtyard by Marriott for rotating exhibitions of faculty and student work

Theatre and Film Facilities

- Two "black box" production studios
- Scene shop and paint frame
- Costume shop
- Full cage of video production equipment, including cameras, lighting, sound and grip
- Computer labs equipped with digital editing facilities
- Starz Denver FilmCenter, a multi-screen complex on campus with year-round screenings and programs and location of the annual Starz Denver Film Festival

King Academic and Performing Arts Center

- 520-seat Concert Hall
- 350-seat Eugenia Rawls Courtyard Theatre
- 200-seat Recital Hall
- Fully wheelchair accessible production facilities, including catwalks

Scholarship Opportunities

The university and CAM provide access to a variety of scholarships, studio and lab work opportunities and other financial support for students. Students are encouraged to review scholarship opportunities provided by CAM and the university on the CAM Web site and through the university's Scholarship/Resource Office (303-352-3608; www.ucdenver.edu/scholarships).

Undergraduate Programs

Theatre, Film and Video Production

Bachelor of Arts (BA) in Theatre, Film and Television

Bachelor of Fine Arts (BFA) in Theatre, Film and Television

with emphases in:

- Writing/Directing
- Film & Theatre Production

Minor

Theatre, Film and Television minor

Music and Entertainment Industry Studies

Bachelor of Science (BS) in Music

Performance Emphasis

Recording Arts emphasis

Music Business emphasis

Music Industry Studies emphasis, with focus areas in Music Technology and Music Business

Minors

General Musicianship

Music Industry Studies

Visual Arts

Bachelor of Arts (BA) in Fine Arts

[Art History emphasis](#)

[Drawing emphasis](#)

[Painting emphasis](#)

[Photography emphasis](#)

[Sculpture emphasis](#)

Bachelor of Fine Arts (BFA) in Fine Arts

3D Graphics and Animation emphasis

Digital Design emphasis

Drawing emphasis

Painting emphasis

Photography emphasis

Sculpture emphasis

Transmedia emphasis

Minors

[Art History Minor](#)

[Digital Design Minor](#)

[Studio Photography Minor](#)

[Sculpture Minor](#)

[Studio Arts](#)

Declaring a Major/Minor

All undergraduate degrees offered through the College of Arts & Media comprise 120 semester hours. Students must choose a major in order to graduate. Minors are optional.

Some majors require students to select a degree plan (BA, BS or BFA) and/or an emphasis (see above links). More about specific majors and emphases are also available on the CAM Web site, under "departments."

Students may choose to pursue a double degree, double major, double emphasis or minor. Each of these options may require in the more than 120 semester hours to graduate. Please consult a CAM advisor for additional information.

Minors

Departments in the college have developed a variety of minors. A minimum of 12 semester hours in residence is required for each. Please click the above links for specific minor requirements.

Students are not required to have a minor to graduate. Students may choose to declare a minor in CAM or through another college/school in the university. Students wishing to declare a minor in CAM should consult with a CAM advisor for details. More than 120 semester hours may be required to complete both a major and minor.

Double Emphases

Students may graduate with more than one emphasis in their degrees and majors by completing all requirements for each emphasis (e.g., BFA in fine arts with emphases in sculpture and photography). Completing these requirements will likely require more than 120 semester hours. Double emphases apply only to students completing two program requirements, both in the same CAM department.

Double Majors

Students may graduate with more than one major in CAM by completing all requirements for each major (e.g., a BA with a major in fine arts, art history emphasis AND a second major in theatre, film and television). Completing these requirements will likely require more than 120 semester hours. Double majors apply to students completing two program areas in two different CAM departments.

Double Degrees

Students may earn two degrees in the College of Arts & Media (e.g., BFA in fine arts and BA in theatre, film and television) or from two different schools or colleges in the university (e.g., BS in music and a BS in physics) simultaneously by fulfilling all requirements for both degrees. Students must complete a minimum of 150 semester hours applied toward the two degrees.

Second Degrees

Students who have been awarded a bachelor's degree may be granted a second bachelor's degree provided that (a) all general requirements for that degree have been met; (b) the degree plan for the second bachelor's degree is different from the major for the first; and (c) the college and major department residence requirements are satisfied. A second degree from the college requires a minimum of 30 additional semester hours of credit.

General Degree Requirements

The following requirements apply to all undergraduates earning a degree in CAM. Please refer to the specific department and emphasis pages in this catalog for additional information.

- Minimum of 120 semester hours passed
- Fulfillment of major degree requirements
- Fulfillment of both intellectual competencies and knowledge areas in the Core (general education)
- For BA and BFA degrees: a minimum of 45 semester hours of upper division (3000/4000 level) course work passed
- A cumulative GPA of 2.0 in all University of Colorado course work
- A minimum of C/2.0 for each course applied towards the major
- A minimum of 30 semester hours of resident credit

Requirements for Undergraduate Admission to the College of Arts & Media

A student wishing to matriculate in the College of Arts & Media (CAM) must be admitted at three levels: (1) as a student of UC Denver, (2) as a student in CAM and (3) as a student in a CAM major, degree and emphasis. Acceptance to majors, degrees and emphases within CAM is highly selective based upon a variety of factors, which may include:

- Careful evaluation of secondary school records, which may include recommendations from guidance counselors, advisors, teachers and professionals
- Scores on standardized tests
- Creative review in the form of an audition, portfolio review or other evaluation

Formal acceptance into specific degree programs may be contingent on successful academic and creative work, assessed following completion of foundation courses in the major.

Overview

- Students may enter the college as an undecided CAM student or may indicate an intended area of study.

- CAM recommends that undeclared students seeking entry into areas that do not identify a review process for entry into the major identify their areas of study quickly, as programs are designed sequentially and many courses are offered fall or spring only. Fall starts in the major are recommended.
- Students may be accepted on a provisional basis for specific programs, with full acceptance pending satisfactory completion of foundation course work and successful review by departmental faculty.
- The application is based on two parts: academic and creative/artistic.
 1. The UC Denver Office of Admissions evaluates the academic component.
 2. In addition, undergraduate programs at CAM may require an incoming artistic/creative assessment such as an audition, portfolio review or an entrance interview.
- Artistic/creative review is conducted by the appropriate department or program (see specific programs for details). Both the academic application and the artistic/creative review are evaluated as a whole to determine admission and must be completed before an admissions decision can be made. Creative material, if required, should be mailed directly to the specific department or program. No admissions decision will be made until the candidate's file is complete and the department has forwarded artistic/creative review results to the Office of Admissions.
- Some departments/emphases require sophomore reviews prior to students declaring specific emphases. Please read through this page of the catalog for additional information.

New freshmen and new transfers must meet the university entrance requirements as outlined in the Information for Undergraduate Students section of the catalog, in addition to appropriate artistic reviews/assessments, outlined in the CAM pages of this catalog.

Admission to the MEIS Department

Acceptance into the UC Denver Department of Music and Entertainment Industry Studies (MEIS) is on a competitive basis with specific entrance evaluation requirements. Admission to the music major is competitive for both freshmen and transfer students. All applicants will be placed in an enrollment pool, and admissions decisions will be based upon several factors, including an indexed composite score of cumulative GPA, music aptitude exam score and an audition (if applicable). Application materials must be received by the deadline—no late applications will be considered.

Prospective students should refer to the MEIS Web site for current requirements, deadlines and procedures.

Notes:

- Please be aware that neither the university nor CAM returns creative materials and will not assume any liability or responsibility for original materials submitted by an applicant that are lost or damaged while in its possession.

- Candidates are urged to complete and file their applications as soon as possible. Applicants will be notified promptly if additional information is required. No admission decision will be made without complete information.
- Courses reach maximum enrollment quickly; students are encouraged to apply early.

Admission into the Visual Arts Department Digital Design Emphasis

Admission into the BFA digital design emphasis or the digital design minor is competitive. Students complete initial required courses and submit a portfolio for faculty review, either as UC Denver students or as transfer students prior to enrolling at the university. This review process occurs April 1 or November 1 (or on the following business day if the deadline falls on a weekend or holiday) during a student's sophomore year after a student has met the following eligibility criteria:

- Current University of Colorado Denver students:
 - You are seeking admission to the digital design program
 - You have completed, or are in the process of completing, the following visual arts foundation courses: FINE 1100, FINE 1400, FINE 2015, FINE 2405 and FINE 2415 (FINE 2405 and FINE 2415 should be taken after a student's freshman year and are offered only in fall semester). A cumulative fine arts GPA of 2.75
- Transfer students:
 - You are a transfer student (not yet enrolled at UC Denver) seeking admission to the digital design program
 - You have completed, and are transferring, a minimum of 24 transferable credit hours from a previous, accredited institution.
 - You have completed, or are in the process of completing, the equivalents of the following visual arts foundation courses: FINE 1100, FINE 1400, FINE 2015, FINE 2405 and FINE 2415.
 - You have a cumulative Fine Arts GPA of 2.75

Students who are applying for entrance into the digital design emphasis, or minor, are required to submit a portfolio that consists of (1) a written statement; (2) a designed portfolio on CD-ROM or DVD; and (3) unofficial transcript(s) from all previous post-secondary education institutions with the understanding that digital design is a fall start program. Upon acceptance you will earn access to upper division (3000/4000 level) digital design classes.

Those applying to the minor (and not the major) are not required to complete FINE 1100, FINE 1400 or FINE 2015 (or their college-level equivalents), but they must show equivalent studio work in their application portfolios.

Please see <http://cam.ucdenver.edu/va/digitaldesign.htm> for program and portfolio information, or contact the Digital Design Area Head Brian Delevie at brian.delevie@ucdenver.edu.

Admission into the Visual Arts Department 3D Graphics and Animation Emphasis

Admission into the 3D graphics and animation emphasis ("Digital Animation Center" or "DAC") is competitive. Students must first enroll at UC Denver and complete

FINE 1810 in the fall semester and FINE 1820 in the spring semester. After completing FINE 1820, applicants submit a visual arts portfolio for faculty review. An application essay and a 2.8 cumulative GPA are also required.

Selection for entrance into the BFA program with an emphasis in 3D animation occurs at the end of year one of the program and is a competitive process (by faculty review). Requirements include:

1. Submission by the candidate of a "demo reel" on DVD or CD. The reel must include original works from either FINE 1810 or FINE 1820 (preferably both), as well as representative works created in other visual arts courses completed during year one of the program.
2. A "breakdown sheet" which describes the work included on the submission reel, and, if collaborative in nature, what aspect of the work shown was created by the applicant.
3. A one page, single-spaced, written statement regarding your aspirations as a member of the DAC Core Cadre and the Computer Graphics (CG) community as a whole.
4. Cumulative visual arts GPA of 2.75.

The demo reel may be a DVD or it can be submitted as a movie file (.mov) on DVD or CD (Quicktime, H.264, 720 x 404 minimum frame size, 16:9 aspect ratio). Still work should be a component of the reel and should be on screen for at least 3 seconds but not more than 10 seconds. Name and contact information must appear at the beginning and end of the reel.

The students' submission package must be turned in to the DAC faculty member, Howard Cook, no later than the first Friday after the spring semester has ended. You will be notified by e-mail and letter on or before the first Monday of June of the application year. Upon acceptance, you will earn access to upper-division DAC classes.

Please see the CAM Web site for program and portfolio information, or contact faculty member Howard Cook in the Digital Animation Center.

Admission to the Visual Arts Department Transmedia Emphasis

Students must apply for admission to the transmedia emphasis. For more information, please contact College of Arts & Media Advising at CAMadvising@ucdenver.edu.

Additional Program-Specific Admission Requirements

Music Major Entrance and Sophomore Review Requirements

All entering freshmen and transfer students applying for admission to the BS in music must submit additional materials. Students wishing to pursue an audition-based program (i.e., performance, music business or recording arts) must successfully complete a music audition at the time of application to the university. Students applying for the music industry studies program must complete an audition deferment form, which allows students to postpone their auditions until completing foundation course work in performance and musicianship. Audition information and the audition deferment form are available on the [music department Web site](#).

The [BS in Music](#) with an emphasis in recording arts or music industry studies (technology focus) permits provisional program acceptance only, pending completion of sophomore-level review, including foundation course work, entrance examination, formal application and acceptance by departmental faculty. Students will not be allowed to take upper-division audio production courses unless they have been formally accepted into the program/focus. Please visit the [music department Web site](#) or contact CAMadvising@ucdenver.edu for more information.

Students who wish to pursue the BS in music with an emphasis in performance must pass a sophomore proficiency recital on their primary instruments prior to being able to continue the program and taking advanced level music courses.

Theatre, Film and Television BFA

All entering freshmen and transfer students planning to pursue the BFA in theatre, film and television are initially admitted under the BA program. Those desiring to pursue the BFA may then apply in the spring semester for admission the following fall, providing they have completed at least one year of college course work (including 12 semester hours at UC Denver and specific major requirements). Please see the [Theatre, Film and Television BFA page](#) in this catalog for more information.

Intra-University Transfer

Students who want to transfer to the College of Arts & Media from another college or school within the university must formally apply to the College of Arts & Media and pass

appropriate reviews/assessments as outlined on this page of the catalog. To be considered for admission, students must have a minimum 2.0 cumulative University of Colorado GPA.

Transfer of Major within the College of Arts & Media

Undergraduate students who wish to transfer from one department to another within the college must currently be in good academic standing, pass appropriate reviews/assessments as outlined on this page of the catalog and notify the CAM Advising Office by submitting a change of major form.

Undergraduate Academic Advising

Office of Advising and Student Services

Location: Arts Building, Suite 177

Telephone: 303-556-2279

Fax: 303-556-2335

E-mail: CAMadvising@ucdenver.edu

Web site: <http://cam.ucdenver.edu/advising>

The college's Office of Advising and Student Services is the main information center for CAM. Advisors assist students in tracking their academic progress, discussing remaining requirements and course sequencing, and it offers appropriate referrals to faculty and other university programs (e.g., Career Center). The office also coordinates student notifications (e.g., Dean's List, probation/suspension, scholarship opportunities) and college academic events (e.g., Open House, commencement, orientation) as well as maintaining advising-related materials. Academic advising is a service provided to students; students are ultimately responsible for their academic progress.

Academic advising may be mandated or suggested prior to registration depending on the student's status. All new freshmen and transfer students are required to meet with an academic advisor prior to registering for their first semesters of courses. Continuing students are encouraged to meet with an advisor annually and may be periodically required to meet with an advisor prior to registration. Continuing students who have a registration block placed on their accounts by the advising office will be notified in advance (via e-mail to the university-issued e-mail address, per university policy). Advising-related information can be found at the [CAM Web site](#).

New Freshmen

All new freshmen are encouraged to attend new student orientation where they will:

- Learn about the university

- Attend the CAM session to discuss academic programs and services and career opportunities in the creative industries

Information about new student orientation will be mailed to students and is available by calling 303-352-3520. Students are encouraged to register for the earliest orientation they are able to attend.

Second-Semester Freshmen and Undecided Students

CAM freshmen with declared majors and undeclared arts and media students are assigned to the Academic Success and Advising Center. ASAC introduces students to university and college policies and explains core and basic degree requirements. These students are required to meet with an advisor prior to registering each semester. Students are encouraged to bring sample schedules to their advising appointments.

Academic Success and Advising Center

Location: North Classroom, Suite 2024

Telephone: 303-352-3520

E-mail: ASAC@ucdenver.edu

Web site: www.ucdenver.edu/life/services/asac/Pages/default.aspx

New Transfers

New transfers need to follow a two-step process:

1. The Office of Admissions will evaluate the student's prior transcript(s) and determine an initial set of courses to be transferred. Admissions will mail a copy of this transfer evaluation to the student.
2. CAM advisors and faculty determine how these courses fit into the student's degree plan, course by course. Students should set up an appointment with a CAM advisor to complete this process by calling 303-556-2279. Students may be referred to the faculty for review of courses in the major.

If certain courses are not initially accepted by the Office of Admissions, the student and advisor can discuss the petition process for accepting these courses. If the student's petition is approved, the advising office will request that the Office of Admissions accept the course(s) in transfer.

New transfers are required to receive individual academic advising to become eligible to register for courses their first semester.

Continuing Students

Students with a declared major who have completed at least 30 semester hours are assigned to the college's Office of Advising and Student Services. Please see above for contact information and location. Students are encouraged to meet with an advisor at

least once per year. We recommend bringing a sample schedule to their advising appointment.

Periodically, students may have a block placed on their registration by the Office of Advising and Student Services, requiring them to meet with a CAM advisor prior to registering. Students will be notified via e-mail to their university-issued e-mail addresses, per university policy, if a registration block has been placed by the advising office. As other offices may also place a block on a student's registration, students are encouraged to resolve any registration blocks through the appropriate office prior to their registration date/time.

Students approaching their junior and senior years are encouraged to meet with a faculty mentor in their area of study to discuss internships, career/employment opportunities, graduate school, professional organizations and other post graduation information. Faculty contact information is available on the [CAM Web site](#). Students also may contact the Office of Advising and Student Services for suggested faculty referrals by interest.

CAM Undergraduate Academic Policies

Please see the [Registration and Records](#) and the [University Policies](#) pages of this catalog for academic policies that apply to all undergraduate students at the university. The policies that follow apply specifically to undergraduates in the College of Arts & Media.

Dean's List

UC Denver will use a fixed criterion across all colleges for determining eligibility for the Dean's List. This policy applies to undergraduate students.

For fall and spring semesters, students must successfully complete nine (9) hours in the semester upon which to determine grade point. These courses can be both within and outside of the college. Pooled courses will not be included in the calculation nor will they count toward the 9 hours required for consideration. The GPA set for inclusion in the Dean's List is 3.75.

In the summer semester, students must complete six (6) hours as a basis for inclusion in the Dean's List. Course inclusion will be the same as in fall and spring semesters. The GPA for Dean's List in summer is also 3.75.

Colleges will collect data each semester on the number of students making the Dean's List and report the number and percentages of total students in the college.

Scholarships tied to Dean's Lists in individual colleges may have additional requirements.

The Registrar's Office will calculate the semester GPAs for all students two weeks prior to the due date for semester grades. Those GPAs will be the basis for determining the Dean's List. Incompletes will not be considered in the calculation of minimum number of hours. The Dean's List will not be recalculated to include completed incompletes.

Graduating with Academic Honors

Academic honors are awarded at the time of graduation, based upon cumulative University of Colorado undergraduate GPA. To be eligible for honors, a student must have completed a minimum of 30 semester hours at the University of Colorado (on any CU campus). A cumulative CU GPA of 3.65-3.749 earns *cum laude*, a 3.75-3.849 earns *magna cum laude* and 3.85 earns the *summa cum laude* honors designations on a degree.

Good Academic Standing

Students at the university are expected to maintain progress in their degree program, as defined by being in "good academic standing." Good academic standing requires a minimal cumulative GPA of 2.0 on all University of Colorado course work.

Academic Probation and Academic Suspension

Academic Probation

- Academic probation is a warning to students that they are not progressing toward completion of their degree in a satisfactory manner.
- Students are placed on academic probation when their cumulative CU GPA falls below a 2.0 at the end of any academic term.
- Students are informed in writing (via university-assigned e-mail and postal letter) of their academic probation status.
- Students on Academic Probation will be required to complete the Academic Success Plan during their first semester on Academic Probation.
- Students will be required to schedule an appointment and meet with their academic advisor to discuss the completed Academic Success Plan before they will be allowed to register for the subsequent term.
- Students on Academic Probation will be required to schedule an appointment and meet with their academic advisor every semester that they are on Academic Probation before they will be allowed to register.
- Academic Probation requires that students achieve a minimum 2.3 semester GPA each subsequent term until their cumulative CU GPA is at least a 2.0 to return to good academic standing.

- Students must achieve a minimum 2.0 cumulative CU GPA to meet graduation requirements.
- Students who fail to earn the 2.3 semester GPA during any semester of Academic Probation will be placed on Restricted Academic Probation.
- Students have five semesters or 30 credits (whichever happens sooner) to raise their cumulative GPA to above a 2.0, or they will be placed on Academic Suspension.
- Once a student has raised his/her cumulative CU GPA to at least a 2.0, s/he will be removed from Academic Probation and notified via university-assigned e-mail that s/he is in Academic Good Standing.

Restricted Academic Probation

- Students who fail to earn the 2.3 semester GPA during any semester of Academic Probation will be placed on Restricted Academic Probation.
- Students are informed in writing (via university-assigned e-mail and postal letter) of Restricted Academic Probation status.
- Students on Restricted Academic Probation will be allowed to enroll for a maximum of 6 credits/2 classes per semester (whichever is more). A course and its attached lab are considered to be one course in this case.
- Students on Restricted Academic Probation will be required to schedule an appointment and meet with their academic advisor in order to register for courses.
- Students on Restricted Academic Probation will not be able to register online; they will need to register for courses using a Schedule Adjustment Form, which must be submitted to the Service Center (North Classroom, Room 1003) for processing.
- Restricted Academic Probation requires that students achieve a minimum 2.3 semester GPA each subsequent term until their cumulative CU GPA is at least a 2.0. Students must achieve a minimum 2.0 cumulative CU GPA to return to good academic standing and to meet graduation requirements.
- Students on Restricted Academic Probation who do not meet the 2.3 minimum semester GPA will be placed on Academic Suspension.
- Students who fail to raise their cumulative GPA to 2.0 or above in five semesters or 30 credit hours on Academic Probation and Restricted Academic Probation will be placed on Academic Suspension.

Academic Suspension

- Students on Restricted Academic Probation who do not meet the 2.3 minimum semester GPA will be placed on Academic Suspension.
- Students are informed in writing via certified/registered letter of their Academic Suspension status.

- The minimum duration of Academic Suspension is for a period of one year (three semesters, including summer term). Students placed on Academic Suspension will be unable to take courses from any CU campus during this time.
- Should a student be placed on Academic Suspension while registered for the next semester, s/he will be administratively dropped from their courses by the university.
- A student's Academic Suspension status is permanently indicated on his/her official University of Colorado transcript.
- During the one-year Academic Suspension period, students who wish to return to the University should consider one (or both) of the following actions:
 - Attend another regionally accredited college/university.
 - Students who choose to attend another institution while on Academic Suspension can take as many or as few credits as they choose, but must earn a 2.75 cumulative GPA in all transferable course work.
 - Students should consult their academic advisor to discuss appropriate course work.
 - Use the time off to directly address and resolve the factors that contributed to the academic difficulty.
- After the one-year suspension period has elapsed, students must petition the appellate committee (of the school or college they wish to enter) for readmission and meet and document at least one of the following criteria:
 - Attendance at another regionally accredited college/university where they earned a minimum cumulative GPA of 2.75 in transferable credit.
 - Explanation of their previous academic difficulty, demonstration of what has changed, and how this will allow them to now achieve and maintain Good Academic Standing (including a semester GPA of at least 2.3 and a cumulative GPA of at least a 2.0). ? Students who choose to petition their college's appellate committee for readmission must submit their petitions by the following deadlines:
 - For fall admission: June 1
 - For spring admission: December 1
 - For Maymester/summer admission: April 1
- If a student is granted readmission and his/her CU GPA is below a 2.0, s/he will be readmitted on Restricted Academic Probation. These students must meet the condition of Restricted Academic Probation every semester until their cumulative CU GPA is at least a 2.0.

Second Academic Suspension

- Students who are readmitted after their first Academic Suspension and fail to meet the conditions of Restricted Academic Probation for a second time are placed on a second suspension for an indefinite period of time.
- Students on a second suspension may be readmitted to the University only by petition to the college's appellate committee.

- Students will not be considered for readmission unless they have demonstrated significant improvement in academic performance at the college/university level, and/or considerable and positive change in personal circumstances.

Leaves of Absence/Returning Students

Students who have not attended the university for more than one calendar year should refer to the "[Readmission Requirements for Former Students](#)" in the Information for Undergraduate Students chapter of this catalog. Due to the dynamic nature of the CAM programs, returning students who have not attended in more than five years must complete their programs based on the current curriculum and policies. For assistance with your specific situation, please consult a CAM advisor.

Independent Study

The College of Arts & Media has very specific policies concerning eligibility and registration for independent studies. Students should consult the CAM advisor or their faculty mentors for specific eligibility criteria and registration procedures. The number of credits to be earned for an independent study project shall be determined at the time of registration. The college and academic programs have specific policies on how independent study credits may apply to the bachelor's degree. A maximum of 12 semester hours of independent study may apply toward the bachelor's degree and cannot be used to replace a required course. Please see the [CAM Web site](#) for additional information and appropriate paperwork. Independent study should be added by Census Date (add/drop deadline) as noted on the academic calendar.

Internships

Internships provide important educational and professional experience. A maximum of 3 hours of internship credit per semester and 9 hours overall is allowed. Internship credit may not be awarded retroactively nor after the student begins internship hours. Students should consult with an academic advisor about the placement of internship credit in their degree plans.

The college requires that students have the following to qualify for an internship:

- 60 semester hours
- Minimum of a 2.75 cumulative University of Colorado GPA

Specific academic programs may have additional eligibility requirements for an internship. Students seeking an internship should consult with the CAM Office of Advising and Student Services, the Experiential Learning Center and their faculty

mentors. Additional information is available at the [CAM Web site](#). Internships should be added by Census Date (add/drop deadline) as noted on the academic calendar. Occasionally opportunities arise mid-semester; students may be required to petition the advising office and/or the associate dean for approval to add an internship after the add/drop deadline.

Graduate Programs

The Department of Music and Entertainment Industry Studies (MEIS) offers a master of science in recording arts (MSRA) with emphases in media forensics and recording arts. For details on program requirements, admissions and policies, please see the [MSRA page](#) in this catalog.

CAM General Academic Policies

Please see the [Registration and Records](#) and the [University Policies](#) pages of this catalog for academic policies that apply to all students at the university. The policies that follow apply specifically to both undergraduate and graduate students in the College of Arts & Media.

Incompletes

The College of Arts & Media has very strict guidelines on granting incomplete grades. They include but are not limited to the following:

- Reason for incomplete must be a verified, compelling and extraordinary circumstance beyond student's control that made completion of the course impossible
- The majority of course requirements (75 percent) must have been completed with a passing grade to be eligible for incomplete (C/2.0 for major/minor courses and select courses in the core; D-/0.7 for most core and general elective courses)
- CAM course completion agreement must be signed by both the instructor and student, with final approval by the associate dean
- All course work must be completed within one calendar year of the end of the original course: NO EXCEPTIONS
- Requests for a retroactive change from a letter grade to an incomplete will not be considered

The student is responsible for requesting an incomplete grade and submitting all of the appropriate paperwork and obtaining approvals. Please visit the [CAM Web site](#) for additional information.

Curricular Changes and Course Substitutions

Undergraduate students are required to complete the core and major requirements as outlined when they declared their degrees, majors and emphases and are admitted to the program. Similarly, graduate students fall under the degree requirements that were in place when they first enrolled in their programs. If a program revises its curriculum, students have the option of following their original degree requirements. Occasionally, courses under the original requirements may no longer be taught or may not be available for a set duration. In this case, the department will approve course substitutions.

Course substitutions in the major must be approved by the designated faculty member in the specific program area, the department chair and possibly by the associate dean. Course substitutions in the core must be approved by the Academic Policies Committee through the petition process (see the [CAM Web site](#) for additional information).

Students who switch majors (e.g., BS in music to BA in theatre, film and television) are required to complete the curriculum in place when they declare their new degree or major. Students who switch degrees within the same major (e.g., BFA in fine arts to BA in fine arts) will be required to complete the curriculum that is in place when they declare their new degree. Students who switch emphases within a degree and major may use either the curriculum that was in place when they were accepted into the major or the current requirements.

Applying to Graduate

Students expecting to graduate are required to fill out the online intent to graduate form (www.ucdenver.edu > Degree Planning > Planning for Graduation > Intent to Graduate Form) by the published deadlines. Late applications will not be accepted, and the student will need to apply for the following semester.

Applications will be accepted from the first day of the student's registration for the semester in which the student plans to graduate through Census Date (the drop/add deadline) of the semester. Applications are due by 5 p.m. on census date of the semester in which the student is applying to graduate as noted in the [academic calendar](#). Students are encouraged to meet with the CAM advisor the semester before they intend to graduate to review graduation procedures and degree requirements.

Students who have not attended the university in more than one calendar year must gain readmission to the university prior to applying for graduation. It is the student's responsibility to apply with enough time for the readmission process to be finalized by the Census Date.

Academic Policies Committee

The CAM Academic Policies Committee is the appellate committee for all student-related academic petitions, issues and appeals. The committee is responsible for the evaluation and interpretation of the approved academic policies of the college. Questions about interpretation of policies may be directed to the Office of Advising and Student Services. Procedures and petition guidelines are available at the [CAM Web site](#).

Theatre, Film and Video Production

Chair: Dan Koetting

Office: Administration Building, 210

Telephone: 303-556-6352

Faculty

Associate Professors:

Laura Cuetara
David Dynak
Kent Homchick
Dan Koetting
Craig Volk

Assistant Professors:

David Liban
Jose Mercado
Hans Rosenwinkel
Nate Thompson

Senior Instructors:

Carol Bloom
Allan Trumpler

Instructors:

Jessica Lance
Howie Movshovitz
Janetta Turner

Department Overview

The Department of Theatre, Film and Video Production prepares students for advanced degree programs in graduate schools as well as for careers in theatre, film, television and/or video, within the context of a strategically designed liberal arts education. The department offers courses in the disciplines of theatre and film/video through an innovative curriculum built on a shared foundation of integrative courses, as well as specialized advanced courses.

Students have the opportunity to work directly with faculty, guest artists and fellow students in the creation of live and recorded performance works through participation in the department's production program of plays, films, television and video projects, and through co-requisite laboratory experiences. Denver-area theatre productions, artist residencies, film screenings, lectures, concerts, exhibits and other cultural resources of the metropolitan area are regularly utilized throughout each student's course of study.

BA/BFA Program Options

Bachelor of Arts in Theatre, Film and Television

The BA is designed for students who are interested in multiple aspects of theatre, film and television, and for students who are transferring with advanced standing. The BA degree involves an integrated sequence of courses in both theatre and film. After completion of the foundation sequence, students choose from a wide range of electives.

See detailed degree requirements for the BA.

Bachelor of Fine Arts in Theatre, Film and Television

Film and Theatre Production Emphasis

or

Writing/Directing Emphasis

For a limited number of students with exceptional abilities, desire and qualifications, the department offers a rigorous and structured BFA. The BFA program goal is to provide training at a professional skill level while implementing overall departmental goals. This program prepares students to begin their careers with entry-level positions in their areas of study, start their personal creative work or continue their studies in a graduate program. Majors will take a series of courses in the foundation sequence. Upon

successful completion of the foundation courses and demonstration of competence and potential through an interview/audition process in their desired area of focus, students then specialize with more intensive course work and production activities in the BFA program. This intensive work culminates in a comprehensive review that requires the successful completion of a portfolio and/or thesis project.

See detailed admission and degree requirements for the BFA.

Student Handbook

All students in the theatre, film and video production program are required to know and abide by the policies and procedures outlined in the TFVP Student Handbook, available by contacting CAMadvising@ucdenver.edu.

Programs

Bachelor of Arts

Theatre, Film and Television BA

All students pursuing a bachelor of arts (BA) in theatre, film and television complete a total of at least 53 semester hours for the major: 38 semester hours of foundation courses and 15 semester hours of approved electives. Each course must be completed with a C/2.0 or better. At least 24 of the major semester hours must be earned at UC Denver. **Students must also follow the College of Arts and Media's general degree requirements.**

Students in the theatre, film and video production program are required to know and abide by the policies and procedures outlined in the TFVP Student Handbook, available by contacting CAMadvising@ucdenver.edu.

Required Foundation Courses

- TFVP 1050 - Video Production/Post-Production I Summer 2010 Registration:
TFVP 1050
- TFVP 1100 - Introduction to Theatre, Film, and Television Summer 2010 Registration: **TFVP 1100**
- TFVP 1110 - Production Design: Theatre, Film and Video Summer 2010 Registration: **TFVP 1110**
- TFVP 1550 - Scriptwriting I Summer 2010 Registration: **TFVP 1550**
- TFVP 1611 - Acting Lab I Summer 2010 Registration: **TFVP 1611**
- TFVP 2090 - Production Management Techniques Summer 2010 Registration:
TFVP 2090

- TFVP 2100 - Visual Culture Summer 2010 Registration: **TFVP 2100**
- TFVP 2800 - Elements of Directing Summer 2010 Registration: **TFVP 2800**
- TFVP 3810 - Introduction to Production Process Summer 2010 Registration: **TFVP 3810**
- TFVP 3820 - Production Process Summer 2010 Registration: **TFVP 3820**
- TFVP 3910 - BA Junior Project Summer 2010 Registration: **TFVP 3910**
- TFVP 4910 - BA Senior Project Summer 2010 Registration: **TFVP 4910**

Select two courses from the following:

- FILM 3070 - History of Silent Film Production Summer 2010 Registration: **FILM 3070**
- FILM 3080 - History of Sound Film Production Summer 2010 Registration: **FILM 3080**
- THTR 3610 - Performance: Theory/History/Criticism I Summer 2010 Registration: **THTR 3610**
- THTR 4610 - Performance: Theory/History/Criticism II Summer 2010 Registration: **THTR 4610**

Approved Elective Courses

Select 15 semester hours from the following:

- FILM 2050 - Film/Video Prod/Post II Summer 2010 Registration: **FILM 2050**
- FILM 2500 - Introduction to Screenwriting for Film and Television Summer 2010 Registration: **FILM 2500**
- FILM 3111 - Shooting Action and Physical Effects Summer 2010 Registration: **FILM 3111**
- FILM 3264 - Advanced Digital Effects Summer 2010 Registration: **FILM 3264**
- FILM 3270 - Film/Video Production III Summer 2010 Registration: **FILM 3270**
- FILM 3275 - Film and Video Postproduction III Summer 2010 Registration: **FILM 3275**
- FILM 3300 - Advanced Lighting for Film and Video Summer 2010 Registration: **FILM 3300**
- FILM 3350 - Editing Aesthetics Summer 2010 Registration: **FILM 3350**
- FILM 3400 - Intermediate Screenwriting Summer 2010 Registration: **FILM 3400**
- FILM 4270 - Film and Video Production IV Summer 2010 Registration: **FILM 4270**
- FILM 4280 - Film and Video Postproduction IV Summer 2010 Registration: **FILM 4280**
- FILM 4350 - Analysis of Contemporary Motion Picture Editing Techniques Summer 2010 Registration: **FILM 4350**
- FILM 4400 - Advanced Screenwriting Summer 2010 Registration: **FILM 4400**
- FILM 4500 - Writing for Episodic Television Summer 2010 Registration: **FILM 4500**

- FILM 4600 - Topics in Film Summer 2010 Registration: **FILM 4600**
- FILM 4840 - Independent Study: FILM Summer 2010 Registration: **FILM 4840**
- TFVP 3840 - Applications Seminar Summer 2010 Registration: **TFVP 3840**
- THTR 2530 - Acting: Character and Staging Summer 2010 Registration: **THTR 2530**
- THTR 2560 - Topics in Theatre Summer 2010 Registration: **THTR 2560**
- THTR 2700 - Art for the Theatre Summer 2010 Registration: **THTR 2700**
- THTR 2840 - Independent Study: THTR Summer 2010 Registration: **THTR 2840**
- THTR 3010 - Stage and Production Management Summer 2010 Registration: **THTR 3010**
- THTR 3530 - Acting: Character and Text Summer 2010 Registration: **THTR 3530**
- THTR 3560 - Topics in Theatre Summer 2010 Registration: **THTR 3560**
- THTR 3720 - Lighting Design Summer 2010 Registration: **THTR 3720**
- THTR 3730 - Scene Design Summer 2010 Registration: **THTR 3730**
- THTR 3740 - Costume Design Summer 2010 Registration: **THTR 3740**
- THTR 3760 - Sound Design for the Theater Summer 2010 Registration: **THTR 3760**
- THTR 3840 - Independent Study: THTR Summer 2010 Registration: **THTR 3840**
- THTR 4530 - Acting: Character and Media Summer 2010 Registration: **THTR 4530**
- THTR 4540 - Directing: Staging and Process Summer 2010 Registration: **THTR 4540**
- THTR 4550 - Playwriting: The Short Form Summer 2010 Registration: **THTR 4550**
- THTR 4560 - Topics in Theatre Summer 2010 Registration: **THTR 4560**
- THTR 4730 - Advanced Scenic Design Summer 2010 Registration: **THTR 4730**
- THTR 4760 - Topics in Design Summer 2010 Registration: **THTR 4760**
- THTR 4840 - Independent Study: THTR Summer 2010 Registration: **THTR 4840**

Total for Program: 53 Hours

Bachelor of Fine Arts

Theatre, Film and Television BFA

The Department of Theatre, Film and Video Production offers a rigorous and structured bachelor of fine arts (BFA) program to a limited number of students with exceptional abilities and qualifications who aspire to work specifically in film/theatre production or writing/directing. The BFA's goal is to provide training at a professional skill level while implementing overall departmental goals, culminating in a comprehensive review that requires successful completion of a portfolio and/or thesis project. The program prepares

students to begin their careers with entry-level positions in their areas of study, start their personal creative work or continue their studies in a graduate program.

Emphases and Degree Requirements

All students pursuing a BFA in theatre, film and television complete a total of at least 78 semester hours for the major: 36 semester hours of foundation courses and 42 semester hours in an emphasis area. Students choose between emphases in film/theatre production and writing/directing; see detailed course requirements below. Each course must be completed with a C/2.0 or better. At least 24 of the major semester hours must be earned at UC Denver. **Students must also follow the College of Arts and Media's general degree requirements.**

Admission Procedures and Incoming Assessment Criteria for BFA

The first step for students seeking a BFA is to apply to the university and be accepted under the theatre, film and television bachelor of arts (BA) program. Typically then, after at least three semesters and satisfactory completion of foundation sequence courses in theatre, video/television and film, the qualified student is able to audition/interview during spring semester for admittance into the BFA program the following fall.

Assessment for admission to the BFA program includes the following:

- *Grade Point Average* of 2.75 or better.
- *Department Interview*. Each student is interviewed by members of the Theatre, Film and Video Production faculty to ascertain whether the student's aspirations and expectations are related to those of the BFA program.
- *Diagnostic Exam and Essay*. Students are required to take an objective examination and write an essay on material covered in the foundation sequence courses. This examination is offered during the spring semester.
- *Résumé*. The résumé should include theatre/film/video work experience and education to date.
- *Successful completion of foundation courses* (see below) with a grade of C or better in each course. Students should have at least 24 foundation semester hours completed or in progress at the time of application in spring semester. Note that the BFA foundation courses may also apply toward the Theatre, Film and Television BA degree requirements (for those who end up pursuing the BA instead of the BFA).
- *Development and successful presentation of a portfolio of the student's work to date*. Faculty will review each student's classroom, studio and production work.

For further information, including annual spring semester application deadlines, please contact CAMadvising@ucdenver.edu.

Transfer Students

Transfer students are considered on a case-by-case basis. However, a minimum of at least one semester (12 semester hours) “residency” in the BA program is required before students can participate in a spring audition/interview for possible admittance into the BFA program. Students are only admitted to the BFA for fall semester.

Admission Deferment

Students admitted to the BFA program may defer their admission for one year, to the fall semester of the academic year following their original admission to the program. Students must contact the Theatre, Film and Video Department (303-556-6352) to formally request their deferment. If more than one year elapses after a student's semester of admission and that student has not begun BFA emphasis course requirements, full reapplication is required to attempt to pursue the BFA.

Student Handbook

All students in the theatre, film and video production program are required to know and abide by the policies and procedures outlined in the TFVP Student Handbook, available by contacting CAMadvising@ucdenver.edu.

Required Foundation Courses for Both Film/Theatre Production and Writing/Directing Emphases

- TFVP 1050 - Video Production/Post-Production I *Summer 2010 Registration:* **TFVP 1050**
- TFVP 1100 - Introduction to Theatre, Film, and Television *Summer 2010 Registration:* **TFVP 1100**
- TFVP 1110 - Production Design: Theatre, Film and Video *Summer 2010 Registration:* **TFVP 1110**
- TFVP 1550 - Scriptwriting I *Summer 2010 Registration:* **TFVP 1550**
- TFVP 1611 - Acting Lab I *Summer 2010 Registration:* **TFVP 1611**
- TFVP 2090 - Production Management Techniques *Summer 2010 Registration:* **TFVP 2090**
- TFVP 2100 - Visual Culture *Summer 2010 Registration:* **TFVP 2100**
- TFVP 2800 - Elements of Directing *Summer 2010 Registration:* **TFVP 2800**
- TFVP 3810 - Introduction to Production Process *Summer 2010 Registration:* **TFVP 3810**

- TFVP 3820 - Production Process Summer 2010 Registration: **TFVP 3820**

Select two courses from the following:

- FILM 3070 - History of Silent Film Production Summer 2010 Registration: **FILM 3070**
- FILM 3080 - History of Sound Film Production Summer 2010 Registration: **FILM 3080**
- THTR 3610 - Performance: Theory/History/Criticism I Summer 2010 Registration: **THTR 3610**
- THTR 4610 - Performance: Theory/History/Criticism II Summer 2010 Registration: **THTR 4610**

Total for Foundation: 36 Hours

Film and Theatre Production Emphasis Courses

Required Courses

- FILM 2050 - Film/Video Prod/Post II Summer 2010 Registration: **FILM 2050**
- FILM 2060 - Film and Video Lighting and Grip Summer 2010 Registration: **FILM 2060**
- FILM 2640 - Introduction to Digital Effects Summer 2010 Registration: **FILM 2640**
- TFVP 3222 - Theatre, Film & Video Business Summer 2010 Registration: **TFVP 3222**
- TFVP 3550 - Directing Process Summer 2010 Registration: **TFVP 3550**
- TFVP 4090 - Senior Seminar & Project Summer 2010 Registration: **TFVP 4090**
- TFVP 4095 - Senior Thesis Project Summer 2010 Registration: **TFVP 4095**
(pass/fail)
_____ - Internship (3 semester hours)

Approved Elective Courses

Select 18 semester hours from the following:

- FILM 2500 - Introduction to Screenwriting for Film and Television Summer 2010 Registration: **FILM 2500**
- FILM 3111 - Shooting Action and Physical Effects Summer 2010 Registration: **FILM 3111**
- FILM 3264 - Advanced Digital Effects Summer 2010 Registration: **FILM 3264**
- FILM 3270 - Film/Video Production III Summer 2010 Registration: **FILM 3270**
- FILM 3275 - Film and Video Postproduction III Summer 2010 Registration: **FILM 3275**

- FILM 3300 - Advanced Lighting for Film and Video Summer 2010 Registration: **FILM 3300**
 - FILM 3350 - Editing Aesthetics Summer 2010 Registration: **FILM 3350**
 - FILM 3400 - Intermediate Screenwriting Summer 2010 Registration: **FILM 3400**
 - FILM 4270 - Film and Video Production IV Summer 2010 Registration: **FILM 4270**
 - FILM 4280 - Film and Video Postproduction IV Summer 2010 Registration: **FILM 4280**
 - FILM 4350 - Analysis of Contemporary Motion Picture Editing Techniques Summer 2010 Registration: **FILM 4350**
 - FILM 4400 - Advanced Screenwriting Summer 2010 Registration: **FILM 4400**
 - FILM 4500 - Writing for Episodic Television Summer 2010 Registration: **FILM 4500**
 - FILM 4600 - Topics in Film Summer 2010 Registration: **FILM 4600**
 - FILM 4840 - Independent Study: FILM Summer 2010 Registration: **FILM 4840**
 - TFVP 3840 - Applications Seminar Summer 2010 Registration: **TFVP 3840**
 - THTR 2530 - Acting: Character and Staging Summer 2010 Registration: **THTR 2530**
 - THTR 2560 - Topics in Theatre Summer 2010 Registration: **THTR 2560**
 - THTR 2700 - Art for the Theatre Summer 2010 Registration: **THTR 2700**
 - THTR 2840 - Independent Study: THTR Summer 2010 Registration: **THTR 2840**
 - THTR 3010 - Stage and Production Management Summer 2010 Registration: **THTR 3010**
 - THTR 3530 - Acting: Character and Text Summer 2010 Registration: **THTR 3530**
 - THTR 3560 - Topics in Theatre Summer 2010 Registration: **THTR 3560**
 - THTR 3720 - Lighting Design Summer 2010 Registration: **THTR 3720**
 - THTR 3730 - Scene Design Summer 2010 Registration: **THTR 3730**
 - THTR 3740 - Costume Design Summer 2010 Registration: **THTR 3740**
 - THTR 3760 - Sound Design for the Theater Summer 2010 Registration: **THTR 3760**
 - THTR 3840 - Independent Study: THTR Summer 2010 Registration: **THTR 3840**
 - THTR 4530 - Acting: Character and Media Summer 2010 Registration: **THTR 4530**
 - THTR 4540 - Directing: Staging and Process Summer 2010 Registration: **THTR 4540**
 - THTR 4550 - Playwriting: The Short Form Summer 2010 Registration: **THTR 4550**
 - THTR 4560 - Topics in Theatre Summer 2010 Registration: **THTR 4560**
 - THTR 4730 - Advanced Scenic Design Summer 2010 Registration: **THTR 4730**
 - THTR 4760 - Topics in Design Summer 2010 Registration: **THTR 4760**
 - THTR 4840 - Independent Study: THTR Summer 2010 Registration: **THTR 4840**
- ____ - Upper-division Film Studies Courses from the English Department
(maximum of 6 semester hours)

_____ - Audio Production and Postproduction Music Courses Related to Theatre, Film or Video (maximum of 6 semester hours)

Total for Film and Theatre Production Emphasis: 42 hours

Writing/Directing Emphasis Courses

Required Courses

- FILM 2500 - Introduction to Screenwriting for Film and Television Summer 2010 Registration: **FILM 2500**
- TFVP 3550 - Directing Process Summer 2010 Registration: **TFVP 3550**
- TFVP 4090 - Senior Seminar & Project Summer 2010 Registration: **TFVP 4090**
- TFVP 4095 - Senior Thesis Project Summer 2010 Registration: **TFVP 4095**
(pass/fail)
- TFVP 4560 - Directors at Work Summer 2010 Registration: **TFVP 4560**
or
- TFVP 4570 - Directing Practicum Summer 2010 Registration: **TFVP 4570**
- THTR 3530 - Acting: Character and Text Summer 2010 Registration: **THTR 3530**
_____ - Internship (3 semester hours)
_____ - Two Upper-division Screenwriting Courses (6 semester hours)

Approved Elective Courses

Select 15 semester hours from the following:

- FILM 2050 - Film/Video Prod/Post II Summer 2010 Registration: **FILM 2050**
- FILM 2060 - Film and Video Lighting and Grip Summer 2010 Registration: **FILM 2060**
- FILM 2640 - Introduction to Digital Effects Summer 2010 Registration: **FILM 2640**
- FILM 3111 - Shooting Action and Physical Effects Summer 2010 Registration: **FILM 3111**
- FILM 3264 - Advanced Digital Effects Summer 2010 Registration: **FILM 3264**
- FILM 3270 - Film/Video Production III Summer 2010 Registration: **FILM 3270**
- FILM 3275 - Film and Video Postproduction III Summer 2010 Registration: **FILM 3275**
- FILM 3300 - Advanced Lighting for Film and Video Summer 2010 Registration: **FILM 3300**
- FILM 3350 - Editing Aesthetics Summer 2010 Registration: **FILM 3350**
- FILM 3400 - Intermediate Screenwriting Summer 2010 Registration: **FILM 3400**

- FILM 4270 - Film and Video Production IV Summer 2010 Registration: **FILM 4270**
- FILM 4280 - Film and Video Postproduction IV Summer 2010 Registration: **FILM 4280**
- FILM 4350 - Analysis of Contemporary Motion Picture Editing Techniques Summer 2010 Registration: **FILM 4350**
- FILM 4400 - Advanced Screenwriting Summer 2010 Registration: **FILM 4400**
- FILM 4500 - Writing for Episodic Television Summer 2010 Registration: **FILM 4500**
- FILM 4600 - Topics in Film Summer 2010 Registration: **FILM 4600**
- FILM 4840 - Independent Study: FILM Summer 2010 Registration: **FILM 4840**
- TFVP 3222 - Theatre, Film & Video Business Summer 2010 Registration: **TFVP 3222**
- TFVP 3840 - Applications Seminar Summer 2010 Registration: **TFVP 3840**
- THTR 2530 - Acting: Character and Staging Summer 2010 Registration: **THTR 2530**
- THTR 2560 - Topics in Theatre Summer 2010 Registration: **THTR 2560**
- THTR 2700 - Art for the Theatre Summer 2010 Registration: **THTR 2700**
- THTR 2840 - Independent Study: THTR Summer 2010 Registration: **THTR 2840**
- THTR 3010 - Stage and Production Management Summer 2010 Registration: **THTR 3010**
- THTR 3560 - Topics in Theatre Summer 2010 Registration: **THTR 3560**
- THTR 3720 - Lighting Design Summer 2010 Registration: **THTR 3720**
- THTR 3730 - Scene Design Summer 2010 Registration: **THTR 3730**
- THTR 3740 - Costume Design Summer 2010 Registration: **THTR 3740**
- THTR 3760 - Sound Design for the Theater Summer 2010 Registration: **THTR 3760**
- THTR 3840 - Independent Study: THTR Summer 2010 Registration: **THTR 3840**
- THTR 4530 - Acting: Character and Media Summer 2010 Registration: **THTR 4530**
- THTR 4540 - Directing: Staging and Process Summer 2010 Registration: **THTR 4540**
- THTR 4550 - Playwriting: The Short Form Summer 2010 Registration: **THTR 4550**
- THTR 4560 - Topics in Theatre Summer 2010 Registration: **THTR 4560**
- THTR 4730 - Advanced Scenic Design Summer 2010 Registration: **THTR 4730**
- THTR 4760 - Topics in Design Summer 2010 Registration: **THTR 4760**
- THTR 4840 - Independent Study: THTR Summer 2010 Registration: **THTR 4840**
- _____ - Upper-division Film Studies Courses from the English Department (maximum of 6 semester hours)
- _____ - Audio Production and Postproduction Music Courses Related to Theatre, Film or Video (maximum of 6 semester hours)

Total for Writing/Directing Emphasis: 42 Hours

Non Degree

Theatre, Film and Television Minor

To declare a CAM minor, please see the College of Arts & Media's Office of Advising and Student Services in Arts Building, 177.

Students may transfer up to 6 semester hours of non-UC Denver courses toward a minor. All other courses must be taken at UC Denver. Each course must be completed with a C/2.0 or better. Students pursuing a BA or BFA in the Department of Theatre, Film and Video Production may not declare a minor in theatre, film and television. Consult a CAM advisor for further details.

Program Requirements

- TFVP 1050 - Video Production/Post-Production I Summer 2010 Registration: **TFVP 1050**
- TFVP 1100 - Introduction to Theatre, Film, and Television Summer 2010 Registration: **TFVP 1100**
_____ - Theatre, Film and Video Production Electives (12 semester hours)
Chosen in consultation with department advisor

Select two courses from the following (in consultation with department advisor):

- FILM 3070 - History of Silent Film Production Summer 2010 Registration: **FILM 3070**
- FILM 3080 - History of Sound Film Production Summer 2010 Registration: **FILM 3080**
- THTR 3610 - Performance: Theory/History/Criticism I Summer 2010 Registration: **THTR 3610**
- THTR 4610 - Performance: Theory/History/Criticism II Summer 2010 Registration: **THTR 4610**

Total: 24 Hours

Music and Entertainment Industry Studies

Contact Information

Office: Arts Building, Suite 288

Telephone: 303-556-2279

Fax: 303-556-2335

Web site: www.cam.ucdenver.edu/meis

Faculty

Professors:

Gregory Walker, DMA, University of Colorado

Associate Professors:

William Clark, MM, Northwestern University

Judith Coe, DMA, University of Colorado

Frank J. Jermance, MBA, University of Miami

Stan Soocher, JD, New York Law School

Assistant Professors:

David Bondelevitch, MFA, USC

Lorne Bregitzer, MS, UC Denver

Leslie Gaston, MS, UC Denver

Storm Gloor, MBA, West Texas A&M University

Sam McGuire, MS, UC Denver

Sean McGowan, DMA, USC

Paul Musso, MM, University of Denver

Senior Instructors:

Peter Ellingson, MM, Arizona State University

Doug Krause, MA, University of Denver

Andrew Morell

Instructors:

Erin Hackel, DMA, University of Colorado

Karin Hauger, PhD, Virginia Tech

Irina Moreland, DMA, St. Petersburg State Conservatory

Leslie Soich, MM, University of Colorado

Sophia Park-Song, DMA, Eastern School of Music
Tom Van Schoick, MM, University of Northern Colorado
Pamela Weng, MA, UC Denver
Travis Yamamoto, MME, University of Southern California

Undergraduate Program

Bachelor of Science in Music

The music program at the University of Colorado Denver is intended for students seeking preparation for professional careers in music related to commercial performance, recording, music business and the entertainment and creative industries. The four-year music program is accredited by the National Association of Schools of Music. There are four emphasis areas available to students: recording arts, music business, performance and music industry studies (MIS).

The specialized curricula offered by the program prepares graduates for sustainable careers in the entertainment and creative industries and the new media section—including positions in recording arts, audio engineering and media forensics, commercial music performance and music business, as well as graduate studies at leading universities and conservatories.

Please note: Acceptance into the UC Denver Department of Music and Entertainment Industry Studies (MEIS) is on a competitive basis with specific entrance evaluation requirements. Admission to the music major is competitive for freshmen, transfer students and minors.

All applicants will be placed in an enrollment pool and admission decisions will be based upon several factors, which include an indexed composite score of GPA, Music Aptitude Exam scores and an audition (if applicable). Application materials must be received by the deadline—no late applications will be considered.

Prospective students should refer to the [MEIS Web site](#) for current entrance requirements, deadlines and procedures.

All music applicants, except those entering the music industry studies program, must pass an entrance audition on their primary instrument or voice before being accepted into the College of Arts & Media and the MEIS department. Call 303-556-2279 for information on scheduling an audition.

Students entering the music industry studies program must submit an audition deferment form.

All students in the MEIS department are required to abide by the policies and procedures outlined in the MEIS Student Handbook.

The emphases in recording arts, music business and performance are audition-based programs, requiring an entrance audition on a primary instrument or voice. These students will be expected to demonstrate a high level of musicianship as part of their curricular requirements. All three have an identical 51-semester-hour foundation requirement in musicianship and a separate 22-26 semester hour emphasis area.

Recording Arts

This program studies contemporary analog and digital technology as it is used in studio recording, sound reinforcement and new media applications. While mastering technology skills and formats, students also study the artistic and aesthetic applications of technology to recording, reinforcement, composition and performance. Due to the immense popularity of the recording arts program and the limited facility space, the recording arts emphasis is a competitive emphasis. Students will be required to apply to the department (known as “applying to the tech focus”) to be eligible to take the intermediate- and advanced-level recording courses. This application includes completion of a series of music courses, transcript review, exam and cumulative GPA.

Music Business

This program prepares musicians for careers in such fields as artist management, music publishing, concert promotion, record production, venue management, label promotion, distribution, entertainment law and the development of skills relative to the rapidly expanding entertainment and creative industries.

Performance

Students gain performance skills in classical, jazz, commercial and experimental music styles. The program includes specialized courses in small performance ensembles, applied study, contemporary improvisation, analysis and history, culminating in the presentation of a junior and senior recital. Students will be required to pass a sophomore proficiency at the end of the sophomore year in order to progress into the advanced performance and musicianship courses.

Music Industry Studies (MIS)

- This non audition-based degree requires a placement audition and passing a basic musicianship proficiency.
- This program is designed for students who may or may not be practicing musicians, but who intend to work behind the scenes after graduation, whether on the tech side, the business side or both.
- MIS requires credits in musicianship and performance as part of the curriculum.
- All MIS students, regardless of emphasis or previous musical experience, will be required to complete the musicianship and performance requirements. For students with no musical experience, these requirements will begin at the introductory level.
- For students interested in pursuing MIS/Tech focus, this emphasis is competitive*, due to the immense popularity of the MIS/Tech program and the limited facility space. Students will be required to apply to the department (known as “applying to the Tech emphasis”) to be eligible to take the intermediate and advanced level recording courses. This application includes completion of a series of music courses, an essay, exam and cumulative GPA.

Primary Differences Between Recording Arts/Music Business and MIS/Tech or MIS Business Focus

Recording Arts/Music Business

- Recording arts and music business are audition-based degrees, requiring an entrance audition and a focused level of musicianship and performance as part of the curriculum.
- Recording arts and music business focuses are designed for students who intend to be practicing musicians after graduation, with a very strong knowledge of the tech or business side of the industry.
- Recording arts and music business students are required to complete more musicianship and performance-area credits than MIS/tech or MIS/business students.

Music Industry Studies/Tech and MIS/Business

- MIS/tech and MIS/business focuses are non audition-based degrees and therefore do not require an entrance audition, but a placement audition will be required.
- MIS/tech and MIS/business focuses are designed for students who may or may not be musicians when they enter, but who don't intend to be practicing musicians after graduation. Rather, they intend to focus solely on the tech or business side. These students are more interested in working behind the scenes.
- MIS/tech and MIS/business students will not be required to

They will not be required to complete as many tech- or business-based electives as MIS/tech or MIS/business students (but can choose additional tech or business electives).

complete as many musicianship and performance-area credits as recording arts or music business students. They will be required to complete more tech- or business-based electives than recording arts or music business students.

Students are encouraged to consult a faculty member or CAM advisor to talk about the differences in curriculum to determine which major is best suited to them.

Competitive Emphases

Recording arts and/or MIS/tech students entering the College of Arts & Media will be required to complete or be completing the following courses before applying to the tech focus:

- MUSC 2470
- MUSC 2540
- MUSC 2560
- MUSC 2700
- PMUS 1023 1024 Piano Class (two semesters)
(Piano placement is available)
- PMUS 1100
- PMUS 1110
- PMUS 3830 or PMUS 3831

These courses also satisfy the requirements for the music industry studies minor. Students who have completed the above named courses, but who are denied acceptance to the recording arts or MIS/tech emphasis, will automatically be eligible for the MIS minor if they choose to pursue a major outside of the MEIS department.

***Please note that satisfactory completion of the above named courses will not automatically guarantee a student's acceptance into the recording arts or MIS/tech focus.**

Students interested in the tech focus will need to submit an application form, and this application will include the above named courses, unofficial transcripts from all previous institutions attended. Students must also take an exam covering material in audio production—test dates are announced at the beginning of the spring semester. Further, the student's cumulative GPA from all institutions will be part of the evaluation criteria. Complete information on applying to the tech focus is available online: <http://cam.ucdenver.edu/meis>.

Graduate Programs

CAM offers two master of science degree programs:

Master of Science in Recording Arts (MSRA)

Master of Science in Recording Arts, Media Forensics Emphasis (MSRA-MF)

Program Overview

Recording arts is a field that deals with all aspects of recorded music and sound including mixing, mastering, sequencing, calibration, reinforcement, media forensics and post-production. Our program refines student skills in sound recording, aesthetics, multitrack recording, digital signal processing, automated mixing, synchronization, stereo imaging and monitoring, media forensics and post-production.

In addition, our program recognizes and includes:

Study in the rapidly growing field of audio forensics, which is audio for the legal field. The program includes study in tape authentication, audio enhancement, voice prints, analysis and witness testimony.

The need for pedagogy degrees. Pedagogy is synonymous with teaching, and this program includes a survey of available resources for audio education. We offer an interdisciplinary approach by including physics, acoustics, engineering, music, broadcast, medicine, psychology, multimedia, theatre and film/video. The program emphasizes design and development of new methods and materials.

UC Denver's master of science in recording arts (MSRA) has the only pedagogy track in the nation, as well as the only college-level course in audio forensics. This graduate degree is designed to:

- prepare students for careers in audio application for the fields of mass communications, education, arts and the entertainment industries.
- help professionals advance their careers.
- help prepare the music educators of the future.

Students may choose between a thesis (research) or nonthesis (portfolio) option.

Graduate courses constituting the core of this study will advance the artistic, pedagogical, technical and problem-solving abilities of the enrolled students. Elective courses will allow each student to develop additional skills and knowledge in related areas including film, broadcasting, education, music business and the performing arts.

We encourage students from allied disciplines (music, physics, engineering, etc.) to apply. Students are not required to have their bachelor's in recording arts—the student's

bachelor's degree can be from any discipline. They can qualify for the MSRA by having the equivalent level preparation (e.g., work experience). Candidates without sufficient experience/training in recording arts may be required to take preparatory courses at the undergraduate level.

Note: the application process, requirements and deadlines for the Master of Science in Recording Arts emphasis in Media Forensics (MSRA-MF) will differ from those listed for the traditional MSRA program. Please refer to the National Center for Media Forensics Web site for up-to-date information regarding application process, requirements and deadlines.

Application Components

See the [Recording Arts MS page](#) of this catalog for further information. For detailed information, please refer to the MSRA Web site at www.cam.ucdenver.edu/meis
> Master of Science

1. Graduate Admissions Application - Parts I and II
2. In-State Tuition Classification Application (if applicable)
3. Entrance Examinations: GRE (TOEFL, if applicable)
4. Official Transcripts
5. Three Letters of Recommendations
6. Application Essay
7. Resume
8. Portfolio
9. Application Fee

Applications that do not include all of the requirements listed above or that include partial components are considered incomplete and will not be reviewed.

Bachelor of Science in Music

Music BS

[CAM General Course Requirements](#)

[General Music Information](#)

Undergraduate Degree Requirements

The BS in music has a competitive application process. Please refer to the MEIS Web site at <http://cam.ucdenver.edu/meis> for additional guidelines and information. To be

eligible for an audition-based BS in music, students must complete 54 semester hours of music foundation courses and then select one of the three emphasis areas: recording arts, music business or performance. Students must pass a music audition as part of the application process and pass varying levels of performance proficiency as part of their curricula. Students must complete all major courses with a C/2.0 or higher.

Music Foundation Courses

- MUSC 2470 - Music Applications on the Computer *Summer 2010 Registration:* **MUS 2470**
- MUSC 2540 - Audio Production I *Summer 2010 Registration:* **MUS 2540**
- MUSC 2700 - Introduction to Music Business *Summer 2010 Registration:* **MUS 2700**
- MUSC 3210 - Music and Entertainment Marketing *Summer 2010 Registration:* **MUS 3210**
or
- MUSC 3220 - Artist Management *Summer 2010 Registration:* **MUS 3220**
- PMUS 1023 - Piano Class I *Summer 2010 Registration:* **PMUS 1023** Level I
- PMUS 1024 - Piano Class II *Summer 2010 Registration:* **PMUS 1024**
- PMUS 1025 - Piano Class III *Summer 2010 Registration:* **PMUS 1025**
- PMUS 1026 - Piano Class IV *Summer 2010 Registration:* **PMUS 1026**
- PMUS 1100 - Music Theory I *Summer 2010 Registration:* **PMUS 1100**
- PMUS 1110 - Ear Training and Sight Singing I *Summer 2010 Registration:* **PMUS 1110**
- PMUS 1200 - Music Theory II *Summer 2010 Registration:* **PMUS 1200**
- PMUS 1210 - Ear Training and Sight Singing II *Summer 2010 Registration:* **PMUS 1210**
- PMUS 1500 - General Recital *Summer 2010 Registration:* **PMUS 1500**
PMUS 1500 - General Recital
PMUS 1500 - General Recital
PMUS 1500 - General Recital
PMUS 1502 through PMUS 1762 (24 instruments) 2 cr/each. Students must take 2 semesters of 1000-level lessons.
PMUS 2502 through PMUS 2562 (24 instruments) 2 cr/each. Students must take 2 semesters of 2000-level lessons.
PMUS 1410 through PMUS 4430 (15 ensembles)
- PMUS 2100 - Music Theory III *Summer 2010 Registration:* **PMUS 2100**
- PMUS 2110 - Ear Training and Sight Singing III *Summer 2010 Registration:* **PMUS 2110**
- PMUS 2200 - Contemporary Styles *Summer 2010 Registration:* **PMUS 2200**
- PMUS 3830 - History and Literature of Music I *Summer 2010 Registration:* **PMUS 3830**
- PMUS 3831 - History and Literature of Music II *Summer 2010 Registration:* **PMUS 3831**

PMUS ____ - UD Music History Elective* (3 semester hours)

Total: 54 Hours

* UD = upper division (3000- or 4000- level course)

Performance Emphasis Courses

Students must successfully pass a Sophomore Proficiency on their primary instrument or voice in order to be accepted into the Performance emphasis. Students are required to successfully complete a Junior Recital, in addition to the 2-credit PMUS 4200 Senior Recital. Contact the MEIS Office for more information at 303-556-2279.

- PMUS 1500 - General Recital *Summer 2010 Registration: **PMUS 1500***
PMUS 1500 - General Recital
PMUS 1500 - General Recital
PMUS 1500 - General Recital
PMUS 3502 through PMUS 3762 (24 instruments) 3 cr/each. Students must take 2 semesters of 3000-level lessons.
PMUS 4502 through PMUS 4762 (24 instruments) 3cr/each. Students must take 2 semesters of 4000-level lessons.
- PMUS 3300 - Advanced Jazz Improvisation *Summer 2010 Registration: **PMUS 3300***
PMUS 1410 through PMUS 4430 (15 ensembles)
Performance students must take a minimum of 8 ensembles (8 semester hours), one with every semester of applied lessons.
- PMUS 4200 - Senior Recital *Summer 2010 Registration: **PMUS 4200***

Total: 22 Hours

Music Business Emphasis Courses

- MUSC 2560 - Audio Production II *Summer 2010 Registration: **MUS 2560***
- MUSC 3720 - Law and the Music Industry *Summer 2010 Registration: **MUS 3720***
- MUSC 4740 - Music Business Analysis *Summer 2010 Registration: **MUS 4740***

Total: 25 Hours

Recording Emphasis Courses

Students must be accepted into the recording arts emphasis before being able to take any of the upper-division courses in this area. Please consult a CAM advisor for details.

- MUSC 2560 - Audio Production II Summer 2010 Registration: **MUS 2560**
- MUSC 3540 - Recording Studio Maintenance and Calibration Summer 2010 Registration: **MUS 3540**
- MUSC 3550 - Critical Listening for Recording Arts Summer 2010 Registration: **MUS 3550**
- MUSC 4505 - Audio Post Production I Summer 2010 Registration: **MUS 4505** or
- MUSC 4575 - Surround Sound Summer 2010 Registration: **MUS 4575**
- MUSC 4550 - Audio Production III Summer 2010 Registration: **MUS 4550**
- MUSC 4580 - Audio Production Seminar Summer 2010 Registration: **MUS 4580** (Junior Project)
MUSC 4580 - Audio Production Seminar (Senior Project)
MUS ____ - Recording Arts Elective (1 semester hours)
- PHYS 3620 - Sound and Music Summer 2010 Registration: **PHYS 3620**

Total: 28 Hours

Music Industry Studies Emphasis—BS in Music

CAM General Course Requirements

General Music Information

Undergraduate Degree Requirements

The music program has a competitive entrance process. Please refer to the CAM Web site for details and information. To be eligible for a BS in music, emphasis in music industry studies (MIS), students must complete the 14 semester hours of music performance courses, 20 semester hours of musicianship courses, 13 semester hours of music industry studies core courses and 26 semester hours of music business or music technology courses. While no audition is required as part of the application process, students are required to complete performance and musicianship courses. Students must pass their major courses with a C (2.0) or better.

Music Performance, Musicianship and MIS Core Courses

- MUSC 2300 - Introduction to Songwriting Summer 2010 Registration: **MUS 2300**
- MUSC 2470 - Music Applications on the Computer Summer 2010 Registration: **MUS 2470**
- MUSC 2540 - Audio Production I Summer 2010 Registration: **MUS 2540**

- MUSC 2560 - Audio Production II Summer 2010 Registration: **MUS 2560**
- MUSC 2700 - Introduction to Music Business Summer 2010 Registration: **MUS 2700**
- PMUS 1023 - Piano Class I Summer 2010 Registration: **PMUS 1023** Level I
- PMUS 1024 - Piano Class II Summer 2010 Registration: **PMUS 1024**
- PMUS 1025 - Piano Class III Summer 2010 Registration: **PMUS 1025**
- or
- PMUS 1040 - Class Guitar Summer 2010 Registration: **PMUS 1040**
- or
- PMUS 1050 - Voice Class I Summer 2010 Registration: **PMUS 1050**
- PMUS 1026 - Piano Class IV Summer 2010 Registration: **PMUS 1026**
- or
- PMUS 1041 - Class Guitar II Summer 2010 Registration: **PMUS 1041**
- or
- PMUS 1060 - Voice Class II Summer 2010 Registration: **PMUS 1060**
- PMUS 1100 - Music Theory I Summer 2010 Registration: **PMUS 1100**
- PMUS 1110 - Ear Training and Sight Singing I Summer 2010 Registration: **PMUS 1110**
- PMUS 1200 - Music Theory II Summer 2010 Registration: **PMUS 1200**
- PMUS 1210 - Ear Training and Sight Singing II Summer 2010 Registration: **PMUS 1210**
- PMUS 1310 - Sight Reading and Improvisation Summer 2010 Registration: **PMUS 1310**
- PMUS 1500 - General Recital Summer 2010 Registration: **PMUS 1500**
PMUS 1500 - General Recital
 PMUS 1801 through PMUS 1823 MIS Applied Lessons (23 instruments)
 PMUS 1410 through PMUS 4430 (15 ensembles)
- PMUS 2200 - Contemporary Styles Summer 2010 Registration: **PMUS 2200**
- or
- MUSC 2220 - Commercial Electronic Music Composition Summer 2010 Registration: **MUS 2220**
- or
- MUSC 3310 - Songwriting II Summer 2010 Registration: **MUS 3310**
- PMUS 3830 - History and Literature of Music I Summer 2010 Registration: **PMUS 3830**
- PMUS 3831 - History and Literature of Music II Summer 2010 Registration: **PMUS 3831**
 _____ - Electives in Performance (2 semester hours)

Total: 50 Hours

Students select either music business or music technology and complete all listed courses and elective credits.

Music Business Focus Courses

- MUSC 3720 - Law and the Music Industry Summer 2010 Registration: **MUS 3720**
- MUSC 4740 - Music Business Analysis Summer 2010 Registration: **MUS 4740**

Total: 26 Hours

Music Technology Focus Courses

Students must be accepted into the MIS/tech focus before being able to take any of the upper-division courses in this area. Please consult CAM advisor for more details.

- MUSC 3540 - Recording Studio Maintenance and Calibration Summer 2010 Registration: **MUS 3540**
- MUSC 3550 - Critical Listening for Recording Arts Summer 2010 Registration: **MUS 3550**
- MUSC 4505 - Audio Post Production I Summer 2010 Registration: **MUS 4505**
or
- MUSC 4575 - Surround Sound Summer 2010 Registration: **MUS 4575**
- MUSC 4550 - Audio Production III Summer 2010 Registration: **MUS 4550**
- MUSC 4580 - Audio Production Seminar Summer 2010 Registration: **MUS 4580**
(Junior Project)
MUSC 4580 - Audio Production Seminar (Senior Project)
- PHYS 3620 - Sound and Music Summer 2010 Registration: **PHYS 3620**
_____ - Music Technology Electives (3 semester hours)

Total: 26 Hours

Non Degree

General Musicianship Minor

See the beginning of the Music and Entertainment Industry Studies section in this catalog for specific admission information to the UC Denver Department of Music and Entertainment Industry (MEIS). This competitive process is also for students interested in either music minor.

To declare a CAM minor, please see the College of Arts & Media's Office of Advising and Student Services in Arts Building, 177. All courses must be taken at UC Denver unless approved by an MEIS faculty member. All other courses must be taken at UC Denver. Students pursuing a BS in music may not declare a minor in music. Consult a CAM advisor for details. All minor courses must be passed with a C (2.0) or better.

Students must successfully audition before declaring a general musicianship minor.

Program Requirements

- PMUS 1100 - Music Theory I *Summer 2010 Registration:* **PMUS 1100**
- PMUS 1110 - Ear Training and Sight Singing I *Summer 2010 Registration:* **PMUS 1110**
- PMUS 1200 - Music Theory II *Summer 2010 Registration:* **PMUS 1200**
- PMUS 1210 - Ear Training and Sight Singing II *Summer 2010 Registration:* **PMUS 1210**
- PMUS 3830 - History and Literature of Music I *Summer 2010 Registration:* **PMUS 3830**
- PMUS 3831 - History and Literature of Music II *Summer 2010 Registration:* **PMUS 3831**
PMUS 1502 through PMUS 1762 Applied Music (2 semester hours) (24 instruments)
- PMUS 1500 - General Recital *Summer 2010 Registration:* **PMUS 1500**
PMUS 1500 - General Recital
PMUS 1410 through PMUS 4430 Ensembles. Students must take a minimum of 2 ensembles.
- PMUS 1023 - Piano Class I *Summer 2010 Registration:* **PMUS 1023**
PMUS 1023 Piano Class I, PMUS 1024 Piano Class II, PMUS 1025 Piano Class III and/or PMUS 1026 Piano Class IV. Students must complete 2 semesters of Piano. Piano placement is available - consult a CAM advisor.
P/MUS ____ - Music Elective (1 semester hour)

Total: 23 Hours

Music Industry Studies Minor

See the beginning of the Music and Entertainment Industry Studies section in this catalog for specific admission information to the UC Denver Department of Music and Entertainment Industry (MEIS). This competitive process is also for students interested in either music minor.

To declare a CAM minor, please see the College of Arts & Media's Office of Advising and Student Services in Arts Building, 177. All courses must be taken at UC Denver unless approved by an MEIS faculty member. All other courses must be taken at UC

Denver. Students pursuing a BS in Music may not declare a minor in Music. Consult a CAM advisor for details. All minor courses must be passed with a C (2.0) or better.

Program Requirements

- MUSC 2450 - Introduction to Performing Arts and Events Management Summer 2010 Registration: **MUS 2450**
- MUSC 2470 - Music Applications on the Computer Summer 2010 Registration: **MUS 2470**
- MUSC 2700 - Introduction to Music Business Summer 2010 Registration: **MUS 2700**
MUS ____ - Music Business or Tech Elective (3-4* semester hours)
- PMUS 1023 - Piano Class I Summer 2010 Registration: **PMUS 1023**
- PMUS 1024 - Piano Class II Summer 2010 Registration: **PMUS 1024**
- PMUS 1025 - Piano Class III Summer 2010 Registration: **PMUS 1025**
and/or
- PMUS 1026 - Piano Class IV Summer 2010 Registration: **PMUS 1026**
Note: Students must complete two semesters of piano class for a total of 2 credits. Piano placement is available; consult a CAM advisor.
- PMUS 1100 - Music Theory I Summer 2010 Registration: **PMUS 1100**
- PMUS 1110 - Ear Training and Sight Singing I Summer 2010 Registration: **PMUS 1110**
- PMUS 3830 - History and Literature of Music I Summer 2010 Registration: **PMUS 3830** or
- PMUS 3831 - History and Literature of Music II Summer 2010 Registration: **PMUS 3831**

Total: 21-22 Hours

* Must be MUSC 2560, Audio Production II (4 semester hours), if student plans to apply for the MIS/tech or recording arts emphasis as a music major.

Master of Science

Media Forensics Emphasis, Recording Arts MS

- Graduate School Rules apply to this program

Program Overview

This unique degree program prepares students from various backgrounds for work in the field of forensic audio and video analysis utilizing the state-of-the-art methods and technology necessary to fight crime in the digital age. Housed within the National Center for Media Forensics (NCMF), this program is unique in that it represents the **only graduate level education in audio and video forensics in the country**.

Students from all disciplines (media production, electrical engineering, general forensics, etc.) are encouraged to apply, as this program enhances scientific inquiry while guiding students through a three-semester cohort curriculum. Classes feature faculty from around the country and emerging avenues of exploration and related legal topics needed in report preparation for expert witness testimony. Digital media evidence acquisition through computer forensics applications will be emphasized in an environment that fosters creativity and individual skills. The capstone of this program will be a research thesis of the student's choosing under the advisement of the director and associate director of the center as well as an advisory board of forensic professionals from around the world. The thesis will be a topic of exploration throughout the program and will serve to enhance a graduate's specialty as they enter the work force in private forensic practice, corporate research and development, academic research and teaching, or crime labs on the local, state or federal levels.

Note: the application process, requirements and deadlines for the master of science in recording arts emphasis in media forensics will differ from those listed for the traditional MSRA program. Please refer to the [National Center for Media Forensics Web site](#) for up-to-date information regarding application process, requirements and deadlines.

Curriculum

The master of science in recording arts emphasis in media forensics comprises 34 semester hours of credit: 30 hours are required courses and 4 hours are thesis. Courses must be completed with a B/3.0 or higher to count toward degree progress. Students are admitted to the program in the fall as a cohort and must follow the curriculum in sequence. Students who do not complete the program in sequence must reapply.

Curriculum and application requirements for the MSRA-MF program are under development and subject to change. Please refer to the [National Center for Media Forensics Web site](#) for up-to-date information regarding curriculum and application requirements for the emphasis in media forensics.

Recording Arts MS

► [Graduate School Rules](#) apply to this program

Master of Science in Recording Arts (MSRA)

Program Overview

Recording Arts is a field that deals with all aspects of recorded music and sound including mixing, mastering, sequencing, calibration, reinforcement, media forensics and post-production. Our program refines student skills in sound recording, aesthetics, multitrack recording, digital signal processing, automated mixing, synchronization, stereo imaging and monitoring, media forensics and post-production.

In addition, our program recognizes and includes:

Study in the rapidly growing field of media forensics, which is audio and video for the legal field. The program includes study in tape authentication, audio and video enhancement, voice prints, analysis and witness testimony. See section below for MSRA emphasis in media forensics (MSRA-MF) program information.

The need for pedagogy degrees. Pedagogy is synonymous with teaching, and this program includes a survey of available resources for audio education. We offer an interdisciplinary approach by including physics, acoustics, engineering, music, broadcast, medicine, psychology, multimedia, theatre and film/video. The program emphasizes design and development of new methods and materials.

UC Denver's Master of Science in Recording Arts (MSRA) has the only pedagogy track in the nation, as well as the only college-level course in audio forensics. This graduate degree is designed to:

- prepare students for careers in audio application for the fields of mass communications, education, arts and the entertainment industries
- help professionals advance their careers
- help prepare the music educators of the future

Students may choose between a thesis (research) or non-thesis (portfolio) option.

Graduate courses constituting the core of this study will advance the artistic, pedagogical, technical and problem-solving abilities of the enrolled students. Elective courses will allow each student to develop an additional skills and knowledge in related areas including film, broadcasting, education, music business and the performing arts.

We encourage students from allied disciplines (music, physics, engineering, etc.) to apply. Students are not required to have their bachelor's in recording arts—the student's bachelor's degree can be from any discipline. They can qualify for the MSRA by having the equivalent level preparation (e.g., work experience). Candidates without sufficient experience/training in recording arts may be required to take preparatory courses at the undergraduate level.

Emphasis in Media Forensics

Students can also earn a master of science in recording arts with an emphasis in media forensics. See the [media forensics program page](#) for specific requirements, as they differ from the general MSRA degree.

Application Components

The following is required of all students applying to the MSRA program, with the exception of International students. International students should consult the Office of International Affairs for specific information on application and admission requirements. Contact the Office of International Affairs for specific application forms, www.internationaladmissions.ucdenver.edu.

1. **Graduate Admissions Application—Parts I and II**

Students may request an application packet by calling 303-556-2279. Please be sure to provide your mailing address.

Students are required to complete the application for graduate admissions form.

Program of study—on the application, the code for all Master of Science in Recording Arts candidates is GR-RAMS. The degree is MS.

International students must complete additional paperwork in addition to the components below. International student applications must be received six months prior to the term for which the student is applying. Contact the Office of International Affairs for specific application forms, www.internationaladmissions.ucdenver.edu.

2. **In-State Tuition Classification Application**

Students who feel they may qualify for Colorado in-state tuition (i.e., residency) should fill out the in-state tuition form. *The Office of Admissions will make the determination of residency.* For information on residency criteria contact the Office of Admissions, 303-556-2704 or admissions@ucdenver.edu.

3. **Entrance Examinations(s)**

Official GRE scores (www.gre.com)—All applicants to the MSRA degree program must submit scores from the GRE. The “General Test” offered by Educational Testing Service will assist in evaluating applicants to the degree program. It evaluates verbal, quantitative and analytical writing skills for the candidates. This examination is offered internationally by Educational Testing Service on a continuous schedule. The minimum required score for entrance in the program is the 50th percentile, although each student’s score will be evaluated as part of

complete application process. This examination is not intended to exclude any applicant from the degree program, but rather to assist in academic advising.

Scores must be received by the application deadline; therefore, students should plan accordingly when scheduling their testing dates. Late GRE scores are not accepted, and these applications will not be reviewed.

Test of English as a Foreign Language (TOEFL) (www.ets.org/toefl)—This examination is required for international students for whom English is not their primary language. These students are required to have a minimum TOEFL score of 500 (173 electronic).

4. *Transcripts*

The most recent *official* academic transcripts must be sent from the registrar of all previous institutions. Official transcripts should be mailed to:

MSRA Graduate Admissions Committee
Campus Box 162, P.O. Box 173364
Denver, CO 80217-3364

5. *Letters of Recommendation*

Three (3) letters of recommendation are required from responsible persons who can attest to your academic and professional accomplishment. The names those who are providing your letters of recommended should be included in your Part II of the application.

Letters of recommendation must be accompanied by the letter of recommendation form, available on the [MSRA Web site](#).

Incomplete letters of recommendation will not be considered, and the application will not be reviewed.

6. *Application Essay*

This essay should summarize the educational and professional history of the applicant relative to a career in the audio/music industry, and should include:

- complete name and contact information
- educational background
- career objective
- anticipated dates of attendance

The essay must be typed, double-spaced and in English; the preferred length is three to five pages.

7. *Resume*

Students are required to submit a one- to two-page typed resume, including educational background, work experience and relevant skills. Students are

welcome to include any published works, exhibitions, performances, awards or other relevant achievements. The resume should be chronological, beginning with your educational background and progressing to your employment history. Please refrain from functional resumes or those that simply summarize qualities or competencies. This professional vita complements the essay you will author by providing a chronology of all your educational and work experiences and of scholarly/creative work.

8. Portfolio

All applicants will submit a portfolio of recordings that represent their best accomplishments in audio production. Presentation, breadth of experience, technical and artistic quality will be evaluated.

The required submission format is Compact Disc (CD) or Digital Video Disc (DVD), with an annotated discography (index) to the portfolio material and a clear and accurate labeling of all material. Discography *must* include the applicant's function on each track (e.g. artist/performer, engineer, producer, arranger, etc.).

A DVD portfolio may be submitted if the student's primary experience is in visual media (film, TV, etc.). DVD portfolios must also contain an annotated discography.

Helpful tips for a good portfolio are available on the MSRA Web site. Portfolio submissions that do not follow these guidelines will not be evaluated, and the application will not be processed.

9. Application Fee

\$50 nonrefundable for domestic (within the USA) applicants

\$75 nonrefundable for international applicants

The application fee must be paid with a check, money order or by credit card. Cash will not be accepted. The fee must be paid in U.S. dollars.

Applications that do not include all of the requirements listed above or that include partial components are considered incomplete and will not be reviewed.

Required Courses

- MSRA 5000 - Introduction to Graduate Studies *Summer 2010 Registration:*
MSRA 5000
- MSRA 5580 - Graduate Audio Seminar *Summer 2010 Registration:* **MSRA 5580**
- MSRA 5590 - Graduate Audio Production *Summer 2010 Registration:* **MSRA 5590**

- MSRA 6510 - Graduate Audio Studies Pedagogy *Summer 2010 Registration:* **MSRA 6510**
- MSRA 6950 - Thesis in Professional Audio *Summer 2010 Registration:* **MSRA 6950**
- MSRA 6951 - Professional Audio Portfolio Thesis *Summer 2010 Registration:* **MSRA 6951**

Total: 18 Hours

Electives

Students may take courses not listed here, per approval of the faculty or academic advisor.

- MSRA 5500 - Topics in Professional Audio *Summer 2010 Registration:* **MSRA 5500** (fall and spring)
- MSRA 5505 - Audio Post Production I *Summer 2010 Registration:* **MSRA 5505** (fall and spring)
- MSRA 5575 - Graduate Surround Sound *Summer 2010 Registration:* **MSRA 5575** (fall and spring)
- MSRA 6530 - Graduate Audio Forensics *Summer 2010 Registration:* **MSRA 6530** (spring only)
or other courses as approved by MSRA advisor or program director.

Total: 34 Hours

Students may take courses not listed here, per approval of the faculty or academic advisor. Below is the suggested semester-by-semester sequencing of courses and semester hours.

Fall

- MSRA 5000 - Introduction to Graduate Studies *Summer 2010 Registration:* **MSRA 5000**
- MSRA 5590 - Graduate Audio Production *Summer 2010 Registration:* **MSRA 5590**
Topics course (1 semester hour)
Two MSRA electives (8 semester hours)

Total: 16 Hours

Spring

- MSRA 5580 - Graduate Audio Seminar Summer 2010 Registration: **MSRA 5580**
- MSRA 6510 - Graduate Audio Studies Pedagogy Summer 2010 Registration:
MSRA 6510
MSRA elective (4 semester hours)
Topics courses (3 semester hours)

Total: 14 Hours

Summer

- MSRA 6950 - Thesis in Professional Audio Summer 2010 Registration: **MSRA 6950** or
- MSRA 6951 - Professional Audio Portfolio Thesis Summer 2010 Registration:
MSRA 6951

Total: 4 Hours

Program Total: 34 Hours

The above progression is merely suggested and shows the quickest possible schedule for graduation (three semesters). Students may elect to enroll for less than the suggested semester hour total, and/or enroll in additional semesters as needed. Students can apply for graduation in any semester (fall, spring or summer) provided they have completed the required course work. All course work must be completed with a satisfactory grade of "B" (3.0) or higher. Students should not register for thesis/portfolio, unless approved by the faculty advisor.

Please refer to the master of science in recording arts Web site for additional information: <http://cam.ucdenver.edu/meis/recordingarts.htm>.

Visual Arts

Chair: Lanny F. DeVuono

Office: CU-Denver Building, 815D

Telephone: 303-556-2781

Faculty

Associate Professors:

Joann Brennan, MFA, Massachusetts College of Art

Mary Connelly, MFA, Indiana University

Brian DeLevie, MFA, University of Houston

Lanny F. DeVuono, MFA, Mills College

Carol Golemboski, MFA, Virginia Commonwealth University

Quintin Gonzalez, MFA, Yale University

Rian Kerrane, MFA, University of New Orleans

Assistant Professors:

Melissa Furness, MFA, University of Iowa

Bryan Leister, MFA, George Mason University

Jeffrey Schrader, PhD, New York University, MA, Oberlin College

Senior Instructors:

Michael Brohman, MA, UC Denver

Vivian George, MFA, Yale University

Department Overview

The Department of Visual Arts offers professional instruction in eight interrelated areas of study: art history, digital design, drawing, painting, photography, sculpture, transmedia and 3D graphics and animation. The Department of Visual Arts provides a vital educational environment where future artists and art historians explore the horizons of their own talent in the midst of critical dialogue, rigorous artmaking and multiple media. Art, art history, design and animation majors will take programs focused on the acquisition of skills specific to their chosen profession within the context of the rich academic offerings of the entire university. Each student's scholarly and creative work will be infused with innovative technology, contemporary theory and professionalism. Education in the visual arts encompasses a comprehensive knowledge of and direct experience with the various media of digital design, drawing, painting, photography and sculpture. Supporting this enterprise is the development of an understanding of art and media theory, knowledge of methods and materials used in making art and design, and an appreciation for diverse approaches to visual culture, both contemporary and historical. Central to the practice of art history are critical writing and analysis.

Graduating seniors receiving the BFA degree are required to participate in the BFA thesis exhibition during their last semester of study. These exhibitions are scheduled in the fall and spring terms only.

Bachelor of Fine Arts (BFA) Emphases

3D Graphics and Animation

Digital Design

Drawing

Painting

Photography

Sculpture

Transmedia

Bachelor of Arts (BA) in Fine Arts Emphases

Drawing

Painting

Photography

Sculpture

Bachelor of Arts (BA) in Fine Arts, Art History Emphasis

Visual Arts Minors

Art History

Digital Design

Sculpture

Studio Art

Studio Photography

Bachelor of Arts

Fine Arts BA — Art History

All students pursuing a BA in fine arts with an emphasis in art history must complete the 12 semester hours of visual arts foundation courses, the 18 semester hours of required art history emphasis courses and 15 semester hours of upper-division art history electives.

General Requirements

- All major courses within the major must be completed with a C (2.0) or better.
- All upper-division visual arts courses must be taken at UC Denver unless approved otherwise by visual arts faculty.
- 21 semester hours of all visual arts credits (at any level) must be taken at UC Denver.
- 18 semester hours of total visual arts courses must be upper-division.

Students must also follow the College of Arts and Media's general degree requirements.

Visual Arts Foundation Courses

- FINE 1100 - Drawing I Summer 2010 Registration: **F A 1100**
- FINE 1150 - Introduction to Photography Summer 2010 Registration: **F A 1150**
- FINE 1400 - Two Dimensional Design Summer 2010 Registration: **F A 1400**

- FINE 2015 - Intermedia Foundations Summer 2010 Registration: **F A 2015**
or
- FINE 2155 - Introduction to Digital Photography Summer 2010 Registration: **F A 2155**

Total: 12 Hours

Art History Required Emphasis Courses

- FINE 2600 - History of Art I (Survey) Summer 2010 Registration: **F A 2600**
- FINE 2610 - History of Art II (Survey) Summer 2010 Registration: **F A 2610**
- FINE 3600 - Art History Survey III: Non-Western Art Summer 2010 Registration: **F A 3600**
- FINE 4790 - Methods in Art History Summer 2010 Registration: **F A 4790**
- FINE 4951 - Bachelor of Art Thesis Summer 2010 Registration: **F A 4951**
Nonwestern Cultural Experience (**select one of the six options listed below***)

Total: 18 Hours

***Nonwestern Cultural Experience Options:**

1. Study abroad course that focuses on the art history or the language of host culture (consult art history faculty).
2. Any upper-division art history course in African, Latin American, Asian or African-American art. This cannot be used to fulfill any other degree requirement.
3. Third-semester study of a foreign language (consult the Department of Modern Languages if placement is needed).
4. Visual arts internship for credit in the College of Arts and Media. Project must focus on cultures outside of mainstream United States; e.g., Native American, Latin American, women studies, gay/lesbian studies, etc. Consult art history faculty.
5. FINE 4840 - Independent Study: FINE. Project/research must focus on cultures outside of mainstream United States; e.g., Native American, Latin American, women studies, gay/lesbian studies, etc. Consult art history faculty.
6. Cultural course: CNST 1000 - China and the Chinese or FREN 1000 - Introduction to Cultures of the French-Speaking World or GRMN 1000 - Germany and the Germans or SPAN 1000 - Introduction to Cultures of the Spanish Speaking World

Upper-Division Art History Electives

Students must complete five upper-division (3000/4000 level) art history courses. (Contact an advisor in the College of Arts and Media at CAMadvising@ucdenver.edu for a complete list.)

Total: 15 Hours

Bachelor of Arts in Fine Arts

Fine Arts BA — Drawing, Painting, Photography, Sculpture

All students pursuing a BA in studio fine arts must complete 27 semester hours of visual arts courses and also select a emphasis area, consisting of 21 additional semester hours. Students interested in pursuing a double emphases (e.g., emphases in drawing

and painting) are encouraged to consult a College of Arts and Media advisor to discuss required courses.

General Requirements

- All major courses in the major must be completed with a C (2.0) or better.
- All upper-division visual arts courses must be taken at UC Denver unless approved otherwise by visual arts faculty.
- 21 semester hours of visual arts credits (at any level) must be taken at UC Denver.
- 18 semester hours of total visual arts courses must be upper-division.

Students must also follow the College of Arts and Media's general degree requirements.

Required Visual Arts Courses

To be completed by all BA-seeking students:

- FINE 1015 - Interdisciplinary Foundations Summer 2010 Registration: **F A 1015**
- FINE 1100 - Drawing I Summer 2010 Registration: **F A 1100**
- FINE 1400 - Two Dimensional Design Summer 2010 Registration: **F A 1400**
- FINE 1500 - Three-Dimensional Design Summer 2010 Registration: **F A 1500**
- FINE 2015 - Intermedia Foundations Summer 2010 Registration: **F A 2015**
- FINE 2600 - History of Art I (Survey) Summer 2010 Registration: **F A 2600**
- FINE 2610 - History of Art II (Survey) Summer 2010 Registration: **F A 2610**
- FINE 4990 - Contemporary Art - 1945 To the Present Summer 2010 Registration: **F A 4990**
- FINE 4800 - Senior Art Seminar Summer 2010 Registration: **F A 4800**

Total: 27 Hours

Drawing Emphasis Courses

- FINE 2000 - Life Drawing Summer 2010 Registration: **F A 2000**
- FINE 3000 - Intermediate Drawing Summer 2010 Registration: **F A 3000**
- FINE 3310 - Drawing and the Printed Image Summer 2010 Registration: **F A 3310**
or
- FINE 4020 - Anatomy for the Artist Summer 2010 Registration: **F A 4020**
- FINE 4000 - Advanced Drawing I Summer 2010 Registration: **F A 4000**
____ - Upper-division Art History Elective (3 semester hours)

_____ - Visual Arts Electives (6 semester hours) *May include studio, lecture, internship or art history*

Total: 21 Hours

Painting Emphasis Courses

- FINE 2200 - Painting I Summer 2010 Registration: F A 2200
- FINE 2210 - Painting II: Figure Painting Summer 2010 Registration: F A 2210
- FINE 3200 - Intermediate Painting I Summer 2010 Registration: F A 3200
- FINE 3210 - Intermediate Painting II Summer 2010 Registration: F A 3210
- FINE 4200 - Advanced Painting I Summer 2010 Registration: F A 4200
- _____ - Upper-division Art History Elective (3 semester hours)
- _____ - Visual Arts Elective (3 semester hours) *May include studio, lecture, internship or art history*

Total: 21 Hours

Photography Emphasis Courses

- FINE 1150 - Introduction to Photography Summer 2010 Registration: F A 1150
- FINE 2155 - Introduction to Digital Photography Summer 2010 Registration: F A 2155
- FINE 3160 - Color and Studio Lighting Summer 2010 Registration: F A 3160
- FINE 3161 - The Silver Fine Print Summer 2010 Registration: F A 3161
Note: must be completed before 3171
- FINE 3162 - The Digital Fine Print Summer 2010 Registration: F A 3162
- FINE 3171 - Concepts and Processes in Photography Summer 2010 Registration: F A 3171
- FINE 3630 - History of Photography Summer 2010 Registration: F A 3630

Total: 21 Hours

Sculpture Emphasis Courses

- FINE 2500 - Bronze Casting and Metal Sculpture Summer 2010 Registration: F A 2500
- FINE 3500 - Modeling and Casting the Figure Summer 2010 Registration: F A 3500
- FINE 3510 - Installation Art Summer 2010 Registration: F A 3510
- FINE 4500 - Kinetic Sculpture Summer 2010 Registration: F A 4500
- _____ - Upper-division Art History Elective (3 semester hours)

_____ - Visual Arts Electives (6 semester hours) *May include studio, lecture, internship or art history*

Total: 21 Hours

Bachelor of Fine Arts in Fine Arts

Fine Arts BFA — 3D Graphics and Animation, Digital Design, Drawing, Painting, Photography, Sculpture, Transmedia

All students pursuing a BFA in fine arts must complete 28 semester hours of visual arts courses and also select an emphasis area, consisting of 54 additional semester hours. Students interested in pursuing a double emphases (e.g., emphases in drawing and painting) are encouraged to consult a College of Arts & Media advisor to discuss required courses.

General Requirements

- All major courses within the major must be completed with a C (2.0) or better.
- All upper-division visual arts courses must be taken at UC Denver unless approved otherwise by visual arts faculty.
- 27 semester hours of visual arts credits (at any level) must be taken at UC Denver.
- 25 semester hours of total visual arts courses must be upper-division.

Students must also follow the College of Arts and Media's general degree requirements.

Required Visual Arts Courses

To be completed by all BFA-seeking students:

- FINE 1015 - Interdisciplinary Foundations Summer 2010 Registration: **F A 1015**
- FINE 1100 - Drawing I Summer 2010 Registration: **F A 1100**
- FINE 1400 - Two Dimensional Design Summer 2010 Registration: **F A 1400**
- FINE 1500 - Three-Dimensional Design Summer 2010 Registration: **F A 1500**
- FINE 2015 - Intermedia Foundations Summer 2010 Registration: **F A 2015**
- FINE 2600 - History of Art I (Survey) Summer 2010 Registration: **F A 2600**
- FINE 2610 - History of Art II (Survey) Summer 2010 Registration: **F A 2610**
- FINE 3600 - Art History Survey III: Non-Western Art Summer 2010 Registration: **F A 3600**

- FINE 4990 - Contemporary Art - 1945 To the Present *Summer 2010 Registration: F A 4990*
- FINE 4950 - BFA Thesis *Summer 2010 Registration: F A 4950* (pass/fail)

Total: 28 Hours

3D Graphics and Animation Emphasis Courses

The digital animation center (DAC) program at the University of Colorado Denver is a competitive and rigorous four-year curriculum focused on preparing students to work in a wide variety of fields that use animated digital computer graphics (CG), including entertainment, film and television, gaming, medicine and science. Tuition rates in the 13 DAC classes are set higher than most undergraduate UC Denver courses due to the nature of the equipment, computing and software requirements of the program. At the time of this publication, tuition for FINE 1810 and FINE 1820 is \$1533.00 per course. Tuition for the other eleven courses is \$4050.00 per course. Students should refer to the course information listed on the University of Colorado Denver Web site for any changes in the current tuition rate for all DAC courses.

In order to maintain the highest standards of excellence for the UC Denver DAC, acceptance into the DAC core cadre comes at the end of the first year and is competitive by portfolio review. To be considered, students are required to take the first two courses in the DAC curriculum, FINE 1810 and FINE 1820. These two courses are open to all College of Arts & Media and UC Denver students with permission of the DAC. Students wishing to enroll in the DAC's entry level courses must contact DAC faculty member Howard Cook at howard.cook@ucdenver.edu or the College of Arts & Media Advising office at CAMadvising@ucdenver.edu to be able to register.

DAC Entry Courses (open enrollment):

- FINE 1810 - Digital Animation Foundations: Producing Animation *Summer 2010 Registration: F A 1810*
- FINE 1820 - Digital Animation Foundations: Introduction to Digital 3D *Summer 2010 Registration: F A 1820*

DAC Core Cadre Course Work (acceptance into the DAC Core Cadre is competitive through portfolio review):

- FINE 2810 - Digital Animation Techniques: Surface Modeling *Summer 2010 Registration: F A 2810*
- FINE 2820 - Digital Animation Techniques: Surface Properties *Summer 2010 Registration: F A 2820*

- FINE 2830 - Digital Animation Techniques: Lighting Summer 2010 Registration: **F A 2830**
- FINE 2850 - Digital Animation Techniques: 3D Character Creation Summer 2010 Registration: **F A 2850**
- FINE 3810 - Digital Animation Studio: Set/Environment Design Summer 2010 Registration: **F A 3810**
- FINE 3820 - Digital Animation Techniques: Rigging and Animation Summer 2010 Registration: **F A 3820**
- FINE 3830 - Digital Animation Technique: Character Animation Summer 2010 Registration: **F A 3830**
- FINE 3845 - Digital Animation Discovery and Preproduction Seminar Summer 2010 Registration: **F A 3845**
- FINE 3850 - Digital Animation Techniques: Dynamic Simulation Summer 2010 Registration: **F A 3850**
- FINE 4810 - Digital Animation Studio: Animation Production I Summer 2010 Registration: **F A 4810**
- FINE 4820 - Digital Animation Studio: Animation Production II Summer 2010 Registration: **F A 4820**

The following courses are required for 3D animation majors, but are offered at the standard UC Denver tuition rates:

- ENGL 2250 - Introduction to Film Summer 2010 Registration: **ENGL 2250**
- FINE 4632 - Media History and Aesthetics Summer 2010 Registration: **F A 4632**
 _____ - Visual Arts Electives (9 semester hours) May include studio, lecture, internship or art history

Total: 54 Hours

Digital Design Emphasis Courses

Admission into the BFA digital design program or the digital design minor is by portfolio review. This review process occurs April 1 or November 1 (or on the following business day if the deadline falls on a weekend or holiday) during a student's sophomore year after a student has met the following eligibility criteria:

University of Colorado Denver Students

- You have completed, or are in the process of completing, the following Foundation Studio classes: FINE 1100, FINE 1400, FINE 2015, FINE 2405 and FINE 2415 (FINE 2405 and FINE 2415 should be taken after a student's freshman year and are offered only in fall semester).

- A cumulative fine arts GPA of 2.75.

Transfer Students

- You have completed, and are transferring, a minimum of 24 semester hours from a previous institution.
- You have completed, or are in the process of completing, the equivalents of the following foundation studio classes: FINE 1100, FINE 1400, FINE 2405 and FINE 2415.
- A cumulative fine arts GPA of 2.75.

Students who are applying for entrance into the digital design program or minor are required to submit a portfolio that consists of (1) a written statement, (2) a designed portfolio on CD-ROM or DVD and (3) unofficial transcript(s) from all previous post-secondary education institutions with the understanding that digital design is a fall start program. Upon acceptance into the digital design program, students may register for upper-division digital design classes.

Please contact CAMadvising@ucdenver.edu for program and portfolio information, or contact the Digital Design Area Head Brian DeLevie at brian.delevie@ucdenver.edu.

Note that Digital Design offers FINE 3438, FINE 3441 and FINE 4434 to all majors.

Emphasis Course Requirements:

- FINE 2405 - Introduction to Digital Design Summer 2010 Registration: **F A 2405**
- FINE 2415 - Typography Studio Summer 2010 Registration: **F A 2415**
- FINE 3414 - Motion Design I Summer 2010 Registration: **F A 3414**
- FINE 3415 - Design Studio I Summer 2010 Registration: **F A 3415**
- FINE 3424 - Interactive Media Summer 2010 Registration: **F A 3424**
- FINE 3428 - Design Studio II Summer 2010 Registration: **F A 3428**
- FINE 3434 - 3D Motion Design Summer 2010 Registration: **F A 3434**
- FINE 3444 - Interactive Media II Summer 2010 Registration: **F A 3444**
- FINE 3454 - Motion Design II Summer 2010 Registration: **F A 3454**
- FINE 4400 - Design Studio III Summer 2010 Registration: **F A 4400**
- FINE 4480 - The Practice of Design Summer 2010 Registration: **F A 4480**
- FINE 4495 - Design Studio IV Summer 2010 Registration: **F A 4495**
- FINE 4632 - Media History and Aesthetics Summer 2010 Registration: **F A 4632**
- _____ - Studio Arts/Visual Arts Electives (15 semester hours) Consult advisor about course selection

Total: 54 Hours

Drawing Emphasis Courses

- FINE 1600 - Painting Methods and Materials Summer 2010 Registration: F A 1600
- FINE 2000 - Life Drawing Summer 2010 Registration: F A 2000
- FINE 2020 - Drawing II: Spatial Thinking and Visualization Summer 2010 Registration: F A 2020
- FINE 2100 - The Media of Drawing Summer 2010 Registration: F A 2100
- FINE 3000 - Intermediate Drawing Summer 2010 Registration: F A 3000
- FINE 3310 - Drawing and the Printed Image Summer 2010 Registration: F A 3310
- FINE 3230 - Abstract Drawing Summer 2010 Registration: F A 3230
- FINE 4000 - Advanced Drawing I Summer 2010 Registration: F A 4000
- FINE 4010 - Advanced Drawing II Summer 2010 Registration: F A 4010
- FINE 4020 - Anatomy for the Artist Summer 2010 Registration: F A 4020
- FINE 4100 - Painting & Drawing Theory & Practice Summer 2010 Registration: F A 4100
- FINE 4800 - Senior Art Seminar Summer 2010 Registration: F A 4800
 - _____ - Upper-division Art History Elective (3 semester hours)
 - _____ - Studio Arts Electives (9 semester hours)
 - _____ - Visual Arts Electives (6 semester hours) *May include studio, lecture, internship or art history*

Total: 54 Hours

Painting Emphasis Courses

- FINE 1600 - Painting Methods and Materials Summer 2010 Registration: F A 1600
- FINE 2000 - Life Drawing Summer 2010 Registration: F A 2000
- FINE 2200 - Painting I Summer 2010 Registration: F A 2200
- FINE 2210 - Painting II: Figure Painting Summer 2010 Registration: F A 2210
- FINE 3200 - Intermediate Painting I Summer 2010 Registration: F A 3200
- FINE 3210 - Intermediate Painting II Summer 2010 Registration: F A 3210
- FINE 3240 - Abstract Painting Summer 2010 Registration: F A 3240
- FINE 3300 - Painting and the Printed Image Summer 2010 Registration: F A 3300
- FINE 4100 - Painting & Drawing Theory & Practice Summer 2010 Registration: F A 4100
- FINE 4200 - Advanced Painting I Summer 2010 Registration: F A 4200
- FINE 4210 - Advanced Painting II Summer 2010 Registration: F A 4210
- FINE 4800 - Senior Art Seminar Summer 2010 Registration: F A 4800
 - _____ - Upper-division Art History Elective (3 semester hours)
 - _____ - Studio Arts Electives (9 semester hours)
 - _____ - Visual Arts Electives (6 semester hours) *May include studio, lecture, internship or art history*

Total: 54 Hours

Photography Emphasis Courses

Students must complete the first seven courses listed in the “Required Visual Arts Courses” section and FINE 1150 and FINE 2155 before going on to the upper-division photography courses. FINE 3160, FINE 3161 and FINE 3162 may be completed in any order after having completed FINE 2155. FINE 3161 must be completed before FINE 3171. FINE 3162 must be completed before FINE 3172. FINE 3630 and all 3000-level studio courses must be completed prior to beginning the advanced photography sequence (FINE 4195 and FINE 4196).

- FINE 1150 - Introduction to Photography Summer 2010 Registration: **F A 1150**
- FINE 2155 - Introduction to Digital Photography Summer 2010 Registration: **F A 2155**
- FINE 3160 - Color and Studio Lighting Summer 2010 Registration: **F A 3160**
- FINE 3161 - The Silver Fine Print Summer 2010 Registration: **F A 3161**
Note: must be completed before 3171
- FINE 3162 - The Digital Fine Print Summer 2010 Registration: **F A 3162**
Note: must be completed before 3172
- FINE 3171 - Concepts and Processes in Photography Summer 2010 Registration: **F A 3171**
- FINE 3172 - Digital Bookmaking Summer 2010 Registration: **F A 3172**
- FINE 3630 - History of Photography Summer 2010 Registration: **F A 3630**
- FINE 3631 - Photography: Theory and Criticism Summer 2010 Registration: **F A 3631**
- FINE 3635 - Photography Now Summer 2010 Registration: **F A 3635**
- FINE 4195 - Advanced Photography I Summer 2010 Registration: **F A 4195**
- FINE 4196 - Advanced Photography II Summer 2010 Registration: **F A 4196**
- FINE 4800 - Senior Art Seminar Summer 2010 Registration: **F A 4800**
____ - Studio Arts Electives (9 semester hours)
____ - Visual Arts Electives (6 semester hours) May include studio, lecture, internship or art history

Total: 54 Hours

Sculpture Emphasis Courses

- FINE 2500 - Bronze Casting and Metal Sculpture Summer 2010 Registration: **F A 2500**

- FINE 2510 - Wood and Metal Sculpture Summer 2010 Registration: F A 2510
- FINE 3500 - Modeling and Casting the Figure Summer 2010 Registration: F A 3500
- FINE 3510 - Installation Art Summer 2010 Registration: F A 3510
- FINE 3515 - Public Art Summer 2010 Registration: F A 3515
- FINE 3525 - Environmental Sculpture Summer 2010 Registration: F A 3525
- FINE 3530 - Iron Casting Summer 2010 Registration: F A 3530
- FINE 3535 - Sculpture Rendering Summer 2010 Registration: F A 3535
- FINE 4500 - Kinetic Sculpture Summer 2010 Registration: F A 4500
- FINE 4505 - Performance Art Summer 2010 Registration: F A 4505
- FINE 4510 - Advanced Sculpture Summer 2010 Registration: F A 4510
- FINE 4800 - Senior Art Seminar Summer 2010 Registration: F A 4800
 - _____ - Upper-division Art History Elective (3 semester hours)
 - _____ - Studio Arts Electives (9 semester hours)
 - _____ - Visual Arts Electives (6 semester hours) *May include studio, lecture, internship or art history*

Total: 54 Hours

Transmedia Emphasis Courses

Student must apply for admission to the Transmedia emphasis. For more information, please contact College of Arts and Media advising at CAMAdvising@ucdenver.edu.

- FINE 2405 - Introduction to Digital Design Summer 2010 Registration: F A 2405
- FINE 2510 - Wood and Metal Sculpture Summer 2010 Registration: F A 2510
- FINE 3414 - Motion Design I Summer 2010 Registration: F A 3414
- FINE 3424 - Interactive Media Summer 2010 Registration: F A 3424
- FINE 3434 - 3D Motion Design Summer 2010 Registration: F A 3434
- FINE 3438 - Text, Image and Electronic Art Summer 2010 Registration: F A 3438
- FINE 3441 - Narrative and Experience Summer 2010 Registration: F A 3441
- FINE 3510 - Installation Art Summer 2010 Registration: F A 3510
- FINE 3520 - Sculpture: Contemporary Artists and Concepts Summer 2010 Registration: F A 3520
- FINE 3535 - Sculpture Rendering Summer 2010 Registration: F A 3535
- FINE 4434 - Virtual Landscapes Summer 2010 Registration: F A 4434
- FINE 4500 - Kinetic Sculpture Summer 2010 Registration: F A 4500
- FINE 4510 - Advanced Sculpture Summer 2010 Registration: F A 4510
- FINE 4632 - Media History and Aesthetics Summer 2010 Registration: F A 4632
 - _____ - Studio Arts Electives (9 semester hours)
 - _____ - Visual Arts Elective (3 semester hours) *May include studio, lecture, internship or art history*

Total: 54 Hours

Non Degree

Art History Minor

To declare a CAM minor, please see the College of Arts & Media's Office of Advising and Student Services in Arts Building, 177.

Students may transfer up to 6 semester hours of non-UC Denver courses toward a minor. All other courses must be taken at UC Denver. Each course must be completed with a C/2.0 or better. Students pursuing a BA or BFA in fine arts may use up to 6 semester hours to fulfill major and minor requirements; the remaining semester hours must be taken in addition to the major requirements. Students pursuing a major in art history may not pursue a minor in art history. Consult a CAM advisor for further details.

Program Requirements

- FINE 2600 - History of Art I (Survey) Summer 2010 Registration: **F A 2600**
- FINE 2610 - History of Art II (Survey) Summer 2010 Registration: **F A 2610**
 - _____ - Upper-division Art History Electives (9 semester hours)
 - _____ - Studio Arts Elective (3 semester hours)

Total: 18 Hours

Digital Design Minor

Admission into the BFA digital design program or the digital design minor is by portfolio review. This review process occurs April 1 or November 1 (or on the following business day if the deadline falls on a weekend or holiday) during a student's sophomore year after a student has met the following eligibility criteria:

University of Colorado Denver Students

- You have completed, or are in the process of completing, the following Foundation Studio classes: FINE 1100, FINE 1400, FINE 2015, FINE 2405 and FINE 2415. (FINE 2405 and FINE 2415 should be taken after a student's freshman year and are offered only in fall.)
- A cumulative fine arts GPA of 2.75.

Transfer Students

- You have completed, and are transferring, a minimum of 24 credit hours from a previous institution.

- You have completed, or are in the process of completing, the equivalents of the following Foundation Studio classes: FINE 1100, FINE 1400, FINE 2405 and FINE 2415.
- A cumulative fine arts GPA of 2.75.

Students who are applying for entrance into the digital design program or minor are required to submit a portfolio that consists of (1) a written statement, (2) a designed portfolio on CD-ROM or DVD and (3) official or unofficial transcript(s) from all previous post-secondary education institutions with the understanding that digital design is a fall start program. Upon acceptance into the digital design program, students may register for upper-division digital design classes.

Those applying to the minor (and not the major) are not required to complete FINE 1100, FINE 1400 or FINE 2015 (or their college-level equivalents), but they must show equivalent studio work in their application portfolios.

Contact CAMadvising@ucdenver.edu for program and portfolio information, or contact the Digital Design Area Head Brian DeLevie at brian.delevie@ucdenver.edu.

Additional Information about the Minor

All courses for the minor must be taken at UC Denver unless approved otherwise by the digital design faculty advisor. Each course must be completed with a C/2.0 or better. Students pursuing a BA in fine arts (art history emphasis) may use up to 9 semester hours to fulfill major and minor requirements; the remaining semester hours must be taken in addition to the major requirements. Students pursuing a major in any of the studio arts may not pursue this minor. Consult a CAM advisor for further details.

Minor Course Requirements

- FINE 2405 - Introduction to Digital Design Summer 2010 Registration: **F A 2405**
- FINE 2415 - Typography Studio Summer 2010 Registration: **F A 2415**
- FINE 3414 - Motion Design I Summer 2010 Registration: **F A 3414**
- FINE 3415 - Design Studio I Summer 2010 Registration: **F A 3415**
- FINE 3424 - Interactive Media Summer 2010 Registration: **F A 3424**
- FINE 3434 - 3D Motion Design Summer 2010 Registration: **F A 3434**
- FINE 4632 - Media History and Aesthetics Summer 2010 Registration: **F A 4632**

Total: 21 Hours

Sculpture Minor

To declare a CAM minor, please see the College of Arts & Media's Office of Advising and Student Services in Arts Building, 177.

Students may transfer up to 6 semester hours of non-UC Denver courses toward a minor. All other courses must be taken at UC Denver. Each course must be completed with a C/2.0 or better. Students pursuing a BA in fine arts (art history emphasis) may use up to 9 semester hours to fulfill major and minor requirements; the remaining semester hours must be taken in addition to the major requirements. Students pursuing a major in any of the studio arts may not pursue this minor. Consult a CAM advisor for further details.

Program Requirements

- FINE 1500 - Three-Dimensional Design *Summer 2010 Registration: F A 1500*
- FINE 2500 - Bronze Casting and Metal Sculpture *Summer 2010 Registration: F A 2500*
- FINE 2510 - Wood and Metal Sculpture *Summer 2010 Registration: F A 2510*
____ - Art History Elective (3 semester hours)

Select three courses from the following:

- FINE 3500 - Modeling and Casting the Figure *Summer 2010 Registration: F A 3500*
- FINE 3510 - Installation Art *Summer 2010 Registration: F A 3510*
- FINE 4500 - Kinetic Sculpture *Summer 2010 Registration: F A 4500*
- FINE 4510 - Advanced Sculpture *Summer 2010 Registration: F A 4510*

Total: 21 Hours

Studio Art Minor

To declare a CAM minor, please see the College of Arts & Media's Office of Advising and Student Services in Arts Building, 177.

Students may transfer up to 6 semester hours of non-UC Denver courses toward a minor. All other courses must be taken at UC Denver. Each course must be completed with a C/2.0 or better. Students pursuing a BA in fine arts (art history emphasis) may use up to 6 semester hours to fulfill major and minor requirements; the remaining semester hours must be taken in addition to the major requirements. Students pursuing a major in any of the studio arts may not pursue this minor. Consult a CAM advisor for further details.

Program Requirements

Select two courses from the following:

- FINE 1015 - Interdisciplinary Foundations Summer 2010 Registration: **F A 1015**
- FINE 1100 - Drawing I Summer 2010 Registration: **F A 1100**
- FINE 1150 - Introduction to Photography Summer 2010 Registration: **F A 1150**
- FINE 1400 - Two Dimensional Design Summer 2010 Registration: **F A 1400**
- FINE 1500 - Three-Dimensional Design Summer 2010 Registration: **F A 1500**
- FINE 2015 - Intermedia Foundations Summer 2010 Registration: **F A 2015**
- FINE 2200 - Painting I Summer 2010 Registration: **F A 2200** (Students must have completed 1015, 1100, 1400 and 1600 prior to taking Painting I)

_____ - Art History Elective (3 semester hours)

_____ - Studio Arts Electives (6 semester hours)

_____ - Upper-division Studio Arts Elective (3 semester hours)

Total: 18 Hours

Studio Photography Minor

To declare a CAM minor, please see the College of Arts & Media's Office of Advising and Student Services in Arts Building, 177.

Students may transfer up to 6 semester hours of non-UC Denver courses toward a minor. All other courses must be taken at UC Denver. Each course must be completed with a C/2.0 or better. Students pursuing a BA in fine arts (art history emphasis) may use up to 6 semester hours to fulfill major and minor requirements; the remaining semester hours must be taken in addition to the major requirements. Students pursuing a major in any of the studio arts may not pursue this minor. Consult a CAM advisor for further details.

Program Requirements

- FINE 1150 - Introduction to Photography Summer 2010 Registration: **F A 1150**
- FINE 2155 - Introduction to Digital Photography Summer 2010 Registration: **F A 2155**
- FINE 3630 - History of Photography Summer 2010 Registration: **F A 3630**

Select three courses from the following:

- FINE 3160 - Color and Studio Lighting Summer 2010 Registration: **F A 3160**
- FINE 3161 - The Silver Fine Print Summer 2010 Registration: **F A 3161**
Note: must be completed before 3171
- FINE 3162 - The Digital Fine Print Summer 2010 Registration: **F A 3162**
Note: must be completed before 3172
- FINE 3171 - Concepts and Processes in Photography Summer 2010 Registration: **F A 3171**

- FINE 3172 - Digital Bookmaking Summer 2010 Registration: F A 3172
- FINE 3175 - Creative Commercial Applications Summer 2010 Registration: F A 3175

Total: 18 Hours

Business School

Dean: Sueann Ambron

Associate Dean of Faculty and Programs: Clifford E. Young

Associate Dean of Operations: Jean-Claude Bosch

Assistant Dean: Linda J. Brooker

Contacts

Dean's Office

UC-Denver Building

1250 14th Street, 2nd Floor

303-315-8000

Fax: 303-315-8040

www.business.ucdenver.edu

Mailing Address

The Business School

Campus Box 165

P.O. Box 173364

Denver, CO 80217-3364

Admissions/Advising

Undergraduate: 303-315-8100

Graduate: 303-315-8200

Application Deadlines

Undergraduate

Fall—August 1

Spring—December 1

Summer—May 1

Graduate

Fall—June 1

Spring—November 1

Summer—April 1

Executive MBA

Fall—June 1

11-month MBA

Fall—June 15

Located in the heart of the Rocky Mountain business community, the Business School at the University of Colorado Denver prepares students with the knowledge and skills necessary to become effective, responsible business professionals. We're able to achieve a standard of excellence by bringing together nationally recognized faculty and highly motivated, mature students in an intellectually challenging academic environment. UC Denver's Business School is a research institution. Because our faculty are nationally recognized for scholarly research as well as for their teaching skills, our students have the opportunity to be on the leading edge of business management theory and practice. Our class schedules and curriculum offer flexibility to meet your needs whether you plan to attend full or part time, day or evening. Whether you're an experienced working professional seeking an advanced degree or preparing for a new career in the business world, you'll gain the knowledge and perspective necessary to succeed in today's challenging business environment.

Educational Goals

The Business School is committed to superb teaching, connecting theory to practice that focuses on:

- current and relevant knowledge and skills necessary for success in the highly competitive global business environment
- experience in cooperative and team-based work skills
- integrated professional and functional expertise
- Sensitivity to cultural and ethnic diversity

Our graduate programs serve both traditional and nontraditional students who have extensive work experience. The MBA serves the needs of students who desire a general business education. The professionally oriented MS degrees serve the needs of students who desire greater specialization, particularly students who have already obtained an undergraduate business degree. Large numbers of our graduate students will be drawn from national and international locales.

Our undergraduate program, which serves both traditional and nontraditional students, leads to a baccalaureate degree in business with a substantial liberal arts component. The program is closely linked, through articulation agreements, to lower-division programs offered by Colorado's four-year and community colleges.

Key elements of our academic programs are the provision of top-quality career advising and placement services, as well as flexible schedules and programs to meet a wide range of student needs. We are committed to assisting our students' efforts to pursue rewarding careers.

Faculty

Our nationally recognized faculty is vigorous and enthusiastic about its teaching and research. Faculty members hold degrees from the nation's leading business schools, including Berkeley, Harvard, Stanford, University of Chicago, University of Pennsylvania, UCLA and Yale. Many of them also bring years of valuable experience in private industry. Their interdisciplinary expertise, academic achievements, scholarly research and business experience provide students with a dynamic learning environment.

Scholarships and Financial Aid

Many programs for financial aid are administered by the Office of Financial Aid . Call 303-556-2886 for detailed information.

Thanks to the generous support of the Colorado business community and others, the Business School has a significant number of scholarships to offer its students. Scholarships are awarded on the basis of merit and/or financial need. The amount of the award and the number of awards available vary.

Thirty different scholarships are available to eligible Business School students, with multiple awards from most scholarships. Go to www.business.ucdenver.edu for more details.

- *Undergraduate* scholarships include the Board of Advisors, the Business School Undergraduate Excellence, the Carolyn Lee Henderson, the Robert E. Moore Memorial, the Business School Sustaining Student, the Dean's Community Scholarships, the Scholarship for International Study and the Dean's Scholarship for Continuing Undergraduate Business Students.
- The MBA Outstanding Scholar Award, the MBA Opportunity Scholarship and the MBA Faculty's Scholarship are given to qualifying MBA students.
- *Accounting* scholarships for both graduate and undergraduate accounting students include the Deloitte & Touche and Accounting Program Scholarship, as well as the Price water house Coopers Scholarship for undergraduate junior accounting majors only.
- *MS finance* scholarships are the MS Finance Fellows, open to graduate students in the finance program, and the Carolyn Lee Henderson Scholarship, designated for students in the finance program.
- *MS health administration* scholarships include the Abbott Fellows, AUPHA/McGaw, UC Denver MS Health Administration, Eugenie D. Sontag,

Leland R. Kaiser, Medical Group Management and the MS Health Administration Alumni Scholarships.

- *MS information systems* students may apply for the Dean's Scholarship in Information Systems.
- The *MS international business* Merit Scholarship is open to students in the UC Denver MS international business program.
- *MS management or human resources management* students may apply for the Excellence in Management or the Excellence in Human Resource Management Scholarship.
- *MS marketing* students may apply for the MS Marketing Sustaining Student, MS in Marketing Fellows and Robert E. Moore Memorial Scholarships (also open to undergraduate marketing students).
- Four scholarships are available to students who take courses in entrepreneurial studies at the Richard H. and Pamela S. Bard Center for Entrepreneurship Development. These are the Coulter Foundation Scholarships in Entrepreneurial Studies and Business, and the Dean's Pursuit of Excellence, Mehalchin and Trueblood Scholarships.

Further information about these scholarships, including eligibility criteria and application forms, may be obtained by visiting the Business School Web site at www.business.ucdenver.edu (click on scholarships) or by calling 303-315-8000.

Study Abroad

Transfer credit from study abroad programs requires prior written approval from the undergraduate or graduate program director. Students must meet with a business staff advisor to determine course acceptability prior to the semester in which they intend to study abroad. Information on the various programs is available at the [Office of International Affairs](#)

Institute for International Business

The Institute for International Business (IIB) was created in 1988 by the Board of Regents of the University of Colorado to serve as a center for the advanced study and teaching of international business. In 1993, the institute was designated a Center for International Business Education and Research by the U.S. Department of Education, one of only 25 such centers of excellence in the United States. Through the CIBER and other funding sources, the institute strives to help the faculties of the Business School and other university departments to internationalize curriculum, programs, certificates or other student-oriented endeavors. The IIB works in other ways to support faculty in their teaching, research and development activities. In addition, the institute designs and facilitates customized international programs and training for business, cooperates with other organizations to offer seminars and conferences and publishes a quarterly newsletter to familiarize the Denver and regional communities with international

business issues. Such initiatives help faculty, students and the business community to acquire the skills and expertise needed to be successful in our increasingly global economy. The institute also conducts and promotes research on the global economic aspects of competitiveness. Call 303-315-8436 for information.

Internships

Internships are included in the experiential learning requirement of the undergraduate business program. To be eligible to enroll in an internship for experiential learning credit, the undergraduate student must meet the following grade and course work requirements:

- the student must be in good standing with a cumulative GPA of at least 2.0, and a GPA in the area of emphasis of at least 2.0
- the student must have completed (a) all required lower-division course work and (b) at least 21 semester hours of the business core courses

Graduate students must be admitted to the Business School, be in good standing with at least a 3.0 GPA and have completed 15 semester hours of graduate work at the Downtown Campus.

Interested students should contact the Experiential Learning Center (303-556-6656) for further details about the program.

General Academic Policies

Academic policies that apply to all students on the UC Denver Downtown Campus are described in “[Registration and Records](#)” and [University Policies](#). The policies outlined on the following pages are relevant for both undergraduate and graduate students in the Business School. Individual policies appropriate only to undergraduate or graduate students are described under separate headings. Each student is responsible for knowing and complying with the academic policies and regulations established for the school. The school cannot assume responsibility for problems resulting from a student’s failure to follow the policies stated in this catalog. Similarly, students are responsible for all deadlines, rules and regulations stated in the online schedule planner.

Academic Ethics

Students are expected to conduct themselves in accordance with the highest standards of honesty and integrity. Cheating, plagiarism, illegitimate possession and disposition of examinations, alteration, forgery, falsification of official records and similar acts or any attempt to engage in such acts are grounds for suspension or expulsion from the university. In particular, students are advised that plagiarism consists of any act involving the offering of the work of someone else as the student’s own. It is recommended that students consult with the instructors as to the proper preparation of reports, papers, etc., to avoid this and similar offenses. Also, actions that disrupt the administrative process,

such as misrepresentation of credentials or academic status, other forms of deception or verbal abuse of university staff are grounds for suspension or probation. All reported acts of dishonesty must be referred to the Business School's Internal Affairs Committee.

Admission to Business Classes

Enrollment in business classes is limited to students who have been admitted to business degree programs and to other students as described in the separate undergraduate and graduate policy sections. The course registration criteria are designed to meet a number of objectives:

- to assure access to business courses for students seeking a business degree
- to serve students in other colleges who have business-related education objectives or requirements
- to serve nondegree students who have specific career or education goals

Refer to the [online schedule planner](#) each term for course availability and prerequisites.

Attendance Regulations

Students are required to attend classes, including online classes, on a regular basis. Absences must be arranged with the instructor and must conform with university and instructor policies on attendance.

Prerequisites

Students are expected to know and fulfill all prerequisites when registering. See course listings for relevant prerequisites as they are strictly enforced. The Business School reserves the right to administratively drop students who enroll without the correct prerequisites. This action may result in the loss of tuition.

Course Numbering

The course numbering system used at the Downtown Campus of UC Denver identifies the class standing required for enrollment. Students are expected to take 1000-level courses in their freshman year, 2000-level courses in their sophomore year, 3000-level courses in their junior year and 4000-level courses in their senior year. Courses at the 5000 and 6000 level are restricted to master's-level business students, and courses at the 7000 level are restricted to PhD students.

Adding Courses

Students may add courses to their original schedule through the census date (first 12 days of the fall or spring semester, first eight days of summer session). Instructor approval may be required to add a course after the first week of classes.

Dropping Courses

Students may drop a course through the census date and it will not appear on the transcript. After census, a student who wishes to drop must obtain written approval from both the instructor and academic dean or designate. The course and a grade of *W* will appear on the transcript. In order to drop beyond the 10th week, it will also be necessary to document circumstances beyond a student's control. Any student who is failing a class will not be allowed to drop, and an *F* will be recorded on the transcript. See the [academic calendar](#) for deadlines and costs involved.

Withdrawal

See [Registration and Records](#) for universitywide withdrawal policies. Note that the Business School normally requires instructors' signatures on withdrawal forms before the academic dean's approval is granted.

Administrative Drop

The school reserves the right to administratively drop students who are incorrectly enrolled in business courses. Instructors also may recommend that students who fail to meet expected course attendance or course prerequisites be dropped from the course. Generally, students who are administratively dropped will not receive tuition refunds.

Note that students who never attend class are not automatically dropped from the course. The student is responsible for payment and for the grade in each course.

Appeal Procedure

Students should contact a staff advisor in the Business School's programs office for appeal and petition procedures pertaining to rules and regulations of the school. For grade appeals, contact the Business School dean's office.

General Grading Policies

Plus/Minus Grading. Faculty have the option to use plus/minus grading.

Incomplete Grades. The only incomplete grade given in the school is *I*. An *I* grade is assigned only when documented circumstances clearly beyond the student's control prevent completion of course requirements (exams, papers, etc.). Students must sign a contract outlining how they will make up the missing work with the instructor giving the *I*. Students may not register for the course a second time. All *I* grades must be made up within the contract period (which may not exceed one year), or the *I* will automatically be changed to the grade of *F*.

Also, *I* grades must be completed and recorded at the Office of the Registrar no later than four weeks prior to graduation. The student is responsible for contacting the instructor concerning the removal of incomplete grades.

Grade Changes. Grades as reported by instructors are final. Grade changes will be considered only in cases of documented clerical errors or when a student is making up an incomplete grade (*I*). All changes must be made within one year after the course has been taken, unless highly unusual circumstances can be documented and the change has been approved by the school. Normally, grade changes will not be considered under any circumstances after three years.

Pass-Fail or No Credit (Audit). With the exception of internships, experiential learning and travel study courses, the Business School does not permit election of pass-fail grading for any business course required for the degree. Students are not allowed to audit business courses.

Academic Programs

A carefully designed curriculum to prepare students for success in business administration is available for the student seeking either an undergraduate or graduate degree. The school offers courses leading to the bachelor of science, master of business administration (MBA), the master of science (MS) and doctor of philosophy (PhD) degrees. www.business.ucdenver.edu

It is possible to pursue two degrees simultaneously, such as an MBA and an MS, or two MS degrees, through our dual degree programs. In addition to the programs in the Business School itself, we partner with other university departments to offer dual programs in MS finance/economics and the MBA in combination with graduate programs in architecture, economics, urban planning and the MD. We also have a joint MBA/MS in international management degree through Thunderbird in Glendale, Arizona.

Undergraduate Degree Programs

Associate Dean: Clifford E. Young

Director Advising and Admissions: Nancy A. Reed

E-mail: nancy.reed@ucdenver.edu

The undergraduate curriculum leading to the bachelor of science (business administration) degree is intended to help the student achieve the following general objectives:

- an understanding of the activities that constitute a business enterprise and the principles underlying administration of those activities
- the ability to think logically and analytically about the kind of complex problems encountered by management
- facility in the arts of communication
- a comprehension of human relationships involved in an organization
- awareness of the social and ethical responsibilities of those in administrative positions
- skill in the art of learning that will help the student continue self-education after leaving the campus

Undergraduate Admissions

Telephone: 303-315-8100

Fax: 303-315-8199

Admission of Freshman Students

Freshman applicants must have completed the college preparatory curriculum in high school, graduated in the top 25 percent of their high school class and achieved a score of at least 26 on the ACT or 1100 on the SAT. See [Information for Undergraduate Students](#) for further information on freshman admission.

Admission of Transfer Students

Applicants who have completed work at other collegiate institutions should review the information for transfer students in [Information for Undergraduate Students](#). In addition to general university transfer policies, the Business School evaluates course work to determine its appropriateness for the degree bachelor of science (business administration). Students who have completed more than 24 semester hours of transferable course work are evaluated for admission on the basis of their college GPA without regard to their high school performance. Transfer applicants with fewer than 24 transferable hours will be evaluated on the basis of both high school and college work.

Applicants are evaluated only on course work that applies to the business degree program. Generally, this will exclude course work of a technical or vocational nature and

courses in activity PE and remedial subjects. For information about specific policies on transfer of credit, consult the undergraduate business program coordinator.

For admission to the Business School, a transfer applicant must have a minimum 3.0 GPA for all work applicable to the bachelor of science (business administration) degree and a 2.0 GPA in business courses. Applicants with less than an overall 3.0 GPA may be evaluated and admitted on a space available basis.

Intra-University Transfer

Students who want to transfer to the Business School from another college or school of the University of Colorado Denver must formally apply to the Business School. To apply for an intra-university transfer, students must submit an intra-university transfer (IUT) form and transcripts from University of Colorado to the business program coordinator. Transfer forms are available at the Office of Admissions or the Business School Advising Office; transcript request forms are available at the Office of the Registrar. The transcript must include the student's most recent semester at the university. Students with previous course work from other institutions are also required to submit a copy of their transfer credit evaluations (advanced standings). Transfer deadlines are August 1 for fall semester, December 1 for spring semester and May 1 for the summer session. In general, the admission standards for intra-university transfer are the same as for transfer from other institutions as listed above.

Former Students

A University of Colorado student from another campus, or a Downtown Campus student who has not registered for three consecutive semesters (summers included), is considered a former student and must reapply for admission. Former Downtown Campus business degree students will be automatically readmitted to the school for up to three years from the semester they last attended if they are in good standing (not on probation or suspension) in the school. Students who have not attended for more than three years, or who have completed the equivalent of 12 or more semester hours at another institution of higher education, must meet the admission and degree requirements applicable at the time they reapply.

Old Work Policy

For students newly admitted to the Business School and former business students readmitted to the school after an absence of three semesters, applicable credits up to five years old will be counted toward business degree requirements. Courses more than five years old will be evaluated individually for their current relevance to the degree program. Students may be required to update their knowledge by taking additional courses when past courses are outdated; in such cases, credit will be given for both

courses. Generally, business courses more than 10 years old will not apply toward degree credit.

Second Undergraduate Degree

Students may apply to the Business School to earn a second undergraduate degree, provided the first undergraduate degree is in a field other than business. Persons who have already earned an undergraduate degree in business may not apply for a second undergraduate degree in business. Applications are available through the Office of Admissions.

If a student has an academic record that justifies consideration for a graduate program, that student is encouraged to apply for one of the Business School's master's degree programs. Call 303-315-8200 for information or refer to the graduate business section of the catalog.

Students who are accepted for the second undergraduate degree will be required to pursue courses in the sequence normally required for a business degree. For example, if a student registered for a second degree has not had the required mathematics or general education courses, these must be taken before the student will be eligible to register for business courses. Further, the basic business courses (core courses) must be taken before a student begins to pursue the major field.

Double Degree Programs

Numerous career opportunities exist for persons trained in both a specialized field and management. For this reason, students may be interested in combined programs of study leading to completion of degree requirements concurrently in two fields. For additional information, contact an undergraduate business staff advisor at 303-315-8100.

Undergraduate Advising and Academic Planning

Admissions Advising

Persons not yet admitted to the Business School can receive advising on course selection, admission requirements and other matters from an undergraduate staff advisor. To make an appointment, call 303-315-8100.

Admitted Students

Upon admission to the school, students execute a degree plan that identifies the courses required to graduate. This plan contains all the information needed to select courses and monitor progress toward completion of requirements for the bachelor of science (business administration). Business students are expected to assume responsibility for their own advising. This includes scheduling courses each term, meeting prerequisite requirements, being familiar with all the policies and procedures of the college and otherwise managing their own academic careers. Staff advisors are available to answer questions about unusual situations.

Career advising is available from the Career Center, 303-556-2250.

Undergraduate Core Curriculum—University of Colorado Denver

The faculty of the Business School, College of Engineering and Applied Science and the College of Liberal Arts and Sciences have established a core curriculum for undergraduate students. All undergraduate students are required to complete the undergraduate core curriculum in dependent of their college or major.

The undergraduate core curriculum for the Downtown Campus is outlined [here](#); the core requirements for business students are specified in the section labeled “Business Program Requirements.”

The undergraduate core curriculum seeks to provide all baccalaureate students with basic intellectual competencies in English, mathematics, biological and physical sciences, behavioral sciences, social sciences, humanities and arts. Furthermore, the core curriculum promotes an awareness of cultural diversity and international perspective. The majority of the core curriculum is designed to be completed during a student’s freshman and sophomore years in order to provide the foundation for specific training in a student’s major discipline.

Graduation Requirements

The bachelor of science (business administration) degree requires the following:

Total Credits. A total of 120 semester hours.

A minimal level of proficiency must be demonstrated in one foreign language or in regional expertise. Students may satisfy the proficiency requirement by taking courses as described below.

Area of Emphasis. Completion of at least 9–21 semester hours of approved courses in the area of emphasis.

Residence. At least 30 semester hours of business courses (including the business area of emphasis) must be completed after a student's admission to the Business School. The 30 hours for residence must include MGMT 4500 and 27 hours in other 4000-level business courses (including area of emphasis courses).

GPA Requirement. To graduate, a student must maintain a minimum cumulative scholastic GPA of 2.0 for all courses attempted at the university acceptable toward the BS (business administration) degree, 2.0 for all business courses and 2.0 for courses in the student's area of emphasis.

Undergraduate Honors. Upon recommendation of the faculty, students who demonstrate superior scholarship are given special recognition at graduation. Students must achieve an overall University of Colorado GPA of 3.3 and a GPA of 3.5 in all business courses taken at the University of Colorado to be considered for *cum laude*. Those who achieve an overall University of Colorado GPA of 3.5 and a GPA of 3.7 in all business courses taken at the University of Colorado will be considered for *magna cum laude*. Those who achieve a 3.7 overall GPA and a 3.85 GPA in all business courses will be considered for *summa cum laude*.

Filing for Graduation. A senior audit is completed on all students who have completed 90 or more semester hours. Students must file an undergraduate candidacy form and diploma card and request a graduation evaluation prior to registering for their final semester. Failure to do so will delay graduation. Also, students desiring to change their area of emphasis after filing for graduation must have the change approved by the graduation coordinator prior to registering for their final semester. Changes after that time will delay graduation.

Undergraduate Core Curriculum for BS in Business

Intellectual Competencies

English, 6 semester hours

Mathematics, 3 semester hours

Knowledge Areas, 6-7 semester hours total

Biological and Physical Sciences, 3 semester hours

Humanities, 3 semester hours

Arts, 3 semester hours

Behavioral Sciences, 3 semester hours
Social Sciences, 3 semester hours

Cultural Diversity, 3 semester hours total

International Perspectives, 3 semester hours total

34 semester hours total

Business Program Requirements

Satisfaction of all the following:

Program Requirements

School proficiencies or other courses, 0-10 semester hours

UC Denver Downtown Campus core, 34 semester hours

Business School specific graduation requirements - see Business School policy, 12 semester hours

Business core, 33 semester hours

International studies, 3 semester hours

Experiential learning, 3 semester hours

Area of emphasis and other courses, 21 semester hours

Other business and nonbusiness courses, 4 semester hours

120 semester hours total

Detailed descriptions of degree course plans that satisfy program requirements follow:

Business School Foreign Language Hours Proficiency

The Business School's foreign language requirement or regional expertise for the 2008–2009 academic year requires that students demonstrate a minimum level of proficiency in one foreign language.

This requirement is met through completion of one of the following:

- a second-year (Level II) high school course with a minimum grade of C (2.0)*
- a second-semester-level college course (1020) with a minimum grade of C (2.0)
- satisfactory proficiency testing, including taking and passing a proficiency exam

***High school courses will not apply toward degree credit; however, they will waive the specific requirement from having to be done at the college level.**

Student's choosing the regional expertise requirement with one year of high school foreign language or one semester of college level work can satisfy the requirement by completing a minimum of 6 semester hours of course work from an approved list that

relates to the politics, arts, history, culture or economy of any region of the world other than North America.

Courses used in the expertise area must meet the Business School guidelines and can be chosen from the list specified by the Business School. Students should contact their business advisor to outline their program, 303-556-5800.

Students who must meet all the proficiency requirements through course work at UC Denver may find it necessary to complete more than 120 semester hours to earn the BS in business administration. The proficiency requirement must be completed during the first three terms in attendance at the Downtown Campus.

Academic Policies for Selecting Courses

Registration

For registration, go online to www.ucdenver.edu/registrar.

Maximum Units per Term

The normal scholastic load of an undergraduate business student is 15 semester hours, with a maximum of 18 hours allowed during the fall/spring semesters and 12 hours allowed during the summer session. Hours carried concurrently in the Division of Continuing Education, University of Colorado-Boulder, or the Downtown Campus Extended Studies Programs, whether in classes or through correspondence, are included in the student's term load.

Repeating Courses

A failed course (grade of *F*) may be repeated; however, the *F* will be included in the GPA and will appear on the transcript. Students must earn at least a *C* grade in required business core courses. Core business courses must be repeated if the student earns less than a *C* grade.

Courses from Other Institutions

Business students must have the written approval of the business program director to register for courses (excluding MSCD pooled courses) offered by other institutions, including other University of Colorado locations. Credit will not be given for courses taken without approval. Grades of *C* or better must be earned to receive business degree credit. Generally, only nonbusiness electives or lower-division, nonbusiness requirements are acceptable for transfer from other institutions once a student has been admitted to the Business School. Students who, after admission to the college, take

more than 12 semester hours from another institution, must reapply for admission to the college as transfer students and must meet the current admission requirements.

Metropolitan State College of Denver Courses

Business students may select their nonbusiness required and elective courses from those offered by MSCD. Grades of *C* or better must be earned to receive business degree credit; however, the grade is not computed in the University of Colorado GPA and is treated like other transfer credits. MSCD business courses may not be taken for Downtown Campus business degree credit.

Graduate-Level Courses

With prior written approval of the business program coordinator, students may take a maximum of 6 semester hours of graduate-level nonbusiness elective credits. Students must earn grades of *B* or better in graduate courses to apply the credits toward business degree requirements.

Pass/Fail

Only internships, independent studies and nonbusiness elective courses may be taken pass/fail. Required business and nonbusiness courses (including the campus core) may *not* be taken pass/fail. A maximum of 6 hours pass/fail credit may be applied toward the business degree. Courses taken in excess of the maximum will not be applied toward degree credit. Pass/fail determination must be made within the posted deadlines (at census dates) and may not be rescinded (unless approved by the undergraduate committee).

Correspondence Courses

Only 6 semester hours of credit taken through correspondence study (from regionally accredited institutions) will be applied toward the business degree. Business courses may not be taken by correspondence. All correspondence courses must be evaluated by the business program coordinator to determine their acceptability toward degree requirements, and the program coordinator's written approval is required *prior to* the student's registering for courses. Students may contact the Division of Continuing Education, University of Colorado-Boulder, for correspondence course offerings and registration procedures.

Independent Study

Junior or senior business students desiring to work beyond regular course coverage may take variable credit courses (1–3 semester hours) as nonbusiness electives under the direction of an instructor who approves the project, but the student must have the appropriate approval before registering. A maximum of 3 semester hours of independent study course work may be taken in any one semester; a maximum of 6 semester hours may be applied toward degree requirements. An independent study request form must be signed by the student, the instructor, the program director and the director of advising and admissions.

Academic Policies for Suspension and Probation

To be in good standing, students must maintain an overall University of Colorado GPA of 2.0 ($C = 2.0$) or better for *all course work attempted* and a 2.0 GPA or better for *all business courses attempted*. PE activity courses, remedial course work, MSCD courses and repeated courses not approved by a business advisor are not included in this average. When semester grades become available, students falling below the 2.0 GPA will be notified of (1) probationary status or (2) suspension. Students are responsible for being aware of their academic status at all times; late grades and/or late grade notification does not waive this responsibility. School rules governing probation and suspension are as follows:

1. Any student whose overall GPA or business course GPA is less than 2.0 will be placed on probation immediately. A student may be removed from probation when the overall GPA and business GPA have been raised to 2.0.
2. A student may remain on probation as long as he/she maintains normal degree progress each semester as determined by the school *and* each term, while on probation, obtains an overall term GPA of 2.5 and term business course GPA of 2.5, with no grade below a C. Failure to meet probationary provisions will result in suspension. Probationary status may continue only until the student has completed a maximum of 12 semester hours or four terms, whichever comes first; summer is considered a term. The student will be suspended if the GPA deficiency is not cleared within this time.
3. Suspended students may not attend any campus of the University of Colorado or any division of the university (including continuing education or extended studies credit classes).
4. Students on suspension may petition for readmission to the school after waiting a minimum of one year from the term in which they were suspended. Generally, petitions are granted only in unusual circumstances. Any suspended student re-admitted to the school will be under contract and placed on a continued probation status until the GPA deficiency has been cleared. Such students will be automatically suspended if, at any time, their overall GPA or business GPA again falls below 2.0.

5. Students earning all failing grades for a semester will have a dean's stop placed on their record and will not be permitted to register without a business advisor's approval.
6. Combined degree students are required to maintain the same standards of performance as Business School students in order to be continued in a combined program.

Areas of Emphasis

Business students must choose an area of emphasis and complete the requirements for the area. The area of emphasis provides specialization beyond the general background that is provided by the undergraduate core and the business core, both of which are required to be fulfilled prior to completing the area of emphasis courses. Areas of emphasis within the BS in business administration program include:

- Accounting (financial, managerial, accounting/information systems)
- Financial Management (financial management/information systems)
- Human Resources Management
- Information Systems
- International Business
- Management (management/information systems)
- Marketing (marketing/information systems)

Graduate Business Programs (MBA/MS/PhD)

Associate Dean: Clifford E. Young

Assistant Dean: Linda J. Brooker

Telephone: 303-315-8200

Fax: 303-315-8199

E-mail: grad.business@ucdenver.edu

The Business School offers programs leading to a doctor of philosophy, the master of business administration and the master of science in specific fields of business and health administration. In addition, the master of business administration for executives (executive MBA) is offered as a multi campus program of the University of Colorado business schools, and the executive program in health administration (executive MBA/HA) is offered through the executive health network.

The PhD, MBA, the executive MBA and the MS degree in business are accredited by AACSB International, the Association to Advance Collegiate Schools of Business. The health administration MBA and MS degrees are also accredited by the Commission on Accreditation of Healthcare Management Education (CAHME).

For a list of graduate business programs, see [Program Curricula](#) below.

Requirements for Admission to the MBA and MS Programs

Admissions Advising

Persons contemplating graduate study are encouraged to learn about admission and program requirements by scheduling an appointment with a graduate advisor or attending one of the regularly scheduled prospective student information meetings. Call 303-315-8200.

Admission to the graduate programs in business is granted only to students showing high promise of success in graduate business study. Admission is based on the following indicators of the candidate's likelihood to succeed in the program.

Academic Record

The bachelor's degree must be earned from a regionally accredited university. The total academic record is considered, including the GPA, the course of study and the quality of the program.

Required Testing

The GMAT is required for admission consideration for any applicant who does not have a post-baccalaureate degree. The GMAT is administered at numerous centers throughout the world. For information and to make application for the test, write to: GMAT, Educational Testing Service, CN 6103, Princeton, NJ 08541; or phone 1-800-GMATNOW; or visit www.mba.com. The code numbers for UC Denver's graduate business programs are as follows:

MBA: MPB-OG-78

MS: MPB-OG-75

PhD: MPB-OG-29

Work Experience

A record of appropriate employment at increasing levels of responsibility is considered a positive indicator of the likelihood of successful completion of graduate work. A resume must be submitted with the application materials.

Background Requirements

Students applying for graduate programs in business do not need to have taken their undergraduate degrees in business. The MBA program is specifically designed so that the required courses cover the material needed for completion of the degree. There are no prerequisites needed to start the MBA program. Applicants for the MS degree,

however, may be required to take background or common body of knowledge courses, depending on the individual's academic background. Students with nonbusiness backgrounds have completed the program successfully. For more detailed information, phone a graduate academic advisor, 303-315-8200.

It is expected that students have an adequate level of personal computer proficiency in a word processing and spreadsheet software, as well as a good working knowledge of basic algebra and proper English.

The Admission Process

Mailing address for applications:

Graduate Admissions
The Business School
University of Colorado Denver
Campus Box 165, P.O. Box 173364
Denver, CO 80217-3364

Students seeking admission to the 11-month MBA, MBA with an emphasis in health administration, MS in health administration or executive programs should consult with the relevant catalog sections for additional application criteria or requirements.

Domestic Application Requirements

- Complete parts I and II of the application for graduate admission and the four essay questions.
- Have required GMAT scores sent directly to the graduate business admissions office from the Educational Testing Service. The code for UC Denver's graduate business programs is as follows:

MBA: MPB-OG-78

MS: MPB-OG-75

PhD: MPB-OG-29

- Have two official transcripts (not student copies) mailed directly from each school, college and university ever attended past high school. Transcripts must be sent even if credit course work completed was not part of a degree program or was taken after an undergraduate degree was earned.
- Résumé
- Enclose a check for \$50 for the MBA, MS or PhD programs, or \$80 for the dual MBA/MS or dual MS/MS, made payable to the University of Colorado. Personal interviews are not required, except for the 11-month MBA, the MBA and MS in health administration, or when meeting a petition requirement.
- If you are denied admission because of our GMAT requirements and can meet three of the following requirements, you can petition for a special admission.
 - have seven to ten years of progressive business work experience

- have an undergraduate GPA of 3.5 or higher
- proven success in previous graduate work to demonstrate acceptable quantitative and verbal skills from an AACSB accredited university
- demonstrated success in passing BUSN 6530 and BUSN 6540 with a grade of B+ or better
- complete a successful personal interview

Deadlines. To be considered for admission, applicants for graduate programs must submit all materials prior to the following dates:

April 1 for summer session admission

June 1 for fall semester admission

November 1 for spring semester admission

The 11-month MBA option only admits students each fall.

Early applications are encouraged because, if admitted, the student receives priority for registration time assignment. Applications received after published deadlines with complete supporting documentation, scores, fees and transcripts will be considered, but do not receive priority handling.

International Application Requirements

See [Information for International Students](#).

Academic Policies for Graduate Students

Advising

As soon as possible after being admitted, students should schedule an appointment with a graduate advisor to discuss general degree requirements, plus determine if any background course work may be required and/or what common body of knowledge courses might be waived for the MS degrees.

Degree Plan

All students are encouraged to meet with a graduate advisor during their first semester to review their degree plan. Students are encouraged to meet with a graduate advisor throughout their program to ensure the correct sequencing of courses. An advising hold will be placed on students beginning an MS in accounting, an MS in health administration and an MBA in health administration. Students must petition before receiving degree credit for any course changes.

Course Load

The normal course load for full-time graduate students is 9–15 semester hours. However, because many students also are pursuing a career, it is possible to attend classes on a part-time basis by enrolling for 3–6 semester hours. For financial aid purposes, 6 semester hours of graduate study is considered full time. Graduate courses are scheduled primarily in the evening or online to accommodate work schedules.

Transfer of Credit

Upon approval of the program director, a maximum of 12 semester hours of graduate business course work may be transferred to the MBA and 9 semester hours for the MS degrees (9 semester hours for each the MBA and MS degree if under a dual program) from another AACSB accredited graduate school of business, if they have been completed within the last five years with a grade of at least B (not B-). No transfer courses will be accepted if they have been used to satisfy degree requirements of a previously awarded degree. Graduate business courses taken at other University of Colorado campuses are considered transfer hours and are included in the transfer limit. Transfer of quarter hours of graduate business credit may satisfy a course requirement, but may not satisfy the total number of hours requirement. One quarter hour equals .667 semester hours.

Time Limits

Master's students are required to complete all degree requirements within five years and one semester (seven years and one semester to earn dual MBA/MS or MS/MS degrees, or a PhD). Courses completed outside of these time limits will not be accepted toward the degree without petition. Time-limit extensions are given only for external situations that restrict a student's ability to complete the program in a timely manner. If you do not take graduate business courses for more than three semesters, you will need to reapply for admission.

Former Students

Any Downtown Campus student who has not been enrolled in his or her admitted program of study for three consecutive semesters (summers included) is considered a former student and must reapply for admission to the program by submitting part I of the application for graduate admission, in-state tuition classification form, along with the applicable fee. Readmitted students must conform to degree requirements in effect during the term in which they are readmitted. If the new requirements differ significantly from the former degree plan, a petition may be submitted requesting exceptions.

Graduation

Students must complete the online intent to graduate form on the registrar's Web site (www.ucdenver.edu/registrar) when they register for their last semester. Contact the graduate advising office to confirm receipt at grad.advising@ucdenver.edu.

Grade Point Average Requirements

A minimum cumulative GPA of 3.0 must be achieved and maintained for courses taken toward a graduate business degree. All Downtown Campus graduate business courses are computed in the graduate business GPA. Transfer hours and grades from other institutions, including University of Colorado courses taken at the Boulder, Anschutz Medical and Colorado Springs Campuses are not computed in the business GPA, although degree credit may be awarded through a petition process.

Probation and Suspension

If after completing 6 semester hours a student's cumulative graduate business GPA falls below 3.0, the student will be placed on academic probation and given three semesters (one calendar year) or 9 semester hours of graduate business course work (whichever occurs first) in which to achieve the required 3.0 cumulative average. Failure to achieve the required GPA within the allotted time period will result in suspension for one year. Suspended students may not attend any campus of the University of Colorado including continuing education/extended studies. Students on suspension may petition for readmission to the school after waiting a minimum of one year from the term in which they were suspended. If a student cannot achieve the required 3.0 cumulative GPA with the remaining required courses, the petition to return will not be approved. A petition form plus a new graduate application part I and in-state tuition classification form must be submitted along with the appropriate fee. Generally, petitions are granted only on rare occasions. Any suspended student readmitted to the school will be placed on a continued probation status until the GPA deficiency has been cleared. They will again have three semesters or 9 semester hours to reach the required 3.0 GPA. Failure to do so will result in a permanent suspension.

Passing Grades

Any grade below a C (2.0) is a failing grade for graduate students. Graduate students must repeat a required course for which they have received a grade below a C. Both the original grade and the grade for the repeated course count in the computation of the business GPA.

Repeating Graduate Business Courses

A failed course (any grade below a C) must be repeated if it is a required course. Both the original and the repeated grade will be included in the GPA and will appear on the

transcript. A course in which a grade of C or better is obtained may not be repeated without written approval from the assistant dean. Those petitions are granted only on rare occasions. Both grades will remain on the student's transcript and both grades will be calculated into the student's cumulative GPA. Graduate business courses repeated without approval may not be used in the graduate business GPA calculation.

Drop/Withdrawal

Classes dropped prior to census date will not appear on the transcript. Thereafter, to drop with a grade of W, a student must be earning a grade of C or better; otherwise, an F will appear on the transcript. Students will not be permitted to drop a course or withdraw from all courses after the 10th week of the semester, unless circumstances outside the student's control are documented. The petition to drop or withdraw must be approved by the assistant dean and the course instructor(s).

Registration for Graduate Business Courses

Students admitted to graduate degree programs have priority for graduate business courses. Nondegree students and graduate students from other University of Colorado schools or colleges may be permitted to attend on a space-available basis by meeting the qualifications and submitting a nondegree application form (available online at www.business.ucdenver.edu).

Some graduate-level (6000-level) courses may be offered simultaneously with undergraduate 4000-level courses. However most 6000-level courses are reserved exclusively for graduate students.

Master of Business Administration Programs

The master of business administration (MBA) program provides a general background in management and administration. This background enables the student to have the breadth of exposure and depth of knowledge required for an advanced-level management career. The program is devoted to developing the concepts, analytical tools and communication skills required for competent and responsible administration of an enterprise viewed in its entirety, within its social, political and economic environment.

The professional MBA program allows the scheduling of classes with maximum flexibility so students can progress through the program at their own pace, by taking as little as one class per semester or as many as five classes per semester, at times that are convenient to their work schedule. The program can be completed in as little as 16 months or as long as five years plus one semester.

Online courses add additional flexibility. Students may complete all degree requirements online, or combine online and campus courses to broaden your choice of electives or to

fit a business travel schedule or personal learning style. Choice of online electives is limited.

The MBA program is also available in different configurations: 11-month (full time, see relevant section), health administration and the executive MBA (see relevant section). All MBAs have the same curriculum requirements; they differ only in their focus, the flexibility of course scheduling and the time required to complete the program. The 11-month and executive MBAs are lockstep programs (no open electives, no specialized tracks), where all the students complete all program requirements together. No course transfers, waivers or substitutions are permitted.

For a list of MBA programs, see [Program Curricula](#) below.

Master of Science Programs

Master of science degrees (MS) are offered in the fields of accounting, decision sciences, finance, global energy management, health administration, information systems, international business, management and marketing.

The MS degree affords the opportunity for specialization and depth of training within a particular field. The specialization and expertise developed within the MS program prepares the student for more specialized staff positions in industry, the nonprofit sector and government.

The course requirements for the MS degree in each of the fields are divided into two components—common body of knowledge (CBK) and graduate core requirements. The common background requires business courses to develop general breadth and competence in the fields of business administration. These requirements differ among degree programs. Some common background requirements may be waived if evidence of equivalent undergraduate or graduate-level course work is shown and the course work is no more than 10 years old. An undergraduate degree in business administration earned from an AACSB or regionally accredited university will meet most of the CBK requirements. The graduate core requires at least 30 semester hours of graduate-level courses. BUSN courses lower than 6800 may not be used as free electives in the MS programs. Contact a graduate staff advisor for any exceptions.

No comprehensive exams are required.

For a list of graduate MS programs, see [Program Curricula](#) below.

Dual Degree Programs

Dual degree program options within the Business School include:

- [MBA/MS](#)
- [MS/MS](#)
- [MBA/MIM](#)
- [MBA/MD](#)

- MBA/MURP (Urban and Regional Planning)

PhD CSIS Program

Program co-directors: Gita Alaghband and Mike Mannino

Telephone: 303-556-4314 (Alaghband), 303-315-8427 (Mannino)

The computer science department and the Business School offer a joint doctor of philosophy degree program in computer science and information systems (CSIS) . The program targets students who have a master's-level education in either computer science or information systems and who seek research training that combines CS and IS along with strong industry interaction. The joint PhD program provides training for academic positions, industrial research positions and senior consulting positions. The specific goals of the program complement these general goals:

- create a pool of graduates with CSIS research training who are qualified for academic and nonacademic careers
- meet student demand for advanced training in CSIS with accommodations for full-time and part-time students
- promote interdisciplinary research between the CSE department and the Business School
- enhance technology transfer between CSIS academic units and front range technology businesses through joint research, student internships, faculty externships and committee participation

Admission

Prospective students apply to either the computer science and engineering department or the Business School. Applicants who pass the initial screening are reviewed by a joint committee consisting of the two co-directors of the program for the final admittance decision.

Admission criteria include GPA (undergraduate and graduate), standardized test scores (GMAT or GRE), letters of recommendation, prior achievements in academia and industry and the application portfolio essay describing an applicant's motivation and an initial plan for doctoral study. The application portfolio is important to gauge an applicant's motivation for research training.

Due to the program's goals, preference is given to students with a master's degree in either computer science or information systems. Students without a master's degree in either area will need to take additional course work depending on the student's background.

Program Organization

Supervision of the PhD Program

The PhD program is supervised by co-directors from the Business School and the CSE department. The duties of the co-directors include scheduling of doctoral courses, setting program policies subject to approval of the Business School and the CSE faculty, working with advisors and doctoral committee chairs to ensure compliance with the program guidelines, resolving disputes, measuring performance of the program over time and providing the final decision on admittance of students.

Advisor

Upon entering the program, each student chooses an advisor who will provide mentoring and guidance in the course of the entire program. The advisor will work with the student to prepare a program of study in the course work part of the program. The advisor will also work with the student in the preparation of the first- and second-year papers. Requests to change the advisor must be approved by the co-directors of the PhD program.

Dissertation Committee

The advisor and four other members form a dissertation committee. To foster interdisciplinary work, you may have your dissertation research co-advised by two faculty members. At least one co-advisor must be a full-time current graduate faculty member in the CSE department or the Business School. The committee must contain at least one faculty member from the CSE department and at least one from the Business School. At least one committee member is from outside of the CSE Department and the Information Systems faculty.

Executive Programs

Executive MBA

Faculty and Resources

The faculty are senior faculty of the business schools from three of the university's campuses. The executive MBA program is offered jointly by the Graduate Schools of Business Administration in Boulder and Colorado Springs and the Business School in Denver. Faculty are nationally recognized, and all possess both practical managerial experience and a demonstrated ability to work effectively with executive-level students.

Admission Requirements

The executive MBA program is designed for men and women who have eight to 10 years experience in a decision-making position. In the selection process, significant attention will be given to the depth and breadth of the candidate's experience, progression in job responsibility, total work experience and the ability to benefit from this integrative classroom/work environment. The admissions committee will base its decision on the application, former academic record, relevant test scores, the employer's nominating letter, other letters of recommendation and a personal interview.

For application and additional information, write to:

Executive MBA Program
University of Colorado Denver
P.O. Box 480006
Denver, CO 80248-0006

Executive MBA in Health Administration

Program Manager: Pete Taffe
Telephone: 303-623-1888 or 1-800-228-5778

Program Sponsors

The executive program in health administration is a cooperative program of UC Denver and the Network for Healthcare Management.

The University of Colorado Denver serves as the degree-granting institution for the executive program. The graduate program in health administration is located in the Business School.

The Network for Healthcare Management is an educational consortium representing healthcare executives and academic faculty from major health administration graduate programs in the United States and Canada, including Arizona State University, Northwestern University, Ohio State University, San Diego State University, the University of California at Berkeley, the University of California at Los Angeles, the University of Colorado Denver, the University of Michigan, the University of Missouri, the University of North Carolina, the University of Southern California, the University of Toronto, the University of Washington and Virginia Commonwealth University.

Program Curricula

Programs

Bachelor of Science in Business Administration

Accounting Emphasis BS in Business Administration

Program Director: Michael Roberts

Telephone: 303-556-5884

E-mail: Michael.Roberts@ucdenver.edu

Accounting courses are offered in several fields of professional accountancy at the intermediate, advanced and graduate levels. They provide preparation for practice in one or more of the following fields:

- Auditing
- Financial Accounting
- Financial Management
- Management Control Systems
- Managerial Accounting
- Tax Accounting
- Teaching and Research

In all of these fields a thorough knowledge of the social, legal, economic and political environment is needed. A high degree of analytical ability and communication skill is indispensable. A grade of C must be earned in all accounting courses to qualify for graduation.

Courses in English composition, speech, ethics and logic are desirable. Courses in statistics and information systems, beyond the required business core courses, are highly recommended.

Required Courses

- ACCT 3054 - Accounting Systems and Data Processing Summer 2010
Registration: **ACCT 3054**
- ACCT 3220 - Intermediate Financial Accounting I Summer 2010 Registration:
ACCT 3220
- ACCT 3230 - Intermediate Financial Accounting II Summer 2010 Registration:
ACCT 3230
- ACCT 3320 - Intermediate Cost Accounting Summer 2010 Registration: **ACCT 3320**
- ACCT 4410 - Income Tax Accounting Summer 2010 Registration: **ACCT 4410**
- ACCT 4620 - Auditing Summer 2010 Registration: **ACCT 4620**

ACCT free elective (4000 level) (3 semester hours) choose one course from the following:

- ACCT 4240 - Advanced Financial Accounting Summer 2010 Registration: **ACCT 4240**
- ACCT 4070 - Management Accounting Summer 2010 Registration: **ACCT 4070**
- ACCT 4330 - Managerial Accounting Problems and Cases Summer 2010 Registration: **ACCT 4330**
- ACCT 4370 - International Accounting Summer 2010 Registration: **ACCT 4370**
- ACCT 4520 - Oil and Gas Accounting Summer 2010 Registration: **ACCT 4520**
- ACCT 4780 - Accounting and Information Systems Processes and Controls Summer 2010 Registration: **ACCT 4780**
- ACCT 4800 - Accounting for Government and Nonprofit Organizations Summer 2010 Registration: **ACCT 4800**
- ACCT 4840 - Independent Study Summer 2010 Registration: **ACCT 4840**
- ACCT 4915 - Accounting for the Public Interest Summer 2010 Registration: **ACCT 4915**
- ACCT 4950 - Special Topics Summer 2010 Registration: **ACCT 4950**

Total: 21 Hours

Students planning to pursue accounting as a career may take more than the above required hours. Many students complete a total of 30 hours of accounting, often taking two accounting courses each semester in their junior and senior years. Students should work closely with the accounting faculty and business advisors in planning their accounting programs.

The accounting program offers several 4000/6000-level courses. Students with credit for a 4000-level course cannot receive credit for the corresponding 6000-level course. Graduate students should take 6000-level courses.

Accounting students often specialize in a particular topical area of accounting.

Financial Accounting

Recommended Electives

- ACCT 4240 - Advanced Financial Accounting Summer 2010 Registration: **ACCT 4240**
- ACCT 4800 - Accounting for Government and Nonprofit Organizations Summer 2010 Registration: **ACCT 4800**

Managerial Accounting

Recommended Electives

- ACCT 4330 - Managerial Accounting Problems and Cases Summer 2010
*Registration: **ACCT 4330***
- ACCT 4800 - Accounting for Government and Nonprofit Organizations Summer 2010
*Registration: **ACCT 4800***

Accounting and Information Systems (ACIS)

Within the accounting curriculum students can choose to add courses in information systems to complement their individual interests as well as prior education and work experiences.

Required Courses

- ACCT 3054 - Accounting Systems and Data Processing Summer 2010
*Registration: **ACCT 3054***
- ACCT 3220 - Intermediate Financial Accounting I Summer 2010
*Registration: **ACCT 3220***
- ACCT 3230 - Intermediate Financial Accounting II Summer 2010
*Registration: **ACCT 3230***
- ACCT 3320 - Intermediate Cost Accounting Summer 2010
*Registration: **ACCT 3320***
- ACCT 4410 - Income Tax Accounting Summer 2010
*Registration: **ACCT 4410***
- ACCT 4620 - Auditing Summer 2010
*Registration: **ACCT 4620***
- ACCT 4780 - Accounting and Information Systems Processes and Controls Summer 2010
*Registration: **ACCT 4780** or*
- ISMG 4780 - Accounting and Information Systems Processes and Controls Summer 2010
*Registration: **ISMG 4780***

ISMG Electives

Choose two:

- ISMG 4500 - Database Management and Applications Summer 2010
*Registration: **ISMG 4500***
- ISMG 4600 - Systems Analysis and Design Summer 2010
*Registration: **ISMG 4600***
- ISMG 4900 - Project Management and Practice Summer 2010
*Registration: **ISMG 4900***

Total: 27 Hours

To further specialize, consider a graduate accounting program. Graduate study in accounting is receiving increasing emphasis by professional organizations and employers. Students meeting admission requirements should consider continuing their education at the graduate level. Qualified undergraduates may petition for permission to take one or two graduate accounting courses as electives (e.g. ACCT 6800, Special Topics).

Financial Management and Information Systems Emphasis—BS in Business Administration

The financial management and information systems emphasis provides students with skills that they need to succeed in careers that bridge the fields of finance and information systems.

The financial management and information systems specialty incorporates knowledge of financial management and markets, accounting and information systems and technology. This specialization provides the manager with knowledge of financial information systems, databases, risk management and accounting systems.

Job opportunities include positions that require knowledge of both financial management and business information systems and databases. The specialization provides a solid accounting/finance and information systems background for other finance specialist and business analyst positions as well.

Required Courses

Finance

- FNCE 3500 - Management of Business Capital *Summer 2010 Registration:*
FNCE 3500
- FNCE 4330 - Investment and Portfolio Management *Summer 2010 Registration:*
FNCE 4330
- FNCE 4350 - Financial Markets and Institutions *Summer 2010 Registration:*
FNCE 4350
- FNCE 4500 - Corporate Financial Decisions *Summer 2010 Registration:* **FNCE 4500**

Accounting

- ACCT 3054 - Accounting Systems and Data Processing *Summer 2010 Registration:* **ACCT 3054**

- ACCT 3220 - Intermediate Financial Accounting I Summer 2010 Registration:
ACCT 3220
- ACCT 3320 - Intermediate Cost Accounting Summer 2010 Registration: **ACCT 3320**
- ACCT 4780 - Accounting and Information Systems Processes and Controls Summer 2010 Registration: **ACCT 4780** or
- ISMG 4780 - Accounting and Information Systems Processes and Controls Summer 2010 Registration: **ISMG 4780**

ISMG

- ISMG 4500 - Database Management and Applications Summer 2010 Registration: **ISMG 4500**
- ISMG 4600 - Systems Analysis and Design Summer 2010 Registration: **ISMG 4600**
- ISMG 4900 - Project Management and Practice Summer 2010 Registration:
ISMG 4900

Total: 33 Hours

In addition, students must complete FNCE 4370, International Finance, to fulfill the international studies requirement.

Financial Management Emphasis—BS in Business Administration

The financial management emphasis provides students with the skills needed to succeed in careers in financial management. The business community has affirmed that students need skills in both the accounting and finance areas. The financial management specialty incorporates knowledge of corporate financial management, financial institutions and markets, investments, financial accounting and managerial accounting, accounting information systems and information technology. Career opportunities include corporate financial management, finance/accounting positions with financial institutions and accounting positions that are not CPA-track. The specialization provides a solid finance and accounting background for other business positions as well.

Required Courses

- FNCE 3500 - Management of Business Capital Summer 2010 Registration:
FNCE 3500
- FNCE 4330 - Investment and Portfolio Management Summer 2010 Registration:
FNCE 4330

- FNCE 4350 - Financial Markets and Institutions Summer 2010 Registration:
FNCE 4350
- FNCE 4500 - Corporate Financial Decisions Summer 2010 Registration: **FNCE 4500**
- ACCT 3054 - Accounting Systems and Data Processing Summer 2010 Registration: **ACCT 3054**
- ACCT 3220 - Intermediate Financial Accounting I Summer 2010 Registration:
ACCT 3220
- ACCT 3320 - Intermediate Cost Accounting Summer 2010 Registration: **ACCT 3320**

Total: 24 Hours

In addition, financial management students must complete FNCE 4370, International Finance, to fulfill the international studies requirement.

* Students should note that all finance and accounting courses are not offered every semester. Students should take the ACCT 2200 and ACCT 2220 courses as soon as possible to avoid future problems in their schedules, since these are prerequisites for all courses in the specialization.

Human Resources Management Emphasis—BS in Business Administration

Human resources management offers opportunities for students to develop professional competence in the areas of personnel administration and development. Students acquire an understanding of, and skills in, developing and implementing human resources systems, including recruitment, selection, evaluation, training, motivation and compensation.

Required Course

- MGMT 3010 - Managing People for a Competitive Advantage Summer 2010 Registration: **MGMT 3010**

Electives

Choose two:

- MGMT 4420 - Human Resources Management: Staffing Summer 2010 Registration: **MGMT 4420**
- MGMT 4430 - Human Resources Management: Training Summer 2010 Registration: **MGMT 4430**

- MGMT 4440 - Human Resource Management: Performance Management Summer 2010 Registration: **MGMT 4440**
- MGMT 4450 - Human Resources Management: Compensation Summer 2010 Registration: **MGMT 4450**

Management Electives

Choose three:

- Any MGMT Course (3 semester hours)
- BLAW 4120 - Legal Issues for Entrepreneurs Summer 2010 Registration: **BLAW 4120**
- ENTP 3000 - Principles of Entrepreneurship Summer 2010 Registration: **ENTP 3000**

Total: 18 Hours

Information Systems Emphasis—BS in Business Administration

The information systems program at the University of Colorado Denver is a nationally accredited program for students who want to design and implement effective solutions to meet organizational and management needs for information, control and decision making.

An information systems (ISMG) emphasis draws on a diverse set of skills and strengths requiring creative and innovative thinking at the intersections of disciplinary knowledge and practice. Information systems students learn how information technology, effective teamwork and leadership and sound project management combine to enable innovation and change, to improve organizational agility and to add competitive value. Courses require extensive hands-on projects, teamwork and use of high-end technology. A combination of technical skills gained in class work with broad based business process knowledge enables our graduates to be ideally situated to take leading roles in shaping the technology-based future of employers in the Rocky Mountain region and the nation.

Undergraduate options

The Business School at the University of Colorado Denver offers a bachelor of science in business administration where you may choose information systems as your primary core specialty:

- Information Systems, Bachelor of Science in Business Administration degree

Or you may choose to add an information systems speciality to another business discipline.

- Accounting and Information Systems emphasis
- Financial Management Systems emphasis
- Management and Information Systems emphasis
- Marketing and Information Systems emphasis

Career Opportunities

Careers in information systems continue to be one of the highest growth markets in the business world. A student completing the information systems program curriculum will be prepared for challenging careers as business analyst, database analyst, Web content manager, project manager, IT consultant and information auditing and compliance specialist. Employment possibilities include financial operations, health care, management consulting, service operations, transportation and logistics and government.

Information systems is becoming the foundation of all business activities, and a solid understanding of the role of information systems in business and in the national and global economy is now critical for every business student. The information systems emphasis focuses on effective use of information technology in business. You are equipped with logical and analytical thinking in all areas of business and a strong basis for continued career growth in a variety of growing professions. You will develop the technical skills, business know-how and administrative insights required for acquisition, deployment and management of IT resources and services development, operation and evolution of IS infrastructure for use in accounting, finance, marketing, management and other business processes.

Curriculum

The courses emphasize both team and individual work, allowing students to gain critical thinking skills, knowledge and experience to analyze, design, program, implement and use information.

Requirements for the Information Systems emphasis

Lower Division

- ISMG 2050 - Introduction to Business Problem Solving Summer 2010
Registration: **ISMG 2050** (fall or spring)
- ISMG 2800 - Designing for the Web Summer 2010 Registration: **ISMG 2800** (spring)

Upper Division: Junior Year

- ISMG 3000 - Principles of Information Systems Summer 2010 Registration: **ISMG 3000**
- ISMG 3500 - Enterprise Data and Content Management Summer 2010
Registration: **ISMG 3500** (fall)
- ISMG 3600 - System Strategy, Architecture and Design Summer 2010
Registration: **ISMG 3600** (spring)

Upper Division: Senior Year

- ISMG 4200 - Building Business Applications Summer 2010 Registration: **ISMG 4200** (fall)
- ISMG 4700 - Business Data Communications and Networking Summer 2010
Registration: **ISMG 4700** (spring)
- ISMG 4900 - Project Management and Practice Summer 2010 Registration: **ISMG 4900** (fall or spring)

Important note

It is particularly important to take the required courses in the proper sequence to fulfill the prerequisites and ensure you can complete your degree within four years. Please refer to the sample degree plan for the recommended course sequence.

Information Systems Electives

- ACCT 3054 - Accounting Systems and Data Processing Summer 2010
Registration: **ACCT 3054**
- CSCI 2312 - Intermediate Programming Summer 2010 Registration: **C SC 2312**
- CSCI 2421 - Data Structures and Program Design Summer 2010 Registration: **C SC 2421**
- ISMG 4300 - Information Security and Compliance Summer 2010 Registration: **ISMG 4300**

- ISMG 4750 - Business Intelligence and Financial Modeling Summer 2010
Registration: **ISMG 4750**
- ISMG 4760 - Customer Relationship Management Summer 2010 Registration:
ISMG 4760

Specialization in a minor area

You may also choose a secondary business minor area to support your career objectives.

Accounting

Choose two from the following:

- ACCT 3054 - Accounting Systems and Data Processing Summer 2010
Registration: **ACCT 3054**
- ACCT 3220 - Intermediate Financial Accounting I Summer 2010 Registration:
ACCT 3220
- ACCT 3230 - Intermediate Financial Accounting II Summer 2010 Registration:
ACCT 3230
- ACCT 4780 - Accounting and Information Systems Processes and Controls Summer 2010 Registration: **ACCT 4780**

Finance

Choose two from the following:

- FNCE 3500 - Management of Business Capital Summer 2010 Registration:
FNCE 3500
- FNCE 4330 - Investment and Portfolio Management Summer 2010 Registration:
FNCE 4330
- FNCE 4350 - Financial Markets and Institutions Summer 2010 Registration:
FNCE 4350
- FNCE 4750 - Business Intelligence and Financial Modeling Summer 2010
Registration: **FNCE 4750**

Human Resource Management

Choose two from the following:

- MGMT 3010 - Managing People for a Competitive Advantage Summer 2010
Registration: **MGMT 3010**

- MGMT 4420 - Human Resources Management: Staffing Summer 2010
*Registration: **MGMT 4420***
- MGMT 4430 - Human Resources Management: Training Summer 2010
*Registration: **MGMT 4430***
- MGMT 4450 - Human Resources Management: Compensation Summer 2010
*Registration: **MGMT 4450***
- MGMT 4770 - Human Resource Information Systems Summer 2010
*Registration: **MGMT 4770***

Management

Choose two from the following:

- MGMT 4350 - Leading Organizational Change Summer 2010 *Registration: **MGMT 4350***
- MGMT 4370 - Organization Design Summer 2010 *Registration: **MGMT 4370***
- MGMT 4400 - Environments of International Business Summer 2010
*Registration: **MGMT 4400***

Marketing

Choose two from the following:

- MKTG 3100 - Marketing Research Summer 2010 *Registration: **MKTG 3100***
- MKTG 3200 - Buyer Behavior Summer 2010 *Registration: **MKTG 3200***
- MKTG 4050 - Applied Marketing Management Summer 2010 *Registration: **MKTG 4050***
- MKTG 4760 - Customer Relationship Management Summer 2010 *Registration: **MKTG 4760***

NOTE:

All information systems courses are not offered every semester.

International Business Emphasis—BS in Business Administration

Increasingly, businesses are reorienting their thinking, planning and operations to capitalize on opportunities that exist in the world marketplace. Every phase of business

is affected by this reorientation. For individuals with the appropriate skills, training and interest, international business provides excellent career opportunities.

The international business curriculum is designed to enhance and build on thorough training in basic business skills and to provide students with additional skills and knowledge appropriate to international business.

Required Foundation Courses

- MGMT 4370 - Organization Design Summer 2010 Registration: **MGMT 4370**
- MKTG 4050 - Applied Marketing Management Summer 2010 Registration:
MKTG 4050

Required Emphasis Courses

- FNCE 4370 - International Financial Management Summer 2010 Registration:
FNCE 4370
- MGMT 4400 - Environments of International Business Summer 2010
Registration: **MGMT 4400**
- MGMT 4410 - Operations of International Business Summer 2010 Registration:
MGMT 4410
- MKTG 4200 - International Marketing Summer 2010 Registration: **MKTG 4200**

Total: 18 Hours

A second area of emphasis in business is highly recommended. In addition, serious consideration should be given to advanced study of a foreign language and to either a minor or a certificate in international affairs, offered by the College of Liberal Arts and Sciences.

Elective Business Emphasis Courses (9 credit Hours)

- Three business courses (3000 or 4000 level), 3 semester hours each

Students are strongly recommended to take courses within the same business discipline, including internationally-oriented courses within the discipline such as MKTG 4220 (Asian Business Development and Marketing) and ACCT 4370 (Internationally Accounting)

Management Emphasis—BS in Business Administration

The management curriculum provides the foundation for careers in supervision and general management in a wide variety of organizations. It develops skills in management practice through an understanding of general management principles, individual and group behavior, organizational change and design and human resources management.

Required Foundation Courses

- MKTG 4050 - Applied Marketing Management Summer 2010 Registration:
MKTG 4050

Required Emphasis Courses

- MGMT 3010 - Managing People for a Competitive Advantage Summer 2010 Registration: **MGMT 3010**
- MGMT 4350 - Leading Organizational Change Summer 2010 Registration:
MGMT 4350
- MGMT 4370 - Organization Design Summer 2010 Registration: **MGMT 4370**

Choose two:

- Any upper-division MGMT course (3 semester hours)
- BLAW 4120 - Legal Issues for Entrepreneurs Summer 2010 Registration: **BLAW 4120**
- ENTP 3000 - Principles of Entrepreneurship Summer 2010 Registration: **ENTP 3000**

Total: 18 Hours

These 6 hours must be in addition to MGMT courses that were used to satisfy the international business or diversity requirements.

Management/Information Systems (MGIS)

Within the management curriculum students can choose to add additional courses in information systems to complement their individual interests as well as prior education and work experiences.

Required Information System courses

- ISMG 4500 - Database Management and Applications Summer 2010 Registration: **ISMG 4500**

- ISMG 4600 - Systems Analysis and Design Summer 2010 Registration: **ISMG 4600**
- ISMG 4900 - Project Management and Practice Summer 2010 Registration: **ISMG 4900**

Total: 9 Hours

Marketing Emphasis—BS in Business Administration

Marketing is concerned with directing the activities of the organization toward the satisfaction of customer wants and needs. This involves understanding customers, identifying those wants and needs that the organization can best serve, guiding the development of specific products or services, planning and implementing ways to take products or services to the market, securing the customer's order and finally, monitoring customer response in order to guide future activities.

In most organizations, marketing is a major functional area that provides a wide variety of career opportunities in such fields as personal selling and sales management, advertising and sales promotion, public relations, marketing research, physical distribution, product management, market management, marketing information systems and retail management. Increasingly, career opportunities exist in service businesses and nonprofit organizations.

Required Foundation Courses

- BLAW 4120 - Legal Issues for Entrepreneurs Summer 2010 Registration: **BLAW 4120**
- MGMT 4370 - Organization Design Summer 2010 Registration: **MGMT 4370**

Required Emphasis Courses

- MKTG 3100 - Marketing Research Summer 2010 Registration: **MKTG 3100**
- MKTG 4050 - Applied Marketing Management Summer 2010 Registration: **MKTG 4050**

MKTG required 3 courses (9 semester hours): CHOOSE FROM:

Electives

Choose three:

- MKTG 3200 - Buyer Behavior Summer 2010 Registration: **MKTG 3200**
- MKTG 4000 - Advertising Summer 2010 Registration: **MKTG 4000**

- MKTG 4200 - International Marketing Summer 2010 Registration: **MKTG 4200**
- MKTG 4220 - Asian Business Development and Marketing Summer 2010 Registration: **MKTG 4220**
- MKTG 4580 - International Transportation Summer 2010 Registration: **MKTG 4580**
- MKTG 4700 - Personal Selling and Sales Management Summer 2010 Registration: **MKTG 4700**
- MKTG 4950 - Special Topics Summer 2010 Registration: **MKTG 4950**

Total: 21 Hours

In addition to the three required courses beyond the core, students may select marketing electives, business electives and nonbusiness electives that support their particular career orientations. The marketing faculty advisor can assist the student in choosing an appropriate set of electives to fit career objectives.

Marketing courses that were used to satisfy the international business requirement cannot be applied to the marketing area of emphasis.

Marketing/Information Systems (MKIS)

Within the marketing curriculum students can choose to add courses in information systems to complement their individual interests as well as prior education and work experiences.

Required Information System Courses

- ISMG 4500 - Database Management and Applications Summer 2010 Registration: **ISMG 4500**
- ISMG 4600 - Systems Analysis and Design Summer 2010 Registration: **ISMG 4600**
- ISMG 4900 - Project Management and Practice Summer 2010 Registration: **ISMG 4900**

Required Emphasis Courses

- MKTG 3100 - Marketing Research Summer 2010 Registration: **MKTG 3100**
- MKTG 4050 - Applied Marketing Management Summer 2010 Registration: **MKTG 4050**
- ISMG 4760 - Customer Relationship Management Summer 2010 Registration: **ISMG 4760**
- or
- MKTG 4760 - Customer Relationship Management Summer 2010 Registration: **MKTG 4760**

Choose two:

- MKTG 3200 - Buyer Behavior Summer 2010 Registration: **MKTG 3200**
- MKTG 4000 - Advertising Summer 2010 Registration: **MKTG 4000**
- MKTG 4220 - Asian Business Development and Marketing Summer 2010
Registration: **MKTG 4220**
- MKTG 4700 - Personal Selling and Sales Management Summer 2010
Registration: **MKTG 4700**
- MKTG 4720 - Internet Marketing Summer 2010 Registration: **MKTG 4720**
- MKTG 4950 - Special Topics Summer 2010 Registration: **MKTG 4950**

Total: 24 Hours

Marketing courses that were used to satisfy the international business requirement cannot be applied to the marketing area of emphasis.

Non Degree

Business Administration Minor

Students in other undergraduate schools and colleges at the Downtown Campus wishing to take a minor in business administration must have a 2.0 GPA to enter as a business minor plus a 2.0 GPA in business courses.

Prerequisites

- ISMG 2050 - Introduction to Business Problem Solving Summer 2010
Registration: **ISMG 2050**
- MATH 1070 - Algebra for Social Sciences and Business Summer 2010
Registration: **MATH 1070** or
- MATH 1110 - College Algebra Summer 2010 Registration: **MATH 1110** and
- MATH 1080 - Polynomial Calculus Summer 2010 Registration: **MATH 1080**
- DSCI 2010 - Business Statistics Summer 2010 Registration: **DSCI 2010** or
a statistics class approved by the Business School and
- ECON 2022 - Principles of Economics: Microeconomics Summer 2010
Registration: **ECON 2022**

Required Courses

- MGMT 1000 - Introduction to Business Summer 2010 Registration: **MGMT 1000**
- ACCT 2200 - Financial Accounting and Financial Statement Analysis Summer 2010 Registration: **ACCT 2200**
- BLAW 3000 - Legal and Ethical Environments of Business I Summer 2010 Registration: **BLAW 3000**
- MKTG 3000 - Principles of Marketing Summer 2010 Registration: **MKTG 3000**
- FNCE 3000 - Principles of Finance Summer 2010 Registration: **FNCE 3000**
- MGMT 3000 - Managing Individuals and Teams Summer 2010 Registration: **MGMT 3000**

Twelve of these 18 hours must be taken while in residence at the Downtown Campus. If the student has already taken the equivalent of one or more of these courses, other higher-level business courses may be substituted with Business School approval. Up to 6 hours of the 18 required business courses may be taken at another institution. Transfer credit will be granted on the same basis that transfer credit is granted for courses taken by business majors.

Master of Business Administration

Business Administration MBA

Program Director: Elizabeth Cooperman

Telephone: 303-315.8422.

E-mail: Elizabeth.Cooperman@ucdenver.edu

Faculty

Professors:

Marcelle Arak, PhD, Massachusetts Institute of Technology
 Heidi Boerstler, PhD/JD, Yale University/University of Denver
 Jean-Claude Bosch, PhD, University of Washington
 Peter Bryant, PhD, Stanford University
 Wayne Cascio, PhD, University of Rochester
 Lawrence Cunningham, DBA, University of Tennessee
 E. Woodrow Eckard, PhD, University of California-Los Angeles
 Richard Foster, PhD, University of Chicago
 James Gerlach, PhD, Purdue University
 Jahangir Karimi, PhD, University of Arizona
 Susan Keaveney, PhD, University of Colorado
 Gary Kochenberger, PhD, University of Colorado
 C. Marlena Fiol, PhD, University of Illinois-Urbana-Champaign
 James Morris, PhD, University of California-Berkeley

Dennis Murray, PhD, University of Massachusetts-Amherst
Bruce Neumann, PhD, University of Illinois
Edward O'Connor, PhD, University of Akron
John Ruhnka, JD/LLM, Yale School of Law/Cambridge University
Dean Taylor, PhD, University of Chicago
Clifford Young, PhD, University of Utah

Associate Professors:

Ajejo Banerjee, PhD, University of Massachusetts-Amherst
Kenneth Bettenhausen, PhD, University of Illinois-Urbana-Champaign
Kang Rae Cho, PhD, University of Washington
Gary Colbert, PhD, University of Oregon
Elizabeth Cooperman, PhD, University of Georgia
Murray Cote, PhD, Texas A & M University
Carol Dee, PhD, Louisiana State University
David Forlani, PhD, University of Minnesota
Blair Gifford, PhD, University of Chicago
Dawn Gregg, PhD, Arizona State University
Deborah Kellogg, PhD, University of Southern California
Sarah Koovor-Misra, PhD, University of Southern California
Vick Lane, PhD, University of Washington
Michael Mannino, PhD, University of Arizona
L. Ann Martin, PhD, University of Minnesota
Madhavan Parthasarathy, PhD, University of Nebraska
Michael Roberts, PhD, Georgia State University
Judy Scott, PhD, University of California-Irvine
Manuel Serapio, PhD, University of Illinois
Marlene Smith, PhD, University of Florida
Steven Walczak, PhD, University of Florida

Assistant Professors:

Vinit Desai, PhD, University of California at Berkeley
Stephanie Johnson, PhD, Rice University
George Kiersey, PhD, University of Southern California
Mary Malina, PhD, University of Colorado
Robert Nieschwietz, PhD, Arizona State University
Ronald Ramirez, PhD, University of California-Irvine
Zhiping Walter, PhD, University of Rochester

Senior Instructors:

John Byrd, PhD, University of Oregon
Elizabeth Connor, MS, Colorado State University
Chen Ji, MS, University of Colorado
Michael Harper, PhD, Rensselaer Polytechnic Institute
Robert Hockenbury, MS, University of Houston
Barbara Pelter, PhD, University of California-Davis
Mary Lee Stansifer, PhD, Northwestern University
Eric Thompson, MS, University of Colorado
John Turner, PhD, St. Louis University

Instructors:

Errol Biggs, PhD, Pennsylvania State University
John Daley, PhD, University of Washington
Cindy Fischer, MA, University of Colorado
Linda Fried, JD/LLM, University of Miami
Wendy Guild, PhD, Massachusetts Institute of Technology
Fredrick Hampel, MS, Kansas State University
Barry McConnell, MBA, University of Colorado
Peter Miller, MA, Farleigh Dickenson University
Jeffrey Nystrom, MS, University of Colorado
Ira Selkowitz, JD, University of Denver
Lori Seward, PhD, Virginia Tech
Mary Lee Stansifer, PhD, University of Florida
Cindy Sutfin, MS, University of Colorado
Emily Vera, MS, University of Colorado

The master of business administration (MBA) program provides a general background in management and administration. This background enables the student to have the breadth of exposure and depth of knowledge required for an advanced-level management career. The program is devoted to developing the concepts, analytical tools and communication skills required for competent and responsible administration of an enterprise viewed in its entirety, within its social, political and economic environment.

The professional MBA program allows the scheduling of classes with maximum flexibility so students can progress through the program at their own pace, by taking as little as one class per semester or as many as five classes per semester, at times that are

convenient to their work schedule. The program can be completed in as little as 16 months or as long as five years plus one semester.

Online courses add additional flexibility. Students may complete all degree requirements online, or combine online and campus courses to broaden your choice of electives or to fit a business travel schedule or personal learning style. Choice of online electives is limited.

The MBA program is also available in different configurations: 11-month (full time, see relevant section), health administration and the executive MBA (see relevant section). All MBAs have the same curriculum requirements; they differ only in their focus, the flexibility of course scheduling and the time required to complete the program. The 11-month and executive MBAs are lockstep programs (no open electives, no specialized tracks), where all the students complete all program requirements together. No course transfers, waivers or substitutions are permitted.

Program Requirements

Core Requirements

- BUSN 6520 - Managing Individuals and Teams Summer 2010 Registration:
BUSN 6520
- BUSN 6530 - Data Analysis for Managers Summer 2010 Registration: **BUSN 6530**
- BUSN 6540 - Legal and Ethical Environment of Business Summer 2010 Registration: **BUSN 6540**
- BUSN 6550 - Analyzing and Interpreting Accounting Information Summer 2010 Registration: **BUSN 6550**
- BUSN 6560 - Marketing Management Summer 2010 Registration: **BUSN 6560**
- BUSN 6610 - Information Systems Management and Strategy Summer 2010 Registration: **BUSN 6610**
- BUSN 6620 - Applied Economics for Managers Summer 2010 Registration:
BUSN 6620
- BUSN 6630 - Management of Operations Summer 2010 Registration: **BUSN 6630**
- BUSN 6640 - Financial Management Summer 2010 Registration: **BUSN 6640**
- BUSN 6710 - Strategic Management Summer 2010 Registration: **BUSN 6710**

Electives

International business elective (1) (3 semester hours)

Free electives (5) (15 semester hours)

Total: 48 Hours

Notes and Restrictions:

Core Substitution. Students with extensive and comparable course work in a particular core subject area may petition to substitute a higher-level graduate core course on the basis of prior undergraduate or graduate course work taken at a regionally accredited college or university for the corresponding core class. This does not waive the 48-hour requirement. If a core course is substituted, another graduate level course in the same functional area must be used as a substitute so that the student completes a total of 48 semester hours.

International Elective. One 3-hour course with an international focus must be completed. Contact a graduate advisor or refer to a current MBA degree plan for a complete list of options.

Electives. The professional MBA curriculum allows for 15 semester hours of elective credit, which can be chosen from graduate-level courses offered by the Business School, except BUSN courses numbered below 6800. Additional graduate-level course work completed at the Downtown Campus outside the Business School may be applied to the MBA degree, but only with prior written approval of the MBA program director.

Note: Electives for the 11-month and executive MBA programs are preselected for all students.

MBA Specializations

Graduate students will have an opportunity to take specialized tracks within the professional MBA program by completing a prespecified program of elective courses. The following 15 tracks are available:

- Business-to-Business Marketing
- Business Intelligence
- Business-to-Consumer Marketing
- Business Strategy
- Change Management
- Corporate Financial Management
- Decision Sciences
- Enterprise Technology Management
- Entrepreneurship
- Finance
- Financial Analysis

Human Resources Management
Information Systems
International Business
Investment Management
Managing for Sustainability
Marketing
Services Management
Sports and Entertainment Management

For additional information about the professional MBA program, contact a graduate advisor at 303-315-8201.

Business Administration—11-Month MBA

Program Director: Gary Colbert

Administrative Director: Debbie Follenweider

E-mail: 11-monthMBA@ucdenver.edu

Telephone: 303-315.8800

Web site: www.busniess.ucdenver.edu/11month

The 11-month MBA is an accelerated full-time program that brings academically superior students together with select research and teaching faculty. The program enables students to focus their energies in a concentrated, total-immersion program of study earning a nationally accredited, 48-semester-hour MBA degree in just under a year.

The 11-month MBA consists of five eight-week terms, three courses per term, plus a two-week international business course abroad. In addition to a minimum of 18 hours of class time each week, the 11-month MBA students spend an average of 30 hours a week on homework. Students should expect a minimum time commitment of 48 hours per week to successfully complete this program.

Admission and Application Process

The admissions committee considers each candidate's entire record of achievement demonstrated through academic transcripts, GMAT scores, essays, letters of recommendation, personal interviews (optional at the candidate's discretion), work experience and extracurricular and community activities.

Previous Education

Applicants' complete academic records, including GPAs and previous course work are considered. Undergraduate degrees do not have to be in business, but they must be from regionally accredited colleges or universities.

Testing

The GMAT is a requirement for application to the 11-month MBA program and cannot be substituted with other standardized examinations. If you take the GMAT more than once, we will evaluate your application using the highest GMAT score. The GMAT score for students admitted into the 11-month MBA program has averaged around 600. Students must score a minimum 500 to be considered for admission to the 11-month MBA program. The GMAT Web site is www.mba.com.

The 11-month MBA also requires a highly developed proficiency in written and oral English. International applicants whose first language is not English must take the TOEFL or IELTS exam and earn a minimum score of 575/232 TOEFL or 7 IELTS to be considered for admission to the 11-month MBA program. Information on taking the TOEFL or IELTS can be obtained by visiting www.ets.org and www.ielts.org.

Work Experience

Students in the 11-month MBA program have an average of six years of work experience. However, experience ranges from the recently graduated to more than 30 years in business. Professional experience strengthens the application, since it adds relevance and depth to the learning process and enables candidates to contribute to and benefit from the knowledge of fellow classmates in the accelerated time frame of the program.

Applications

The following are required for consideration of admission to the program.

- completed application for graduate admission, parts I and II, submitted by published deadlines and fee (domestic or international as appropriate)
- two (2) letters of recommendation from professional or academic acquaintances who are familiar with the applicant's academic/professional competence
- GMAT scores taken in the last five years sent directly to the graduate admissions office from the Educational Testing Service. When registering for the GMAT, use code MPB-OG-65
- two (2) official transcripts from each school, college or university previously attended past high school, sent directly to the graduate admissions office. A minimum baccalaureate degree is required

- include answers to the four essay questions demonstrating commitment to an accelerated MBA program
- a resumé outlining work experience
- for international students, a minimum official score of 575/232 TOEFL or 7 IELTS is required to apply

The priority date for domestic applications is June 15 (May 1 for international students). Applications (for domestic students) and current fee information are available at www.ucdenver.edu/business/11month.

All of the required admission materials should be sent to:

University of Colorado Denver
The Business School
Graduate Admissions
Campus Box 165, P.O. Box 173364
Denver, CO 80127-3364

For further information, brochures and application materials, contact the 11-month MBA program at 303-315-8800 or 11-monthMBA@ucdenver.edu.

The 11-month MBA uses a rolling admission system. The committee reviews applications when they are complete in all respects, including transcripts, GMAT scores and letters of recommendation. Candidates are encouraged to submit their application as early in the process as possible. Completed applications are reviewed until early August; applications received after June 15 will be reviewed on a space-available basis. International applicants should have their completed applications in by May 1, to leave them sufficient time for visa and travel arrangements if they are admitted.

A personal interview may also be required for admission to the 11-month MBA.

11-Month MBA Scholarships/Loans

General financial assistance is available for qualified students. Students should apply directly to the Downtown Campus Office of Financial Aid. Call 303-556-2886 for information and forms. In addition, 11-month MBA merit-based scholarships are available only to students in the 11-month MBA. Other Business School scholarships are also available to all MBA students.

Degree Requirements

Students in the 11-month MBA complete 10 MBA core courses, one international business course (conducted abroad) and five special topics courses. All courses require

that students work in teams. Due to the program's cohort structure, individual elective options are not available to 11-month MBA students. **No courses may be waived, substituted or transferred into the program.** If a student finds it necessary to leave the accelerated program, credits already earned may be transferred to the professional MBA program on campus.

MBA Core Courses

- BUSN 6520 - Managing Individuals and Teams Summer 2010 Registration:
BUSN 6520
- BUSN 6530 - Data Analysis for Managers Summer 2010 Registration: **BUSN 6530**
- BUSN 6540 - Legal and Ethical Environment of Business Summer 2010 Registration: **BUSN 6540**
- BUSN 6550 - Analyzing and Interpreting Accounting Information Summer 2010 Registration: **BUSN 6550**
- BUSN 6560 - Marketing Management Summer 2010 Registration: **BUSN 6560**
- BUSN 6610 - Information Systems Management and Strategy Summer 2010 Registration: **BUSN 6610**
- BUSN 6620 - Applied Economics for Managers Summer 2010 Registration:
BUSN 6620
- BUSN 6630 - Management of Operations Summer 2010 Registration: **BUSN 6630**
- BUSN 6640 - Financial Management Summer 2010 Registration: **BUSN 6640**
- BUSN 6710 - Strategic Management Summer 2010 Registration: **BUSN 6710**

Total: 30 Hours

International Course Abroad

The international course, which involves travel abroad, is completed as an all-day, two-week intensive course.

Special Topics Courses

The special topics courses, revised each year, are selected to create a broad understanding of the most current business issues. These requirements are subject to change.

Business Administration—Health Administration MBA

Program Director: Errol L. Biggs
Telephone: 303-315-8851
E-mail: errol.biggs@ucdenver.edu

Faculty

Professors:

Heidi Boerstler, PhD/JD, Yale University/University of Denver
Peter Bryant, PhD, Stanford University
C. Marlena Fiol, PhD, University of Illinois-Urbana-Champaign
Richard Foster, PhD, University of Chicago
Bruce Neumann, PhD, University of Illinois
Edward O'Connor, PhD, University of Akron

Associate Professors:

Deborah Kellogg, PhD, University of Southern California
Stephen Ross, MD, University of North Carolina

Instructors:

Errol Biggs, PhD, Pennsylvania State University

Admission Process

Requirements for Admission

Selection of students is a multistep process. When making application to the program for the MBA-HA, candidates should send their applications to:

Graduate Admissions
Graduate School of Business Administration
University of Colorado Denver
Campus Box 165, P.O. Box 173364
Denver, CO 80217-3364

Application Requirements

- complete the application for graduate admission, parts I and II, and submit by published deadlines
- send two (2) letters of recommendation from professional or academic acquaintances who are familiar with the applicant's academic/professional competence

- send required GMAT scores directly to the graduate office from the Educational Testing Service. When registering for the GMAT, use code MPB-OG-78. GRE scores will also be considered.
- pay the appropriate application fee
- send two (2) official transcripts directly from each school, college or university previously attended past high school. A minimum baccalaureate degree is required.
- include answers to the four essay questions
- document any experience in the field of health services administration (preferred but not required)
- complete a personal interview with the health administration committee

Admission to the MBA-HA degree program is on a competitive basis. Therefore, these admission criteria represent minimum entrance qualifications expected of all students.

For further information, brochures and application materials, contact the Business School's Graduate Program in Health Administration, University of Colorado Denver, 303-315-8200.

Health Administration Scholarships/Loans

Financial assistance is available for qualified students. Students should apply directly to the Downtown Campus Office of Financial Aid. Call 303-556-2886 for information and forms.

In addition, some funds are available only to students in the graduate program in health administration:

- Foster G. McGaw Scholarship
- UC Denver MS and MBA Health Administration Scholarship
- Colorado Health Administration Alumni Association Scholarship

Enrollment in the program also makes students eligible to apply for some nationally competitive scholarships from professional organizations.

Call 303-315.8200 for applications or visit www.business.ucdenver.edu.

Graduate Program in Health Administration

The graduate program in health administration is consistently ranked as a top program in the United States and attracts students with a variety of backgrounds and experience levels, which further enriches the classroom experience. The HA program is accredited by the Commission on Accreditation of Healthcare Management Education. The program is the only such program in the Rocky Mountain region and was started in 1968. Full-time faculty with distinguished research records and a select group of

practicing managers provide students with the latest thinking on the most important health issues.

Degree Requirements

The curriculum of the MBA with an emphasis in health administration is a synthesis of management concepts and techniques that are applicable to any economic organization, and tools that can be specifically applied to health services systems. The program emphasizes skills that strengthen basic analytic and decision-making processes used by top level managers in selecting broad strategies and by junior managers in administering subunits in health care organizations.

Students enrolled in the master of business administration with an emphasis in health administration must complete a minimum of 48 semester hours of graduate-level course work to receive their degree. The curriculum is based on a series of structured learning sequences. Most of the courses are available in the evening to enable working students to pursue the degree on a part-time basis. The specific course requirements are as follows (recommended sequence):

Year One

- BUSN 6521 - Managing Individuals and Teams (Health Section) Summer 2010
Registration: **BUSN 6521**
- BUSN 6530 - Data Analysis for Managers Summer 2010 Registration: **BUSN 6530**
- BUSN 6550 - Analyzing and Interpreting Accounting Information Summer 2010
Registration: **BUSN 6550**
- HLTH 6010 - Health Care Systems Summer 2010 Registration: **HLTH 6010**
- BUSN 6541 - Legal and Ethical Environment of Business (Health Section)
Summer 2010 Registration: **BUSN 6541**
- HLTH 6071 - Introduction To Health Information Technology Summer 2010
Registration: **HLTH 6071**
- BUSN 6621 - Applied Economics for Managers (Health Section) Summer 2010
Registration: **BUSN 6621**
HLTH____ - Health Elective (3 semester hours)
Total: 24 Hours

Year Two

- HLTH 6040 - Health Care Financial Management Summer 2010 Registration: **HLTH 6040**
- BUSN 6640 - Financial Management Summer 2010 Registration: **BUSN 6640**
- BUSN 6560 - Marketing Management Summer 2010 Registration: **BUSN 6560**

- HLTH____ - International Elective (Health) (3 semester hours)
 - BUSN 6631 - Management of Operations (Health Section) Summer 2010
*Registration: **BUSN 6631***
 - DSCI 6440 - Quality and Process Improvement Summer 2010 *Registration: **DSCI 6440***
 - BUSN 6711 - Strategic Management (Health Section) Summer 2010
*Registration: **BUSN 6711***
 - HLTH 6911 - Health Field Studies Summer 2010 *Registration: **HLTH 6911***
 - HLTH____ - Health Elective (3 semester hours)
- Total: 27 Hours**

Notes and Restrictions

Students admitted into the MBA with an emphasis in health administration must meet with a graduate advisor before they register for their first semester. Call 303-315-8200 to schedule an appointment.

Administrative Residency. An administrative residency is optional but recommended for students with limited health care experience. The program faculty provide assistance to students in securing the residency, as well as regular consultation during the residency period. The program has been very successful in placing graduates in administrative residencies.

Length of program. A maximum of five years and one semester is allowed to complete the health administration program.

Specialized Tracks in the MBA with an Emphasis in Health Administration

Each track carries its own specific course requirements. To provide a variety of perspectives and experiences within a specific area of health administration, each track includes courses that span various departments within the Business School, other schools at the Downtown Campus and other University of Colorado campuses.

- International Health Management and Policy Track
- Financial Management Track
- Health Information Technology Management Track

Executive MBA in Health Administration

Distinctive Features of the Executive Program in Health Administration

1. Drawing on the expertise represented by the faculties of a consortium of western universities, the program offers high-quality courses taught by instructors that are typically not available from a single university.
2. The executive program facilitates learning for professionals who have continuing career and family responsibilities. The program is especially tailored for working individuals, allowing students to remain on their jobs while completing their educational program.
3. The program employs innovation in the technology of educational delivery. Learning methods include:
 - computer-assisted instruction and self-paced learning packages
 - computer conferencing and electronic case analyses
 - on-campus sessions

For application and additional information, write to:

Executive Program in Health Administration
The Business School
University of Colorado Denver
P.O. Box 480006
Denver, CO 80248-0006
www.colorado.edu/execed

Master in Business Administration for Executives, MBA

Program Director: W. Scott Guthrie

Telephone: 303-623-1888 or 1-800-228-5778

The executive MBA program provides executive-level students with a broad, rigorous 21-month academic experience leading to the master of business administration degree. The program is designed for persons who hold managerial positions in the private and public sectors. It builds upon the knowledge and experience of these executives with a sophisticated, challenging curriculum that can be pursued simultaneously without career interruption.

The executive MBA program emphasizes strategic leadership; the organization in a complex, international environment; and the applied tools of management. Courses are taught through a variety of methods. Case studies, lectures and computer simulation are combined with research projects and other teaching methods to provide students with

tools useful in their present positions and applicable to more advanced responsibilities as they progress in their management careers.

Each new session of the executive MBA program begins the last week of August. Classes meet for a full day, once a week, on alternating Fridays and Saturdays, making it possible for those who live outside the Denver area to participate.

Two courses are taken simultaneously throughout the program. The program is supplemented by an intensive orientation at the beginning and a two-day seminar at the conclusion of the first academic year. A second-year seminar is held at an international business center outside of North America.

Master of Business Administration/Master of Science

Business Administration/Business MBA/MS

The Business School also offers MBA/MS dual degree programs for each function of business. The program consists of a minimum of 66 semester hours of graduate work and leads to both an MBA degree and an MS degree, which must be completed within seven years and one semester. See MS program pages for a list of functional areas. Contact a graduate academic advisor for details, 303.315.8200

Master of Business Administration/Master of International Management

Business Administration/International Management MBA/MIM

This unique combined degree is offered in cooperation with the American Graduate School of International Management (the Thunderbird School) located in Glendale, Arizona, a suburb of Phoenix. Thunderbird has established eight dual programs with universities in the United States. The student applies independently to both schools and, if admitted, earns the MBA from UC Denver and a master of international management degree from Thunderbird. The student begins the program at UC Denver and, after completing 36 semester hours (12 courses) required for the MBA, transfers to the Thunderbird campus and takes a minimum of 30 semester hours (10 courses) for the MIM. When all dual degree requirements are finished, the student is awarded a diploma from each school. For more information about admission to the MBA on the Downtown Campus, refer to the appropriate section of this chapter. For specifics about the dual

MIM application process, call Thunderbird's associate dean of admissions, Stephen R. Beaver, 1-800-848-9084.

Master of Business Administration/Doctor of Medicine

Business Administration/Medicine MBA/MD

The MBA/MD is for medical students at the University of Colorado School of Medicine who wish to pursue a career in administrative medicine or who seek additional training in administration or business. The program is designed to be completed in five years, at which time both the MD and MBA degrees would be awarded. Candidates for the MBA/MD complete 36 semester hours of course work in the business school and all requirements for the MD.

Master of Business Administration/Master of Urban and Regional Planning

Business Administration/Urban and Regional Planning MBA/MURP

This dual degree enables students to obtain both the master of urban and regional planning offered by the College of Architecture and Planning and the master of business administration offered by the Business School upon completion of 78 semester hours. The dual degree program is composed of the core curricula in each program plus a set of electives jointly approved by the student's advisors.

Master of Science

Accounting MS

Program Director: Michael Roberts

Telephone: 303-315-8460

E-mail: Michael.Roberts@ucdenver.edu

Faculty

Professors:

Bruce Neumann, PhD, University of Illinois

Associate Professors:

Gary Colbert, PhD, University of Oregon

Carol Dee, PhD, Louisiana State University

L. Ann Martin, PhD, University of Minnesota

Michael Roberts, PhD, Georgia State University

Assistant Professors:

George F. Klersey, PhD, University of Southern California

Mary Malina, PhD, University of Colorado Boulder

Robert Nieschwietz, PhD, Arizona State University

Senior Instructors:

Elizabeth Connor, MS, Colorado State University

Robert Hockenbury, MS, University of Houston

Instructors:

Cindy Fischer, MA, University of Colorado Boulder

Emily Vera, MS, University of Colorado Denver

The master of science in accounting offers three specializations plus a flexible program which allows students to design individualized courses of study. The program provides students the opportunity to acquire a thorough understanding of financial and managerial accounting, auditing and taxation in preparation for successful careers in public or private accounting, as well as government or nonprofit accounting.

Students completing the MS in accounting will complete:

- 6 semester hours of required accounting course work
- 12 semester hours of elective accounting course work*
- 9 semester hours of a secondary business area
- 3 semester hours of a free accounting elective.

*The elective course work can be selected from graduate accounting courses or by selecting one of the three specializations offered within the program. Students who select the accounting and information systems audit and control (AISAAC) specialization

have completely different requirements which are listed under that specialization.

A. Background Accounting Courses*

The MS in accounting also requires completion of the following undergraduate accounting prerequisites.

Must be completed with a grade of B- or higher plus a cumulative GPA of 3.0. Students with grades below a B may be subject to probation.

Required Courses:

- ACCT 2200 - Financial Accounting and Financial Statement Analysis Summer 2010 Registration: **ACCT 2200**
- ACCT 2220 - Managerial Accounting and Professional Issues Summer 2010 Registration: **ACCT 2220**
- ACCT 3054 - Accounting Systems and Data Processing Summer 2010 Registration: **ACCT 3054**
- ACCT 3220 - Intermediate Financial Accounting I Summer 2010 Registration: **ACCT 3220**
- ACCT 3230 - Intermediate Financial Accounting II Summer 2010 Registration: **ACCT 3230**
- ACCT 3320 - Intermediate Cost Accounting Summer 2010 Registration: **ACCT 3320**
- ACCT 4620 - Auditing Summer 2010 Registration: **ACCT 4620**

Total: 15-21 Hours

*Waived for students with appropriate background. BUSN 6550, Analyzing and Interpreting Accounting Information, may be substituted for ACCT 2200 and ACCT 2220. International course work waivers are by petition only.

Accounting courses may be taken by nondegree or non-matriculated students.

B. Common Body of Knowledge (CBK)

Based on prior course work, students may be required to take up to three background courses. The following are suggested:

- BUSN 6540 - Legal and Ethical Environment of Business Summer 2010 Registration: **BUSN 6540**
- BUSN 6620 - Applied Economics for Managers Summer 2010 Registration: **BUSN 6620**
- BUSN 6640 - Financial Management Summer 2010 Registration: **BUSN 6640**

C. MS Accounting Core

Required Courses (all students)

(6 semester hours)

- ACCT 6250 - Seminar: Financial Accounting Summer 2010 Registration: **ACCT 6250**
- ACCT 6260 - Seminar: Managerial Accounting Summer 2010 Registration: **ACCT 6260**

Accounting Electives

(12 semester hours)

To design an individualized course of study, choose four accounting courses with three of those accounting courses numbered 6260 or higher.

Or, you may select one of the three following specializations to meet this elective requirement.

D. Accounting Specializations

If you select one of the three following specializations, you will complete the required courses, complete four of the choices within your selection of specialization, complete the secondary area and complete a free elective.

Auditing and Forensic Accounting Specialization

Complete the required courses and choose four of the following courses:

- ACCT 6280 - Professional Judgment and Decision Making in Accounting Summer 2010 Registration: **ACCT 6280**
- ACCT 6340 - Financial Statement Analysis Summer 2010 Registration: **ACCT 6340**
- ACCT 6350 - Current Issues in Professional Accounting Summer 2010 Registration: **ACCT 6350**
- ACCT 6380 - Forensic Accounting Summer 2010 Registration: **ACCT 6380**
- ACCT 6470 - Internal Auditing Summer 2010 Registration: **ACCT 6470**
- ACCT 6510 - Accounting and Information Systems Processes and Controls Summer 2010 Registration: **ACCT 6510**
- ACCT 6620 - Advanced Auditing Summer 2010 Registration: **ACCT 6620**

Financial Accounting Specialization

Complete the required courses and choose four of the following courses:

- ACCT 6024 - Advanced Financial Accounting Summer 2010 Registration: ACCT 6024
- ACCT 6080 - Accounting for Government and Nonprofit Organizations Summer 2010 Registration: ACCT 6080
- ACCT 6280 - Professional Judgment and Decision Making in Accounting Summer 2010 Registration: ACCT 6280
- ACCT 6340 - Financial Statement Analysis Summer 2010 Registration: ACCT 6340
- ACCT 6350 - Current Issues in Professional Accounting Summer 2010 Registration: ACCT 6350
- ACCT 6370 - International Accounting Summer 2010 Registration: ACCT 6370

Three of the courses must be selected with course numbers above ACCT 6260.

Taxation Specialization

Complete the required courses and choose four of the following courses:

- ACCT 6140 - Tax Planning for Managers Summer 2010 Registration: ACCT 6140
- ACCT 6410 - Advanced Tax For Individuals Summer 2010 Registration: ACCT 6410
- ACCT 6420 - Advanced Tax for Businesses Summer 2010 Registration: ACCT 6420
- ACCT 6430 - International Taxation Summer 2010 Registration: ACCT 6430
- ACCT 6450 - Research Problems in Income Tax Accounting Summer 2010 Registration: ACCT 6450
- ACCT 6460 - Advance Topics in Taxation Summer 2010 Registration: ACCT 6460

Three of the courses must be selected with course numbers above ACCT 6260.

E. Secondary Area

(9 semester hours)

Accounting is increasingly diverse and linked to many business decisions. Accountants may eventually work as systems designers, chief financial officers, cost analysts, budget officers or chief executive officers. Students will be better prepared for their careers if they develop competencies in a related field, which may be chosen from a single discipline such as finance, information systems, entrepreneurship, health administration,

marketing or management. *The accounting faculty strongly encourage students to gain additional expertise in finance and/or information systems.*

Alternatively, a self-designed secondary area might best achieve a student's individual objectives (must be approved by the program director). A self-designed secondary field must have a common theme or objective if it crosses several disciplines. For example, a secondary area in information systems might include an accounting technology course, a data base management course and a finance technology course. On the other hand, a finance secondary area might include two finance courses and a cost management (accounting) course or a strategic management course. When a BUSN course is a prerequisite for a secondary area, it can be included in the secondary area by petition only. Consult a schedule planner for information about current course offerings and a current catalog for course descriptions.

F. Free Accounting Elective

(3 semester hours)

Select one graduate accounting course numbered above ACCT 6000.

G. Total: 30 Hours

Accounting and Information Systems Audit and Control (AISAAC) Specialization

Recently, new regulatory environments have required companies to provide better documentation of their accounting and IT systems to improve the management and disclosure of their business processes for better financial and regulatory controls. Accounting and IT professionals have significant roles in audit and control activities, since they control the systems that monitor and report on finance, planning and operations. The courses within this specialization cover business-process management and financial controls; the emerging trends and practices in privacy and security; the strategies for integrating governance and compliance; and the IT organization's financial and business intelligence services. These courses will focus on how to leverage the existing IT infrastructure to establish quality in financial and internal audit processes and address the regulatory issues associated with reporting, consolidation and document/content management more effectively and completely.

As you will notice the complete 30 semester hour requirements for this specialization are listed below.

Accounting Core

(9 semester hours)

- ACCT 6250 - Seminar: Financial Accounting Summer 2010 Registration: **ACCT 6250**
- ACCT 6260 - Seminar: Managerial Accounting Summer 2010 Registration: **ACCT 6260**
- ACCT 6620 - Advanced Auditing Summer 2010 Registration: **ACCT 6620**

AISAAC Common Courses

(12 semester hours)

Choose four of the following courses:

- ACCT 6020 - Auditing Summer 2010 Registration: **ACCT 6020**
- ACCT 6510 - Accounting and Information Systems Processes and Controls Summer 2010 Registration: **ACCT 6510** or
- ISMG 6510 - Accounting and Information Systems Processes and Controls Summer 2010 Registration: **ISMG 6510**
- ISMG 6040 - Business Process Management Summer 2010 Registration: **ISMG 6040**
- ISMG 6420 - Global Enterprise Systems Summer 2010 Registration: **ISMG 6420**

Choose three of the following courses:

(9 semester hours)

- ACCT 6340 - Financial Statement Analysis Summer 2010 Registration: **ACCT 6340**
- ACCT 6800 - Special Topics Summer 2010 Registration: **ACCT 6800**
- ISMG 6080 - Database Management Systems Summer 2010 Registration: **ISMG 6080**
- ISMG 6180 - Information Systems Management and Strategy Summer 2010 Registration: **ISMG 6180**
- ISMG 6430 - Information Systems Security and Privacy Summer 2010 Registration: **ISMG 6430**

Total 30 hours

Decision Sciences MS

Program Director: Marlene A. Smith
Telephone: 303-315-8421
E-mail: Marlene.Smith@ucdenver.edu

The MS in decision sciences focuses on modeling and applications which prepares you for a career as a decision science specialist in industry or government. Today, companies in every conceivable industry are reaping the benefits of using formal mathematical models to assist them in addressing complex business problems. Decision science graduates hold positions that bridge the gap between operations research/statistics specialists and management.

Learn to apply quantitative methods to real-world problems using modern methodologies adopted from statistics, operations research, and management science. Although the MS in decision sciences is founded in operations research methods, it focuses on applications of these methods in the workplace rather than the development of new operations research techniques. The managerial emphasis of our degree is accomplished through a comprehensive set of elective and required course work such as data analysis, operations management, forecasting, project management, simulation and supply chain management. A required practicum course provides students with the opportunity (under the direction of faculty) to solve a real, complex workplace problem for a local Denver organization.

Requirements for the MS degree in decision sciences are met by the following courses and options:

Prerequisite course work:

Accounting: completion of BUSN 6550 or two undergraduate accounting courses with a grade of B- or better along with useable knowledge of spreadsheets.

Required Courses

- BUSN 6530 - Data Analysis for Managers *Summer 2010 Registration:* **BUSN 6530**
 - BUSN 6630 - Management of Operations *Summer 2010 Registration:* **BUSN 6630**
 - DSCI 6820 - Project Management *Summer 2010 Registration:* **DSCI 6820**
 - DSCI 6230 - Business Forecasting *Summer 2010 Registration:* **DSCI 6230**
 - DSCI 6460 - Decision Analysis *Summer 2010 Registration:* **DSCI 6460**
 - DSCI 6910 - Decision Sciences Practicum *Summer 2010 Registration:* **DSCI 6910**
- DSCI Electives (12 semester hours)

Total: 30 Hours

Notes and Restrictions

Decision sciences electives must include at least two DSCI courses numbered 6000 or higher. Remaining decision sciences electives may be any of the following courses: DSCI 6000 or higher; MKTG 6050, Marketing Research; or FNCE 6480, Financial Modeling.

Students are not required to take a comprehensive examination or complete a thesis in the major field.

Finance MS

Program Director: Ajeyo Banerjee

Telephone: 303.315.8456

Faculty

Professors:

Marcelle Arak, PhD, Massachusetts Institute of Technology

Jean-Claude Bosch, PhD, University of Washington

E. Woodrow Eckard, PhD, University of California-Los Angeles

Richard Foster, PhD, University of Chicago

James Morris, PhD, University of California-Berkeley

Dean Taylor, PhD, University of Chicago

Associate Professors:

Ajeyo Banerjee, PhD, University of Massachusetts-Amherst

Elizabeth Cooperman, PhD, University of Georgia

Jian Yang, PhD, Texas A&M University

Senior Instructors:

John Byrd, PhD, University of Oregon

Chen Ji, MS, University of Colorado

Barbara Pelter, PhD, University of California-Davis

John Turner, PhD, St. Louis University

Instructors:

John Daley, PhD, University of Washington

Cindy Sutfin, MS, University of Colorado

The master of science in finance provides the necessary depth and specialized expertise to meet the need of businesses for financial managers, investment analysts and other finance specialists.

The program emphasizes a familiarity with the institutions in our financial system, an understanding of financial markets and instruments, and the analytical skills and tools necessary to make informed decisions about investment and financing.

The program is suited to students from a wide variety of undergraduate backgrounds and is particularly appropriate to students with strong technical and analytical backgrounds.

The MS in finance offers flexibility with on-campus and online courses. The MS finance degree requirements are met by the following courses and options:

Required Courses

- BUSN 6620 - Applied Economics for Managers Summer 2010 Registration:
BUSN 6620
 - BUSN 6640 - Financial Management Summer 2010 Registration: **BUSN 6640**
 - FNCE 6290 - Quantitative Methods for Finance Summer 2010 Registration:
FNCE 6290
 - FNCE 6300 - Macroeconomics and Financial Markets Summer 2010 Registration: **FNCE 6300**
 - FNCE 6330 - Investment Management Analysis Summer 2010 Registration:
FNCE 6330
 - FNCE 6380 - Futures and Options Summer 2010 Registration: **FNCE 6380** or
 - FNCE 6382 - Survey of Financial Derivatives: Futures, Options and Swaps Summer 2010 Registration: **FNCE 6382**
- FNCE Electives (3) (9 semester hours)
Free Elective (1) (3 semester hours)

Total: 30 Hours

Prerequisites: BUSN 6550, Analyzing and Interpreting Accounting Information, or the equivalent accounting background. Students are also expected to be knowledgeable in spreadsheet software.

Notes and Restrictions

Finance Electives. Choose three courses in finance from the list of regularly scheduled graduate classes in consultation with an advisor.

Free Elective. Students complete 3 semester hours of graduate business course work (excluding BUSN courses numbered below 6800). Modern finance is heavily mathematical and draws extensively on economics and accounting. Courses in these areas are especially useful. Petitions may be submitted to the program director for special courses that fit a student's individual needs.

Global Energy Management MS

Program Advisor: Sarah Dushame

Telephone: 303-605-6212

E-mail: Sarah.Dushame@ucdenver.edu

Faculty

Professors/Instructors

Timothy Antoniuk, MDes, University of Alberta

William Ascher, PhD, Yale University

Stephen Brown, PhD, University of Maryland

Matthew Clarke, PhD, University of Calgary

William Fox, JD, Catholic University of America

Mean Husein, PhD, McGill University

Merrily Kaut, PhD, University of Colorado Denver

L. Ann Martin, PhD, University of Minnesota

The master of science in global energy management (GEM) prepares individuals for leadership careers in the energy industry. This degree is particularly appropriate for individuals seeking to advance their existing careers in the energy field. Prior work experience within the field is preferred, but not required. The program consists of two components: the core curriculum and the more advanced and specialized elective courses. The MS GEM program requires the completion of the following core classes as well as four elective courses from the selection listed below.

Required Courses

- GEMM 6000 - 21st Century Global Energy Issues and Realities Summer 2010
*Registration: **GEMM 6000***
- GEMM 6100 - Global Energy Economics and Geography Summer 2010
*Registration: **GEMM 6100***

- GEMM 6200 - Environmental, Regulatory, Legal & Political Environment in the Energy Industry Summer 2010 Registration: **GEMM 6200**
- GEMM 6300 - Renewable and Alternative Energy: Opportunities & Challenges Summer 2010 Registration: **GEMM 6300**
- GEMM 6400 - Leadership and Decision Making in the Global Energy Environment Summer 2010 Registration: **GEMM 6400**
- GEMM 6500 - Energy Accounting in Global Markets Summer 2010 Registration: **GEMM 6500**
- GEMM 6600 - Financial Management and Hedging in the Global Energy Markets Summer 2010 Registration: **GEMM 6600**
- GEMM 6410 - People Management in the Global Energy Environment Summer 2010 Registration: **GEMM 6410**

Choose four

Choose four of the following courses. These courses are taken during the last two terms of the program and are offered based on enrollment.

- GEMM 6210 - Land Management and Energy Contracts Summer 2010 Registration: **GEMM 6210**
- GEMM 6430 - Organizational Behavior in the Energy Industry Summer 2010 Registration: **GEMM 6430**
- GEMM 6450 - Strategic Management of the Energy Industry Summer 2010 Registration: **GEMM 6450**
- GEMM 6460 - Integrated Information Management for Energy Firms Summer 2010 Registration: **GEMM 6460**
- GEMM 6470 - Energy Marketing Summer 2010 Registration: **GEMM 6470**
- GEMM 6610 - Advanced Financial Management in the Energy Industry Summer 2010 Registration: **GEMM 6610**
- GEMM 6620 - Energy Asset Management Summer 2010 Registration: **GEMM 6620**
- GEMM 6630 - Production and Supply Chain Management for the Energy Industry Summer 2010 Registration: **GEMM 6630**

Prerequisites

Applicants that do not have a science- or energy-related field undergraduate degree or three-plus years experience in the industry are required to take two prerequisite courses as well as the GMAT.

The prerequisite courses include physical geology and introduction to physical engineering. These courses can be taken at any accredited university, but must be approved by a GEM team staff member before registering. Also the prerequisites may be taken prior or concurrently with GEMM 6000 and GEMM 6100.

Notes and Restrictions

The program is a cohort group, hybrid online, 18-month master of science degree program. As a cohort program, all students start together, progress together and graduate together. Students cannot take time out from the program once it starts and need to plan on remaining in the program for the full 18 months. If it becomes necessary to take a term off, students may not re-enroll until the next cohort group catches up to the point where the student originally dropped out, which is 6 months later. As a hybrid online program, professors and students meet in class face to face for four days (Fridays through Mondays) at the start of each 3-month term with the rest of the term completed online. Please note that the GEM degree program runs on a completely separate schedule from the normal semester terms of the Business School. Please check the [Business School Web site](#) for deadlines and dates of each GEM term. All GEMM courses are restricted to those students who have been admitted to the MS GEM program.

Dual Degrees

In order to participate in the dual degree options offered by the Business School, students in the GEM program must first complete their entire GEM degree before they can begin their second degree.

Health Administration MS

Program Director: Errol L. Biggs

Telephone: 303-315-8851

E-mail: errol.biggs@ucdenver.edu

Faculty

Professors:

Heidi Boerstler, PhD/JD, Yale University/University of Denver

Peter Bryant, PhD, Stanford University

C.Marlena Fiol, PhD, University of Illinois-Urbana-Champaign

Richard Foster, PhD, University of Chicago

Bruce Neumann, PhD, University of Illinois

Edward O'Connor, PhD, University of Akron

Associate Professors:

Murray Cote, PhD, Texas A & M University
Blair Gifford, PhD, University of Chicago
Deborah Kellogg, PhD, University of Southern California
Stephen Ross, MD, University of North Carolina

Instructor:

Errol Biggs, PhD, Pennsylvania State University

The goal of the master of science in health administration degree is to prepare men and women who, after appropriate practical experience in responsible managerial positions, are capable of assuming positions as chief executive officers or senior administrators in complex, multiservice health care organizations or in organizations' purchasing and health services.

The curriculum is a synthesis of management concepts and techniques that are applicable to any economic organization and tools that can be specifically applied to health and health services systems. The program emphasizes skills that heighten basic analytical and decision-making processes used by top-level managers in selecting broad strategies for the institutions and by junior managers in administering subunits of health care organizations. The faculty guide the students in their mastery of theoretical, conceptual and quantitative topics.

The program has enjoyed continuous accreditation by the Commission on Accreditation of Healthcare Management Education since 1970.

A. Common Body of Knowledge (CBK)

- BUSN 6521 - Managing Individuals and Teams (Health Section) Summer 2010
*Registration: **BUSN 6521***
- BUSN 6530 - Data Analysis for Managers Summer 2010 *Registration: **BUSN 6530***
- BUSN 6550 - Analyzing and Interpreting Accounting Information Summer 2010
*Registration: **BUSN 6550***
- BUSN 6560 - Marketing Management Summer 2010 *Registration: **BUSN 6560***
- BUSN 6630 - Management of Operations Summer 2010 *Registration: **BUSN 6630***
- BUSN 6640 - Financial Management Summer 2010 *Registration: **BUSN 6640***

Total: 18 Hours

Waivers of CBK courses are possible. The entire CBK may be waived if the student has completed an undergraduate business degree from an AACSB-

accredited college or university within the last 10 years. Specific courses may be waived based on a case-by-case evaluation of undergraduate or graduate course work in business completed at a regionally accredited college or university within the last 10 years.

B. Graduate Core in Health Administration

- HLTH 6010 - Health Care Systems Summer 2010 Registration: **HLTH 6010**
 - HLTH 6040 - Health Care Financial Management Summer 2010 Registration: **HLTH 6040**
 - HLTH 6911 - Health Field Studies Summer 2010 Registration: **HLTH 6911**
 - BUSN 6541 - Legal and Ethical Environment of Business (Health Section) Summer 2010 Registration: **BUSN 6541**
 - BUSN 6621 - Applied Economics for Managers (Health Section) Summer 2010 Registration: **BUSN 6621**
 - DSCI 6440 - Quality and Process Improvement Summer 2010 Registration: **DSCI 6440**
 - BUSN 6711 - Strategic Management (Health Section) Summer 2010 Registration: **BUSN 6711**
- HLTH Electives (3) (9 semester hours)
Free Elective (1) (3 semester hours)

Total: 33 Hours

Notes and Restrictions

Free Elective. The free elective course can be chosen from the areas of accounting, finance, health administration, information systems, international business, management and marketing. A course with the BUSN prefix can be used as a free elective if the course number is 6800 or higher.

Management Residency. A management residency is optional, but recommended for all students, especially those with limited health care experience. The faculty of the program provide assistance to students in securing the residency, as well as regular consultation during the residency period. Information on the full range of local, regional and national residencies is available in the program office.

Length of Program. The didactic portion of the degree will take at least two academic years, since most HA courses are offered only once each year and many have prerequisites. Part-time study is facilitated by courses being scheduled for late afternoon and evening hours.

Specialized Tracks in MS Health Administration

Each track carries its own specific course requirements. To provide a variety of perspectives and experiences within a specific area of health administration, each track includes courses that span various departments within the Business School, other schools on the Downtown Campus and other University of Colorado campuses.

- International health management and policy track
- Financial management track
- Health information technology management track

Institute for International Business

The international health track is affiliated with the Institute for International Business at UC Denver. The Institute for International Business is one of a few university programs to have received the prestigious CIBER grant from U.S. Department of Education. The grant is being used by the institute to provide effective internationally oriented education, research and outreach activities. Also, the institute is a participant in an international consortium of universities for faculty and student program and course exchanges. Students in the international health management and policy track will have access to the institute's exchange networks.

International Health Travel/Study Course

Program Director: Blair Gifford

Telephone: 303-315-8400

E-mail: Global-Health@ucdenver.edu

A unique feature of our international health management and policy track is its emphasis on making sure students gain international experience during their education. The travel study course requirement can be met by taking a University of Colorado health travel/study course, or a student can take a course at a partnering university. An example of a health travel/study was a three-week trip to Thailand and Vietnam to visit numerous cultural- and health-related facilities.

Information Systems MS

Program Director: Jahangir Karimi

Telephone: 303-315-8430

E-mail: Jahangir.Karimi@ucdenver.edu

Web site: <http://business.ucdenver.edu/Disciplines/InfoSystems/InfoSystemsMS.htm>

Faculty

Professors:

James Gerlach, PhD, Purdue University
Jahangir Karimi, PhD, University of Arizona

Associate Professors:

Dawn Gregg, PhD, Arizona State University
Michael Mannino, PhD, University of Arizona
Judy Scott, PhD, University of California-Irvine
Steven Walczak, PhD, University of Florida

Assistant Professors:

Ronald Ramirez, PhD, University of California-Irvine
Zhiping Walter, PhD, University of Rochester

Senior Instructors:

Eric Thompson, MS, University of Colorado

Instructor:

Linda Fried, JD/LLM, University of Miami

The master of science in information systems (MSIS) program at the Business School meets industry needs by providing specializations. The program prepares students for career paths in systems development and management services, enterprise application services, business intelligence, health information technology, information security audit and control, business consulting and development and consumer products and services. Whether students aim to be systems analysts or designers, software engineers, applications programmers, database administrators, Web developers, systems integrators, project managers, LAN administrators or application and technology consultants, the MSIS program provides the necessary knowledge and skills. This entire MS in information systems can be completed online.

The MSIS program offers a wide choice of courses. The course work consists of a common body of knowledge courses plus 30 semester hours, which includes a choice of a specialization. Those specialization include two required courses, 6 courses from a list specific to your chosen specialization and two elective courses. Candidates for the MS degree are not required to take a comprehensive examination or to complete a thesis in the major field.

A. Common Body of Knowledge (CBK)

Waivers of CBK courses are possible. The entire CBK may be waived if the student has completed an undergraduate business degree from an AACSB-accredited college or university within the last 10 years. Specific courses may be waived based on a case-by-case evaluation of undergraduate or graduate course work in business completed at a regionally accredited college or university within the last 10 years.

Four of the following courses are required if you do not meet the above waiver policy.

- BUSN 6530 - Data Analysis for Managers *Summer 2010 Registration: **BUSN 6530***
- BUSN 6550 - Analyzing and Interpreting Accounting Information *Summer 2010 Registration: **BUSN 6550***
- BUSN 6560 - Marketing Management *Summer 2010 Registration: **BUSN 6560***
- BUSN 6630 - Management of Operations *Summer 2010 Registration: **BUSN 6630***
- BUSN 6640 - Financial Management *Summer 2010 Registration: **BUSN 6640***

Total: 12 Hours for Common Body of Knowledge (CBK)

B. Information Systems Specializations

This set of courses consists of selected areas of specialization designed to provide the fundamental knowledge necessary for a career as an IS professional. Up to 9 semester hours may be transferred from an AACSB international accredited graduate school and applied to the information systems specializations upon approval. Students should take the required courses in each specialization before taking the chosen electives in each specialization.

The IS specializations provide students with a set of related courses necessary to acquire skills and expertise within a specific area in the development, management and use of information technology applications. Students are required to choose one specialization and complete the 6 hours of required coursework, 18 hours of selected electives, 3 hours of any other ISMG course or an internship in IS, and 3 hours of any Business School graduate course.

Accounting and Information Systems Audit and Control (AISAAC) Specialization

Recently, new regulatory environments have required companies to provide better documentation of their accounting and IT systems to improve the management and disclosure of their business processes for better financial and regulatory controls. Accounting and IT professionals have significant roles in audit and control activities, since they control the systems that monitor and report on finance, planning and

operations. The courses within this specialization cover business-process management and financial controls; the emerging trends and practices in privacy and security; the strategies for integrating governance and compliance; and the IT organization's financial and business intelligence services. These courses will focus on how to leverage the existing IT infrastructure to establish quality in financial and internal audit processes and address the regulatory issues associated with reporting, consolidation and document/content management more effectively and completely.

Prerequisite

- ACCT 6030 - Financial Accounting Summer 2010 Registration: **ACCT 6030**

Required Courses

- ACCT 6020 - Auditing Summer 2010 Registration: **ACCT 6020**
- ISMG 6040 - Business Process Management Summer 2010 Registration: **ISMG 6040**
- ISMG 6060 - Analysis, Modeling and Design Summer 2010 Registration: **ISMG 6060**
- ISMG 6080 - Database Management Systems Summer 2010 Registration: **ISMG 6080**
- ISMG 6180 - Information Systems Management and Strategy Summer 2010 Registration: **ISMG 6180**
- ISMG 6220 - Business Intelligence Systems Summer 2010 Registration: **ISMG 6220**
- ISMG 6420 - Global Enterprise Systems Summer 2010 Registration: **ISMG 6420**
- ACCT 6510 - Accounting and Information Systems Processes and Controls Summer 2010 Registration: **ACCT 6510**
- **OR**
- ISMG 6510 - Accounting and Information Systems Processes and Controls Summer 2010 Registration: **ISMG 6510**

Choose two:

- ACCT 6340 - Financial Statement Analysis Summer 2010 Registration: **ACCT 6340**
- ACCT 6360 - Fraud Examination Summer 2010 Registration: **ACCT 6360**
- ISMG 6430 - Information Systems Security and Privacy Summer 2010 Registration: **ISMG 6430**
- ISMG 6450 - IT Project Management Summer 2010 Registration: **ISMG 6450**
- ACCT 6470 - Internal Auditing Summer 2010 Registration: **ACCT 6470**

- ACCT 6620 - Advanced Auditing Summer 2010 Registration: **ACCT 6620**

Business Intelligence Specialization

Business intelligence (BI) systems combine operational data with analytical tools to present complex and competitive information to planners and decision makers. The objective is to improve the timeliness and quality of inputs to the decision process. BI is used to understand the capabilities available in the firm; the state-of-the-art, trends, and future directions in the markets, the technologies, and the regulatory environment in which the firm compete; and the actions of competitors and the implications of these actions. With this specialization, you get the necessary skills and knowledge in real-time data warehousing, data visualization, data mining, online analytical processing, customer relationships management, dashboards and scorecards, corporate performance management, expert and advanced intelligent systems, and hands-on experience with leading BI tools.

Required Courses

- ISMG 6080 - Database Management Systems Summer 2010 Registration: **ISMG 6080**

Choose six:

- DSCI 6828 - Business Applications of Data Mining Summer 2010 Registration: **DSCI 6828**
- ISMG 6180 - Information Systems Management and Strategy Summer 2010 Registration: **ISMG 6180**
- ISMG 6420 - Global Enterprise Systems Summer 2010 Registration: **ISMG 6420**
- ISMG 6430 - Information Systems Security and Privacy Summer 2010 Registration: **ISMG 6430**
- ISMG 6480 - Data Warehouse and Administration Summer 2010 Registration: **ISMG 6480**
- ISMG 6810 - Business Intelligence in Healthcare Summer 2010 Registration: **ISMG 6810 OR**
- ISMG 6820 - Business Intelligence and Financial Modeling Summer 2010 Registration: **ISMG 6820**
- MKTG 6090 - Customer Relationship Management Summer 2010 Registration: **MKTG 6090**

Enterprise Technology Management (ETM) Specialization

This specialization focuses on information technology as the prime driver of business strategy. It focuses on the strategic, technological, financial and organizational issues

involved with the effective management of information technology within an enterprise. The courses in this specialization cover the emerging technologies and the evolving roles and importance of IT in modern organizations; IT-enabled organizational processes and knowledge management; methods to develop, acquire and implement information systems; implementing and managing complex IT projects; security and privacy issues associated with IT.

Required Courses

- ISMG 6040 - Business Process Management *Summer 2010 Registration: ISMG 6040*
- ISMG 6180 - Information Systems Management and Strategy *Summer 2010 Registration: ISMG 6180*

Choose six:

- ISMG 6080 - Database Management Systems *Summer 2010 Registration: ISMG 6080*
- ISMG 6120 - Internet and Mobile Technologies *Summer 2010 Registration: ISMG 6120*
- ISMG 6420 - Global Enterprise Systems *Summer 2010 Registration: ISMG 6420*
- ISMG 6430 - Information Systems Security and Privacy *Summer 2010 Registration: ISMG 6430*
- ISMG 6450 - IT Project Management *Summer 2010 Registration: ISMG 6450*
- ISMG 6460 - Emerging Technologies *Summer 2010 Registration: ISMG 6460*

Health Information Technology Management Specialization

Recently, the health care industry has shifted its focus from using proprietary and expensive IT solutions to more innovative IT applications in electronic health records (EHR) and other health information technology (HIT) innovations for sharing information effectively to help manage health care crisis. The courses within this specialization cover the evolving roles and importance of IT in health care industry; the innovative IT applications for delivering health care with reduced cost and increased quality; the management of health care using effective IT systems; and the security and privacy issues associated with health information. These courses will focus on how IT-enabled health care organizations can integrate information from various resources in order to deliver innovative IT solutions to meet unique requirements of health care industry.

Required Courses

- ISMG 6060 - Analysis, Modeling and Design Summer 2010 Registration: **ISMG 6060**
- ISMG 6080 - Database Management Systems Summer 2010 Registration: **ISMG 6080**

Choose six:

- HLTH 6071 - Introduction To Health Information Technology Summer 2010 Registration: **HLTH 6071**
- HLTH 6072 - Fundamentals of Health Information Technology Management Summer 2010 Registration: **HLTH 6072**
- ISMG 6220 - Business Intelligence Systems Summer 2010 Registration: **ISMG 6220**
- ISMG 6280 - Service Oriented Architecture Summer 2010 Registration: **ISMG 6280**
- ISMG 6430 - Information Systems Security and Privacy Summer 2010 Registration: **ISMG 6430**
- ISMG 6460 - Emerging Technologies Summer 2010 Registration: **ISMG 6460**
- ISMG 6810 - Business Intelligence in Healthcare Summer 2010 Registration: **ISMG 6810**

Web and Mobile Computing Specialization

This specialization focuses on building and managing large systems using platforms for Web site development, mobile and wireless applications, and Web services and service oriented architectures. The courses provide expertise in .Net programming, business process management, Internet and mobile technologies, Web site development technologies, data warehousing and administration, and service oriented architecture. Project management course work enables graduates to successfully handle highly complex systems development projects in the business world.

Required Courses

- ISMG 6060 - Analysis, Modeling and Design Summer 2010 Registration: **ISMG 6060**
- ISMG 6080 - Database Management Systems Summer 2010 Registration: **ISMG 6080**

Choose six:

- ISMG 6020 - .Net Programming Fundamentals Summer 2010 Registration: **ISMG 6020**
- ISMG 6040 - Business Process Management Summer 2010 Registration: **ISMG 6040**
- ISMG 6120 - Internet and Mobile Technologies Summer 2010 Registration: **ISMG 6120**
- ISMG 6240 - Website Development Practice and Technologies Summer 2010 Registration: **ISMG 6240**
- ISMG 6280 - Service Oriented Architecture Summer 2010 Registration: **ISMG 6280**
- ISMG 6450 - IT Project Management Summer 2010 Registration: **ISMG 6450**
- ISMG 6480 - Data Warehouse and Administration Summer 2010 Registration: **ISMG 6480**

Electives

Students fulfill an additional 6 semester hours by completing the following:

Note: If you are pursuing the accounting and information systems audit and control specialization, you do not complete these electives. All other students will complete the following electives.

- an elective course from any of the ISMG graduate courses OR an internship **AND**
- a free elective selected from any graduate course offered by the Business School, except BUSN courses numbered below 6800.

Candidates for the MS degree are not required to take a comprehensive examination or to complete a thesis in the major field.

Total: 30 hours for MS in Information Systems

Geographic Information Systems (GIS) Option

The geographic information systems option expands upon system development skills through the understanding geographic information systems work flows, analysis processes and data models. This option for the mobile and Internet computing specialization and business intelligence specialization addresses how map representations can be abstracted in geo-databases to develop intelligent GIS systems. Learn how GIS can improve efficiencies, decision making, planning, geographic accountability, science-based plans and communication. The GIS option is offered in conjunction with the College of Engineering and Applied Science and a certificate in GIS is awarded by the College of Engineering and Applied Science.

Students must complete all requirements for the MS in information systems, as well as the requirements below.

- CVEN 5381 - Introduction to Geographic Information Systems Summer 2010
Registration: C E 5381

Choose three:

- CVEN 5382 - GIS Spatial Database Development Summer 2010 *Registration: C E 5382*
- CVEN 5383 - GIS Analysis -- Theory and Practice Summer 2010 *Registration: C E 5383*
- CVEN 5384 - GIS Management and Policies Summer 2010 *Registration: C E 5384*
- CVEN 5385 - GIS Relational Database Systems Summer 2010 *Registration: C E 5385*
- CVEN 5386 - GIS Laboratory Summer 2010 *Registration: C E 5386*

Total: 12 Hours

- GIS courses are offered online and can be completed concurrently with the information systems courses.
- Students will be able to register for the classes on the Web. There are not any special registration requirements.
- Students need to notify the graduate advising office at the Business School, 303-315-8200, prior to graduation if they are planning to complete the GIS option. Students also need to indicate the completion of the course work when they submit their application for diploma card.

International Business MS

Advisor: Manuel G. Serapio, Jr.

Telephone: 303-315-8436

E-mail: Manuel.Serapio@ucdenver.edu

Faculty

Professors:

Wayne Cascio, PhD, University of Rochester

Lawrence Cunningham, DBA, University of Tennessee

John Ruhnka, JD/LLM, Yale School of Law/Cambridge University

Associate Professors:

L. Ann Martin, PhD, University of Minnesota

Kang RaeCho, PhD, University of Washington
Manuel Serapio, PhD, University of Illinois

Senior Instructors:

John Byrd, PhD, University of Oregon
John Turner, PhD, St. Louis University

Instructors:

Chen Ji, MS, University of Colorado
Mary Lee Stansifer, PhD, Northwestern University

The master of science in international business prepares individuals for the careers in international business or with international organizations.

The MS program in international business requires the completion of the following:

A. Common Body of Knowledge (CBK)

Required CBK

- BUSN 6520 - Managing Individuals and Teams Summer 2010 Registration:
BUSN 6520
- BUSN 6530 - Data Analysis for Managers Summer 2010 Registration: **BUSN 6530**
- BUSN 6540 - Legal and Ethical Environment of Business Summer 2010 Registration: **BUSN 6540**
- BUSN 6550 - Analyzing and Interpreting Accounting Information Summer 2010 Registration: **BUSN 6550**
- BUSN 6560 - Marketing Management Summer 2010 Registration: **BUSN 6560**
- BUSN 6620 - Applied Economics for Managers Summer 2010 Registration:
BUSN 6620
- BUSN 6640 - Financial Management Summer 2010 Registration: **BUSN 6640**

Total: 21 Hours

Waivers of CBK courses are possible. Specific courses may be waived based on a case-by-case evaluation of undergraduate or graduate course work in business completed at a regionally accredited college or university within the last 10 years.

B. Foreign Language Competency

Prior to graduation, students must demonstrate proficiency in a foreign language (other than English). This is accomplished through completion of three semesters of college-level course work in a single foreign language with a grade of C or better in all three terms or by passing a proficiency exam.

C. Graduate Core in International Business

Required Courses

- INTB 6000 - Introduction to International Business Summer 2010 Registration: **INTB 6000**
- INTB 6020 - Cross-Cultural Management Summer 2010 Registration: **INTB 6020**
- INTB 6200 - International Business Policy Summer 2010 Registration: **INTB 6200**

International Electives (4) (12 semester hours)

Free Elective (1) (3 semester hours)

Advanced Study Requirements in International Business (2) (6 semester hours)

Total: 30 Hours

Notes and Restrictions

International Topics Electives. Choose four courses (12 semester hours) from any INTB 6000-level course or higher or any approved international course.

Free Elective. One graduate-level class may be selected from any functional area of business, including international business topics classes, except BUSN courses numbered below 6800. International business majors can petition for transfer of 3 semester hours of relevant nonbusiness graduate courses offered at UC Denver's Downtown Campus.

Advanced Study Requirements. This 6-semester-hour requirement may be fulfilled by a master's thesis, research internship, international field study/study abroad or advanced courses in international business.

Management and Organization MS

Program Director: Kenneth L. Bettenhausen

Telephone: 303-315-8425

E-mail: Kenneth.Bettenhausen@ucdenver.edu

Faculty

Professors:

Heidi Boerstler, PhD/JD, Yale University/University of Denver
Wayne Cascio, PhD, University of Rochester
C. Marlena Fiol, PhD, University of Illinois-Urbana-Champaign
Edward O'Connor, PhD, University of Akron
John Ruhnka, JD/LLM, Yale School of Law/Cambridge University

Associate Professors:

Kenneth Bettenhausen, PhD, University of Illinois-Urbana-Champaign
Blair Gifford, PhD, University of Chicago
Sarah Koovor-Misra, PhD, University of Southern California

Assistant Professors:

Vinit Desai, PhD, University of California at Berkeley
Stephanie Johnson, PhD, Rice University

Instructors:

Linda Fried, JD/LLM, University of Miami
Barry McConnell, MBA, University of Colorado
Jeffrey Nystrom, MS, University of Colorado
Ira Selkowitz, JD, University of Denver

The MS management program prepares students for significant managerial responsibilities in the private and public sectors. Core course requirements provide students with advanced understanding of how to manage interpersonal dynamics, effectively design organizations, implement planned change and organizational transformations and develop human resources. Students build on this foundation with any four electives in MGMT, ENTP or INTB, or with the courses that comprise one of 12 career-focused specializations.

The specializations include: business strategy, change and innovation, communications management, enterprise technology management, entrepreneurship and innovation, human resources management, global management, leadership, strategic management, managing for sustainability, quantitative decision methods and sports and entertainment management. These specializations will help students master the tools and knowledge to be successful in each focused competency.

The MS management and organization degree requirements are met by the following:

Management MS Core

Required Management Courses

- BUSN 6520 - Managing Individuals and Teams Summer 2010 Registration:
BUSN 6520
- MGMT 6320 - Organizational Development Summer 2010 Registration: **MGMT 6320**
- MGMT 6360 - Designing Effective Organizations Summer 2010 Registration:
MGMT 6360
- MGMT 6380 - Managing People for Competitive Advantage Summer 2010 Registration: **MGMT 6380**

Total: 12 Hours

Management Emphasis (or elective) courses (12-18 semester hours)

A student may choose to complete the program by taking any four MGMT, INTB or ENTP elective courses.

Choose from one of the following emphasis areas:

- communications management
- enterprise technology management
- entrepreneurship and innovation
- global management
- human resources management
- leadership
- quantitative decision methods
- sports and entertainment management
- strategic management
- sustainability management

Communications Management

For the communications management specialization you must complete six courses from the Business School, five of which must be within the MGMT course curriculum. You are allowed no more than four communications courses (three required and one free elective).

Required Courses

- COMM 5240 - Organizational Communication Summer 2010 Registration: **CMMU 5240**
- COMM 5250 - Difference Matters and Organizational Communication Summer 2010 Registration: **CMMU 5250**
- COMM 5405 - Technical Communication: Writing Summer 2010 Registration: **CMMU 5405**

Choose one:

- MGMT 6800 - Special Topics in Management Summer 2010 Registration: **MGMT 6800**
- MGMT 6803 - Visionary Leadership Summer 2010 Registration: **MGMT 6803**
- MGMT 6804 - Bargaining and Negotiation Summer 2010 Registration: **MGMT 6804**

Total: 12 Hours

Approved COMM Elective Courses

Choose one:

The following is a list of communication courses that may be used to fulfill a free elective on your degree plan.

For the communications specialization you must complete six courses from the Business School, of which five must be within the MGMT course curriculum. You are allowed no more than four communications courses.

- COMM 5151 - Group Communication Summer 2010 Registration: **CMMU 5151**
- COMM 5222 - Professional Communication Summer 2010 Registration: **CMMU 5222**
- COMM 5245 - Advanced Organizational Communication Summer 2010 Registration: **CMMU 5245**
- COMM 5260 - Communication and Conflict Summer 2010 Registration: **CMMU 5260**
- COMM 5262 - Mediation Summer 2010 Registration: **CMMU 5262**
- COMM 5270 - Intercultural Communication Summer 2010 Registration: **CMMU 5270**
- COMM 5280 - Communication and Change Summer 2010 Registration: **CMMU 5280**
- COMM 5500 - Health Communication Summer 2010 Registration: **CMMU 5500**
- COMM 5505 - Technical Communication: Editing Summer 2010 Registration: **CMMU 5505**

- COMM 5640 - Advanced Public Relations Summer 2010 Registration: **CMMU 5640**
- COMM 5760 - Computer-Mediated Communication Summer 2010 Registration: **CMMU 5760**
- COMM 5830 - Visual Principles in Technical Communication Summer 2010 Registration: **CMMU 5830**

Enterprise Technology Management

Required Courses

Choose four:

- ISMG 6430 - Information Systems Security and Privacy Summer 2010 Registration: **ISMG 6430**
- ISMG 6450 - IT Project Management Summer 2010 Registration: **ISMG 6450**
- ISMG 6460 - Emerging Technologies Summer 2010 Registration: **ISMG 6460**
- ISMG 6420 - Global Enterprise Systems Summer 2010 Registration: **ISMG 6420**

Total: 12 Hours

Entrepreneurship and Innovation

- ENTP 6000 - Fundamentals of Entrepreneurship Summer 2010 Registration: **ENTP 6000**
- ENTP 6020 - The Business Plan Summer 2010 Registration: **ENTP 6020** and 6000-level ENTP courses (2) or 6000-level ENTP course (1) and 6000-level MGMT course (1) (6 semester hours)

Total: 12 Hours

Global Management

Required Courses

- INTB 6000 - Introduction to International Business Summer 2010 Registration: **INTB 6000**
- INTB 6020 - Cross-Cultural Management Summer 2010 Registration: **INTB 6020**
- MGMT 6040 - International Human Resources Management Summer 2010 Registration: **MGMT 6040** or
- INTB 6040 - International Human Resources Management Summer 2010 Registration: **INTB 6040**
Any travel-study program or 6000-level INTB course (3 semester hours)

Total: 12 Hours

Leadership

Prerequisite

- BUSN 6530 - Data Analysis for Managers Summer 2010 Registration: **BUSN 6530**

Required Courses

- INTB 6000 - Introduction to International Business Summer 2010 Registration: **INTB 6000** or
- ENTP 6000 - Fundamentals of Entrepreneurship Summer 2010 Registration: **ENTP 6000**
- MGMT 6803 - Visionary Leadership Summer 2010 Registration: **MGMT 6803**
- MGMT 6804 - Bargaining and Negotiation Summer 2010 Registration: **MGMT 6804**
- MGMT 6800 - Special Topics in Management Summer 2010 Registration: **MGMT 6800**

Total: 12 Hours

Management of Change

Required Courses

Choose four:

- BUSN 6811 - IT and New Business Paradigms Summer 2010 Registration: **BUSN 6811**
- BUSN 6830 - Business and the Natural Environment Summer 2010 Registration: **BUSN 6830**
- ENTP 6820 - Business Consulting Summer 2010 Registration: **ENTP 6820**
- MGMT 6730 - Human Resources Management: Performance Management Summer 2010 Registration: **MGMT 6730**
- MGMT 6803 - Visionary Leadership Summer 2010 Registration: **MGMT 6803**
- MGMT 6804 - Bargaining and Negotiation Summer 2010 Registration: **MGMT 6804**
- MGMT 68__ - Leadership in Difficult Times (3 semester hours)
- MGMT 6821 - Managing for Sustainability Summer 2010 Registration: **MGMT 6821**

Total: 12 Hours

Managing Human Resources

Prerequisites

- BUSN 6530 - Data Analysis for Managers Summer 2010 Registration: **BUSN 6530**
 - MGMT 6380 - Managing People for Competitive Advantage Summer 2010 Registration: **MGMT 6380**
- HR emphasis prerequisite courses are in addition to the 30-hour MS core.

Required Courses

Choose four:

- BUSN 6540 - Legal and Ethical Environment of Business Summer 2010 Registration: **BUSN 6540**
- MGMT 6040 - International Human Resources Management Summer 2010 Registration: **MGMT 6040** or
- INTB 6040 - International Human Resources Management Summer 2010 Registration: **INTB 6040**
- MGMT 6710 - Human Resources Management: Staffing Summer 2010 Registration: **MGMT 6710**
- MGMT 6720 - Human Resources Management: Training Summer 2010 Registration: **MGMT 6720**
- MGMT 6730 - Human Resources Management: Performance Management Summer 2010 Registration: **MGMT 6730**
- MGMT 6740 - Human Resources Management: Compensation Summer 2010 Registration: **MGMT 6740**

Total: 12 Hours

Managing for Sustainability

Courses and course numbers in this emphasis were still being finalized when this catalog went to print. See a graduate advisor for details.

Quantitative Decision Methods

Prerequisite

(completion of prerequisite is in addition to the 30-hour MS in management and organization)

- BUSN 6530 - Data Analysis for Managers Summer 2010 Registration: **BUSN 6530**

Required Courses

Choose four:

- BUSN 6630 - Management of Operations Summer 2010 Registration: **BUSN 6630**
- BUSN 6820 - Project Management Summer 2010 Registration: **BUSN 6820**
or
- DSCI 6820 - Project Management Summer 2010 Registration: **DSCI 6820**
- BUSN 6822 - Services Operations Summer 2010 Registration: **BUSN 6822**
or
- DSCI 6822 - Services Operations Summer 2010 Registration: **DSCI 6822**
- BUSN 6824 - Business Forecasting Summer 2010 Registration: **BUSN 6824**
or
- DSCI 6230 - Business Forecasting Summer 2010 Registration: **DSCI 6230**
- BUSN 6826 - Supply Chain Management Summer 2010 Registration: **BUSN 6826**
- BUSN 6828 - Business Applications of Data Mining Summer 2010 Registration: **BUSN 6828**
or
- DSCI 6828 - Business Applications of Data Mining Summer 2010 Registration: **DSCI 6828**
- DSCI 6440 - Quality and Process Improvement Summer 2010 Registration: **DSCI 6440**

Total: 12 Hours

Note: One of two free electives must be aMGMT, ENTP or INTB course.

Sports and Entertainment Management

Required Courses

Choose four:

- FNCE 6___ - Sports and Entertainment Finance (3 semester hours)
- MGMT 5939 - Internship or Cooperative Education Summer 2010 Registration: **MGMT 5939**

- MGMT 6830 - Sports and Entertainment Management Summer 2010
*Registration: **MGMT 6830***
- MGMT 6832 - Law and Negotiation in the Sports/ Entertainment Industries
*Summer 2010 Registration: **MGMT 6832***
- MKTG 6820 - Sports & Entertainment Marketing Summer 2010 Registration:
MKTG 6820

Total: 12 Hours

Courses and course numbers in this emphasis were still being finalized when this catalog went to print. See a graduate advisor for details.

Strategic Management

Students pursuing a dual MBA/MS in organization and management are not eligible for this emphasis.

Prerequisites

- BUSN 6530 - Data Analysis for Managers Summer 2010 Registration: **BUSN 6530**
- BUSN 6550 - Analyzing and Interpreting Accounting Information Summer 2010
*Registration: **BUSN 6550***

Required Courses

- BUSN 6560 - Marketing Management Summer 2010 Registration: **BUSN 6560**
- BUSN 6640 - Financial Management Summer 2010 Registration: **BUSN 6640**
- BUSN 6710 - Strategic Management Summer 2010 Registration: **BUSN 6710**
- MGMT 6803 - Visionary Leadership Summer 2010 Registration: **MGMT 6803**

Total: 12 Hours

Free Electives (6 semester hours)

Free electives can be anything in the Business School (graduate level), except BUSN prefix courses below 6800. Any 6000-level or higher ACCT, FNCE, ENTP, MKTG, MGMT, ISMG, INTB or HLTH course can count as your free elective requirement.

*For the **communications emphasis**, the student is allowed to use an approved COMM course as the free elective.

Marketing MS

Program Director: David Forlani

Telephone: 303-315-8420

E-mail: David.Forlani@ucdenver.edu

Faculty

Professors:

Lawrence Cunningham, DBA, University of Tennessee

Susan Keaveney, PhD, University of Colorado

Clifford Young, PhD, University of Utah

Assistant Professors:

David Forlani, PhD, University of Minnesota

Vick Lane, PhD, University of Washington

Madhavan Parthasarathy, PhD, University of Nebraska

Senior Instructor:

Mary Lee Stansifer, PhD, Northwestern University

Instructors:

Peter Miller, MA, Farleigh Dickenson University

The MS in marketing degree is designed to provide the skill sets necessary for you to succeed in middle (e.g., brand manager, advertising account executive) and upper level (e.g., CMO) positions in marketing and for those who interface with an organization's markets (e.g., customer service or operations).

Your MS in marketing degree from the University of Colorado Denver consists of 30 hours:

- 18 semester hours of marketing core courses
- 12 semester hours of graduate electives

We highly recommend that one of the electives include a marketing-related internship, especially for those making a career change or without prior experience in marketing. Further, as has been our policy, if you feel that you would benefit by

substituting a one or two graduate electives for a marketing elective, the marketing program director will help to work out a plan designed to meet your specific career needs. You must complete the following 18 hours of marketing core courses and then you can choose from two paths to complete the remaining 12 hours. You can select the “build your own MS marketing degree” option or one of the nine specializations.

Graduate Core in Marketing

Required Courses

- BUSN 6560 - Marketing Management Summer 2010 Registration: **BUSN 6560**
- MKTG 6010 - Marketing Strategy, Evaluation and Development Summer 2010 Registration: **MKTG 6010**
- MKTG 6020 - International Marketing Summer 2010 Registration: **MKTG 6020**
- MKTG 6050 - Marketing Research Summer 2010 Registration: **MKTG 6050**
- MKTG 6060 - Buyer Behavior Summer 2010 Registration: **MKTG 6060**
- MKTG 6200 - Marketing Dashboards & Scorecards Summer 2010 Registration: **MKTG 6200**

Marketing Electives

Build Your Own MS Marketing Degree with 12 semester hours of MKTG electives

Choose any four MKTG electives, such as:

- MKTG 5939 - Internship/Cooperative Education Summer 2010 Registration: **MKTG 5939**
- MKTG 6030 - Sales and Sales Force Management Summer 2010 Registration: **MKTG 6030**
- MKTG 6040 - Services Marketing Summer 2010 Registration: **MKTG 6040**
- MKTG 6070 - Integrated Marketing Communications and Brand Identity Summer 2010 Registration: **MKTG 6070**
- MKTG 6080 - Marketing in Emerging Markets Summer 2010 Registration: **MKTG 6080**
- MKTG 6090 - Customer Relationship Management Summer 2010 Registration: **MKTG 6090**
- MKTG 6091 - Strategic Product Marketing Summer 2010 Registration: **MKTG 6091**
- MKTG 6092 - Internet Marketing Summer 2010 Registration: **MKTG 6092**
- MKTG 6094 - Marketing Issues in the Chinese Environment Summer 2010 Registration: **MKTG 6094**

- MKTG 6120 - Non-Profit and Social Marketing Summer 2010 Registration:
MKTG 6120
- MKTG 6700 - Marketing Travel Study Summer 2010 Registration: **MKTG 6700**

Total: 30 Hours

...or complete one of the following marketing specializations (listed alphabetically).

Marketing Specializations

The specializations are areas of focus that will appeal to those who have specific interests or are looking to apply their marketing acumen in particular contexts (e.g., interface with engineering or work in a multinational or nonprofit environment). A 3-semester-hour internship can be substituted for an elective in any area of specialization with the approval of the marketing program director.

Brand Management and Marketing Communications

Are you interested in a career in advertising, promotions or public relations? How about furthering your career in marketing management? Advertising, promotion and public relations managers are creative, highly-motivated individuals who are flexible yet can meet a deadline. They need good verbal and written communication skills and the ability to work well with people. Similar talents are needed by those involved with brand management. This task is central to all marketers, especially those involved with perceptual positioning and the deliverance of positions in a target market (e.g., those working in any phase of market communication and R&D) The U.S. Bureau of Labor Statistics reports that, because of the high visibility of these positions, these managers are often prime candidates for top C-level positions. The job outlook remains promising but competition will be keen, and the best opportunities will go to those with an MS in marketing or an MS marketing /MBA dual degree. (Don't take our word for it, see <http://www.bls.gov/oco/ocos020.htm>).

Required:

- MKTG 6070 - Integrated Marketing Communications and Brand Identity Summer 2010 Registration: **MKTG 6070**

Choose three of the following courses:

- MKTG 6030 - Sales and Sales Force Management Summer 2010 Registration:
MKTG 6030
- MKTG 6040 - Services Marketing Summer 2010 Registration: **MKTG 6040**
- MKTG 6091 - Strategic Product Marketing Summer 2010 Registration: **MKTG 6091**

- MKTG 6092 - Internet Marketing Summer 2010 Registration: **MKTG 6092**
- BUSN 6530 - Data Analysis for Managers Summer 2010 Registration: **BUSN 6530**
- COMM 5635 - Principles of Public Relations Summer 2010 Registration: **CMMU 5635**
- COMM 5640 - Advanced Public Relations Summer 2010 Registration: **CMMU 5640**
- ISMG 6240 - Website Development Practice and Technologies Summer 2010 Registration: **ISMG 6240**

Global Marketing

One of the growing themes of the 21st century economy is the growth of world trade. There is continuing demand for individuals who understand the how to conduct marketing across many different international environments as well as rapidly growing areas such as China and the emerging markets. This specialization prepares you to effectively compete and succeed in this environment.

Required (select one of the following courses):

- MKTG 6080 - Marketing in Emerging Markets Summer 2010 Registration: **MKTG 6080**
- MKTG 6094 - Marketing Issues in the Chinese Environment Summer 2010 Registration: **MKTG 6094**

Choose three of the following courses:

- ENTP 6826 - International Entrepreneurship Summer 2010 Registration: **ENTP 6826**
- INTB 6020 - Cross-Cultural Management Summer 2010 Registration: **INTB 6020**
- INTB 6022 - International Business Negotiations Summer 2010 Registration: **INTB 6022**
- INTB 6080 - Global Competition Summer 2010 Registration: **INTB 6080**
- INTB 6200 - International Business Policy Summer 2010 Registration: **INTB 6200**
- MKTG 6700 - Marketing Travel Study Summer 2010 Registration: **MKTG 6700**

High-Tech/Entrepreneurial Marketing

The American economy was built on a spirit of innovation, hard work and entrepreneurship, and this is surely going to be the path that assures continued

American dominance in the technology and business development fields. Most smart innovators know that, in addition to the financial and managerial aspects of a business, it is the marketing function that often makes the difference between success and failure. Whether your interest is in corporate intrapreneurship and the development of high-technology oriented innovations or individual entrepreneurship and the development of a small business with minimal funds, knowing how to create and implement appropriate marketing strategies is fundamental to achieving your goals. This specialization allows you to focus on the type of new business creation path that best suits your aspirations while greatly enhancing your endeavor's probability of success. If you aspire to be the next Bill Gates, this is a "must take" degree path for you.

Required:

- MKTG 6091 - Strategic Product Marketing Summer 2010 Registration: **MKTG 6091**
- ENTP 6842 - New Concept Development Summer 2010 Registration: **ENTP 6842**

Choose two of the following courses:

- MKTG 6030 - Sales and Sales Force Management Summer 2010 Registration: **MKTG 6030**
- MKTG 6040 - Services Marketing Summer 2010 Registration: **MKTG 6040**
- MKTG 6070 - Integrated Marketing Communications and Brand Identity Summer 2010 Registration: **MKTG 6070**
- MKTG 6092 - Internet Marketing Summer 2010 Registration: **MKTG 6092**
- COMM 5285 - Communication Processes in Technology Transfer Summer 2010 Registration: **CMMU 5285**
- ENTP 6000 - Fundamentals of Entrepreneurship Summer 2010 Registration: **ENTP 6000**
- ENTP 6020 - The Business Plan Summer 2010 Registration: **ENTP 6020**
- ENTP 6826 - International Entrepreneurship Summer 2010 Registration: **ENTP 6826**
- ENTP 6860 - Business Planning for Social Entrepreneurs Summer 2010 Registration: **ENTP 6860**

Internet Marketing

Are you interested in a degree that blends Web development and application strategies with marketing? This, then, is the specialization for you. This specialization covers all

aspects of Internet marketing including the functions associated with Web sites for marketing communication and customer support, one-to-one communication to many different receiving devices, marketing via social networks, consumer behavior insights based on offline and online data combination, inventory optimization through CRM-SCM integration, and a focus on ROI and associated performance metrics. With Internet marketing poised to take off globally, especially in developing countries where consumers may not have access to the latest products in local stores, this is indeed the wave of the future.

Required:

- MKTG 6040 - Services Marketing Summer 2010 Registration: **MKTG 6040**
- MKTG 6092 - Internet Marketing Summer 2010 Registration: **MKTG 6092**

Choose two of the following courses:

- MKTG 6070 - Integrated Marketing Communications and Brand Identity Summer 2010 Registration: **MKTG 6070**
 - MKTG 6090 - Customer Relationship Management Summer 2010 Registration: **MKTG 6090**
 - BUSN 6828 - Business Applications of Data Mining Summer 2010 Registration: **BUSN 6828**
- or
- DSCI 6828 - Business Applications of Data Mining Summer 2010 Registration: **DSCI 6828**
 - ISMG 6080 - Database Management Systems Summer 2010 Registration: **ISMG 6080**
 - ISMG 6240 - Website Development Practice and Technologies Summer 2010 Registration: **ISMG 6240**
 - ISMG 6430 - Information Systems Security and Privacy Summer 2010 Registration: **ISMG 6430**

Marketing and Business Intelligence

A great increase in ERP, CRM, HRMS and SCM applications over the last decade has created a need for specialists who can manage the many sources of information critical for business growth. Further, increased competition due to globalization has made it critical to have effective and faster decision making across all functions, especially the marketing function, where smart analysis and interpretation of enterprise data is often paramount in the formulation of competitive marketing strategy. If you are seeking a

fast-growing and fast-paced area of specialization, this may well be the degree path for you.

Required:

- MKTG 6090 - Customer Relationship Management Summer 2010 Registration:
MKTG 6090
- ISMG 6080 - Database Management Systems Summer 2010 Registration: **ISMG 6080**

Choose one of the following courses:

- ISMG 6480 - Data Warehouse and Administration Summer 2010 Registration:
ISMG 6480
 - BUSN 6828 - Business Applications of Data Mining Summer 2010 Registration:
BUSN 6828
- or
- DSCI 6828 - Business Applications of Data Mining Summer 2010 Registration:
DSCI 6828

Marketing for Sustainability

The world has changed. More than ever, companies around the globe need to introduce smart, sustainable brands to lead the way into the future. The strong core of MS marketing courses will give you the skills to become an effective marketing manager, while the specialized set of sustainability courses will give you the knowledge to work toward a better tomorrow. The sustainability courses will focus on the triad of economic, environmental and social sustainable development.

Required:

- MKTG 6040 - Services Marketing Summer 2010 Registration: **MKTG 6040**
- MKTG 6120 - Non-Profit and Social Marketing Summer 2010 Registration:
MKTG 6120

Choose two of the following courses:

- BUSN 6830 - Business and the Natural Environment Summer 2010 Registration:
BUSN 6830
- BUSN 6850 - Accounting and Finance for Sustainability Summer 2010 Registration: **BUSN 6850**
- ENTP 6858 - Innovation in the Social Sector Summer 2010 Registration: **ENTP 6858**

- MGMT 6821 - Managing for Sustainability Summer 2010 Registration: **MGMT 6821**
- MGMT 6822 - Business Ethics and Corporate Social Responsibility Summer 2010 Registration: **MGMT 6822**

Marketing in Nonprofit Organizations

Are you someone who would rather help people, communities and the environment rather than focus on turning a profit? Many of our alumni have followed career paths with nonprofit organizations. They tell us that a strong core in marketing combined with specialized knowledge of the unique needs of not-for-profit organizations helped them to succeed.

Required:

- MKTG 6040 - Services Marketing Summer 2010 Registration: **MKTG 6040**
- MKTG 6120 - Non-Profit and Social Marketing Summer 2010 Registration: **MKTG 6120**

Choose two of the following courses:

- BUSN 6550 - Analyzing and Interpreting Accounting Information Summer 2010 Registration: **BUSN 6550**
- BUSN 6822 - Services Operations Summer 2010 Registration: **BUSN 6822**
- or
- DSCI 6822 - Services Operations Summer 2010 Registration: **DSCI 6822**
- ENTP 6858 - Innovation in the Social Sector Summer 2010 Registration: **ENTP 6858**
- ENTP 6860 - Business Planning for Social Entrepreneurs Summer 2010 Registration: **ENTP 6860**
- MGMT 6822 - Business Ethics and Corporate Social Responsibility Summer 2010 Registration: **MGMT 6822**
- MKTG 6030 - Sales and Sales Force Management Summer 2010 Registration: **MKTG 6030**
- MKTG 6070 - Integrated Marketing Communications and Brand Identity Summer 2010 Registration: **MKTG 6070**

Marketing Research

Marketing and survey researchers gather information about what people think, measure customer satisfaction and repurchase intentions, help companies decide what goods and services to offer and at what price, and detect up-and-coming trends. Marketing researchers need good quantitative skills, strong analytical skills and a good understanding of marketing and buyer behavior. Many of our alumni got their starts in marketing research positions. According to the U.S. Bureau of Labor Statistics, employment is expected to grow faster than average with the best job opportunities for those with an MS marketing degree (Don't just take our word for it; check out <http://www.bls.gov/oco/ocos013.htm>).

Required:

- MKTG 6040 - Services Marketing Summer 2010 Registration: **MKTG 6040**
- MKTG 6090 - Customer Relationship Management Summer 2010 Registration: **MKTG 6090**

Choose two of the following courses:

- BUSN 6530 - Data Analysis for Managers Summer 2010 Registration: **BUSN 6530**
 - DSCI 6480 - Simulation Modeling Summer 2010 Registration: **DSCI 6480**
 - BUSN 6828 - Business Applications of Data Mining Summer 2010 Registration: **BUSN 6828**
- or**
- DSCI 6828 - Business Applications of Data Mining Summer 2010 Registration: **DSCI 6828**
 - MKTG 6070 - Integrated Marketing Communications and Brand Identity Summer 2010 Registration: **MKTG 6070**

Sports and Entertainment Marketing

The sports business industry is one of the largest and fastest growing in the United States. Add to that the burgeoning music, film, theater, television, cable and other entertainment industries and you've got virtually limitless choices. Every one of those industries needs good marketers. The strong core of marketing courses in the MS marketing program will give you the skills you need to hit the ground running with the specialized courses to teach you how to tailor your skills to the unique needs of the sports and entertainment industries.

Required:

- MKTG 6040 - Services Marketing Summer 2010 Registration: **MKTG 6040**

- MKTG 6820 - Sports & Entertainment Marketing Summer 2010 Registration:
MKTG 6820

Choose two of the following courses:

- BUSN 6860 - Finance in the Sports Entertainment Industries Summer 2010 Registration: **BUSN 6860**
- MGMT 6832 - Law and Negotiation in the Sports/ Entertainment Industries Summer 2010 Registration: **MGMT 6832**
- MGMT 6830 - Sports and Entertainment Management Summer 2010 Registration: **MGMT 6830**
- MKTG 6070 - Integrated Marketing Communications and Brand Identity Summer 2010 Registration: **MKTG 6070**

Master of Science/Master of Arts

Finance/Economics MS/MA

Students may concurrently pursue an MA in economics offered by the College of Liberal Arts and Sciences and the MS in finance offered by the Business School. Students must complete 27 semester hours of a combination core, 15 semester hours of combination electives and 3 semester hours of a 5000- or 6000-level economics elective.

Master of Science/Master of Science

Business/Business MS/MS

Students may concurrently pursue dual MS degrees in any two fields of business. The program consists of a minimum of 51 semester hours of core course work, which must be completed within a period of seven years. In addition, candidates for the dual degree must satisfy all the common body of knowledge (CBK) and background requirements prescribed for each degree. Waivers may be approved for some of the CBK or background upon transcript evidence of equivalent previous undergraduate or graduate course work. For more information contact a graduate staff advisor, 303-315-8200.

Doctor of Philosophy

CSIS-Business PhD

Program Components

Plan of Study

A list of course work and other requirements for the degree should be prepared with the advisor and submitted to the program co-directors for approval. The successful completion of all work indicated on the plan of study is an important prerequisite for the conferring of the degree. A plan of study should be submitted for approval by the end of the first semester of the program. The current plan of study should be updated before the beginning of the second year of the program and submitted for reapproval to the co-directors.

Preliminary Exam

According to Graduate School rules, students are required to demonstrate their basic knowledge and preparation toward more advanced doctoral level work. For more information visit the CSIS program Web site.

Comprehensive Exam

Students will submit a paper to fulfill the graduate school's comprehensive exam requirement. The paper should describe an area of research including literature review, problem definition and possible methodologies/models to study a significant problem in computer science or information systems. The paper will be evaluated by a committee of three faculty members. An oral presentation of the paper will be open to the entire CSIS faculty. The committee may adopt additional guidelines to evaluate the paper and presentation. According to graduate school rules, the comprehensive exam must be completed by the end of the fourth year in the program. In addition to these requirements, the comprehensive exam must meet the other graduate school requirements.

Dissertation Proposal

As the first phase of the dissertation, each student should prepare a proposal that will be evaluated by the doctoral committee. A proposal should be ready for review at least one semester before the expected completion date of the degree. The proposal is submitted for review and approval by the doctoral committee. An oral presentation of the dissertation proposal before the doctoral committee is required for approval. An approved proposal is then submitted to the co-directors of the program for final approval.

University-Level Instructional Training

During the program, each student will obtain training for university-level instruction. This requirement can be fulfilled by working with a faculty member as a teaching assistant,

attending university-level teacher training or teaching a university-level class. Students who plan a university career will be encouraged to teach one or more courses and participate in training. When teaching or working as a teaching assistant, a student will be compensated according to standard university salaries.

Dissertation Completion

Following completion of the approval of the dissertation proposal, each student prepares and then submits a dissertation. The dissertation is defended before the doctoral committee in a public meeting. Final approval for the dissertation is given by a vote of the dissertation committee after the public defense of the dissertation.

Graduation

Upon completion of all degree requirements, including the dissertation defense, the student receives the degree of doctor of philosophy. Students applying through the CSE receive the PhD from the College of Engineering and Applied Science, while students applying through the information systems program receive the PhD from the Business School.

College of Engineering and Applied Science

[At A Glance: College of Engineering and Applied Science](#)

[Complete course list for the College of Engineering and Applied Science](#)

Dean

Marc Ingber

Assistant Dean of Administrative and Academic Planning

Brian Brady

Assistant Dean of Student Services

Paul Rakowski

Director of Community and Industry Relations

Marilee DeGoede

Contact

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College of Engineering and Applied Science

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Denver, CO 80217-3364

Engineering Student Services/Academic Advising

303-556-4768

Application Deadlines

Undergraduate

Fall—August 1

Spring—December 1

Summer—May 1

Graduate Programs

Civil Engineering

Domestic

Fall: master's—July 15

doctoral—May 15

Spring: master's—December 1

doctoral—October 1

Summer: master's—March 15

doctoral—January 15

International

Fall: master's—June 15
doctoral—April 15

Spring: master's—November 1
doctoral—September 1

Summer: master's—February 15
doctoral—December 15

Computer Science and Engineering

Rolling Admissions

Electrical Engineering

Rolling Admissions

Mechanical Engineering

Fall—April 1

Spring—October 1

Overview

Continuing an 85-year tradition, the College of Engineering and Applied Science on the Denver Campus of the University of Colorado Denver (UC Denver) meets the needs of the Denver metropolitan area by providing nationally accredited engineering education in a flexible format that suits both students and employers. Recognizing the importance for students to pursue professional studies and related employment simultaneously, the college offers undergraduate and graduate degree programs in civil engineering, mechanical engineering, electrical engineering and computer science and engineering through evening studies or through a more traditional schedule of day classes. As a practicing engineer, you can improve and update your professional capabilities and earn a graduate degree. Or, through our interdisciplinary master of engineering degree, you can obtain graduate education in management, computer science, behavioral science or other areas together with new engineering skills in your field. We also participate in an interdisciplinary master of science in environmental science.

A listing of the fields in which engineers work would have hundreds of entries. The following list gives only a brief summary of the fields available at UC Denver.

Civil engineering offers an interesting and challenging career in the design and construction of buildings, bridges, dams, aqueducts and other structures; in transportation systems including highways, canals, pipelines, airports, rapid transit lines,

railroads and harbor facilities; in the distribution of water and the regulation of rivers; in the development of water resources for urban use, industry and land reclamation; in the control of water quality through water purification and proper waste treatment; in the construction and contracting industry; and in the problems concerned with our physical environment and the growth of cities.

Computer science and engineering offers graduates the solid foundation needed for jobs in computing and information technologies. Career paths in computer science involve designing and implementing software, devising new applications of computers and developing effective ways to solve computing problems. Computer engineers design and develop computer hardware and supervise its manufacture and installation.

Electrical engineering offers professional careers that include research in development of new electrical or electronic devices, instruments or products; design of equipment or systems; production and quality control of electrical products; and sales or management for private industry or government. There are numerous specialties within electrical engineering. Among them are the design and application of computer systems and digital engineering; electromagnetic fields and microwave devices; control systems; communication theory and signal processing; electrical integrated circuits and electron devices; and energy and power systems.

Mechanical engineering offers a wide range of interesting and challenging career opportunities in research, design, development, manufacturing, testing and marketing for either private industry or government. Mechanical engineers help develop a wide range of products such as engines, transmissions, compressors, pumps, computer disk drives, oil field drilling rigs, missiles, space satellites, earth-moving equipment, container-manufacturing machines, medical equipment and many other products encountered in daily life.

College of Engineering and Applied Science Educational Goals

The College of Engineering and Applied Science has established the following goals and objectives for undergraduate education:

- successful completion of the fundamental core courses, primarily lower division, in mathematics and the physical sciences
- successful completion of the required upper-division courses in engineering science, analysis and design
- successful completion of real-world engineering design projects that require integration of engineering, economic and social skills
- successful completion of a series of humanities and social science courses that introduce the student to societal problems and historical perspectives

- evidence, through close student/faculty contact, of development of professionalism, ethics and concern for the multifaceted human element of engineering
- evidence, from successful completion of a full engineering curriculum, of the ability to maintain professional competency through lifelong learning
- evidence, through successful completion of a series of communications oriented courses and project presentations, of an ability to communicate effectively with professionals and lay persons alike

Accreditation

The undergraduate degree programs in civil, computer science and engineering, electrical and mechanical engineering programs are accredited by the Engineering Accreditation Commission (EAC) of the Accreditation Board for Engineering and Technology (ABET).

Availability of Degree Programs

UC Denver will accept for matriculation only those prospective engineering students who designate a degree program awarded by the UC Denver College of Engineering and Applied Science. Students desiring degree programs other than those named above must apply to the campus awarding the degree. In some cases, the university campus accepting the student may grant permission to take courses on another University of Colorado campus, subject to enrollment limitations. In such cases, the engineering department of the admitting campus will counsel the student in the preparation of course schedules.

Nondegree Students

Nondegree students may apply 12 semester hours of course work (or up to 18 if taken in one semester) toward a bachelor's degree in engineering from UC Denver. Nondegree graduate students may apply 9 semester hours of graduate-level course work toward a master's degree in engineering from UC Denver.

Summer Courses

Summer session courses are offered for regular students and those who have academic deficiencies. Courses are also offered for high school graduates who wish to enter as freshmen and need some additional preparatory work. For some students, there are advantages in starting their college careers during the summer session. Some required

freshman and sophomore courses and many elective courses are offered at UC Denver during the summer. The summer session gives students a head start and enables them to take a lighter load during the fall semester or take additional courses to enrich their programs.

Computing

The College of Engineering and Applied Science encourages all students to develop their skills in using the computer as a tool, not only for solving technical problems but for use in all other facets of their careers. Students are encouraged to explore computer courses other than the fundamental programming course required in their curriculum.

Internships and Cooperative Education

Internships and cooperative education are a way for students to gain professional experience while studying at UC Denver. Many internship and co-op positions lead to permanent employment opportunities upon graduation. Please see the "Career Center" section of the Campus Life chapter in this catalog or contact the Career Center at 303-556-2250 for information on the specific eligibility requirements. Information can also be obtained by contacting Engineering Student Services (ESS) in the Office of the Dean at 303-556-4768.

Scholarships

The college receives an annual allocation of state funds for Dean's Scholarships; these funds are awarded to students who apply and meet scholarship and community service criteria. Additional funds for scholarships and loans are obtained through contributions from alumni and friends. Enrollment in the College of Engineering and Applied Science makes the student eligible for these scholarships. Scholarship application forms are available in the college. Students must apply by April 1 for summer or fall semester and by October 1 for spring semester of each year for consideration. Students can apply for all industry scholarships and Dean's Scholarships using the general application form. Scholarship application forms require information about the applicant's participation in school related activities, community activities and work. Dean's Scholarship applicants must qualify for in-state tuition and have at least a 3.0 GPA, but do not need to show unmet financial need. All recipients must be registered for six or more hours in the semester for which the awards are made.

The College of Engineering and Applied Science also offers scholarships to new, financially eligible students who are enrolled full time as an engineering major through its Recruiting Engineers to ACHieve (REACH) program. Through this National Science Foundation program, scholarship recipients can receive up to \$7,600 their first year (depending on need) and up to \$3,800 the second year. Detailed program information is

online at www.ucdenver.edu/REACH. For more scholarship information, go to www.ucdenver.edu/academics/colleges/Engineering/Pages/EngineeringAppliedScience.aspx under "Scholarships."

For additional information on other types of financial aid, consult the Tuition, Fees and Financial Aid chapter of this catalog.

Research Centers

Transportation Research Center

Director: Bruce Janson

Telephone: 303-556-2831

The Transportation Research Center (TRC) involves both students and faculty on the Downtown Campus in a range of education and research activities. The TRC works on projects in collaboration with other departments and colleges such as business, urban planning and public affairs. TRC projects address local, state, national and international concerns with funding from federal, state, local or private sources.

Some focuses of the Transportation Research Center are transportation modeling; traffic monitoring technologies and data analysis techniques; transportation planning and travel demand forecasting for both person and freight movements; traffic engineering and control; facility design and management; use of geographic information systems in transportation; environmental impact assessment; transportation investment decision analysis, including cost-benefit analyses and cross-subsidization issues; and accident studies. Several studies on advanced system development involve partnerships with Colorado's high-tech industry.

Facility for Advanced Spatial Technology

GIS Lab Coordinator: M. Sue Hawkins

Affiliated Faculty: Deborah Thomas, College of Liberal Arts and Sciences; Lynn E. Johnson, College of Engineering and Applied Science; Brian Muller, College of Architecture and Planning

Telephone: 303-556-4172

Web site: ucdenver.edu/academics/colleges/Engineering/Programs/Civil-Engineering/Laboratories/Pages/FacilityforAdvancedSpatialTechnologyLab.aspx

The Facility for Advanced Spatial Technology (FAST) is a coordinated facility of the Colleges of Architecture and Planning, Engineering and Applied Science and Liberal Arts and Sciences. The FAST is comprised of computer clients and servers, GIS and related software and classroom and research space. It is the campus interdisciplinary center of GIS related activities that is used by students, faculty and outside community

groups seeking to develop GIS techniques for various applications.

The FAST provides support for GIS courses and degree programs for students of varying backgrounds, learning styles and locations. The programs give students modern proficiencies in applying GIS techniques to analyze, plan and design natural and built environments. Students can complete the engineering GIS program entirely online.

Colorado Advanced Photonics Technology Laboratory

Director: Larry Scherrer

Telephone: 303-556-4175

Web site: www.captcenter.org

The Colorado Advanced Photonics Technology (CAPT) Laboratory is a state-of-the-art measurement and fabrication research center. The four major areas of concentration are optical characterization and metrology, photonics, prototype packaging and photolithography and environmental testing and evaluation.

The CAPT Laboratory provides cutting-edge technical services to corporate and educational partners. It is the only photonics resource in Colorado that can deliver surface roughness measurements, optical testing, contract measurement services, prototyping, precision metrology, environmental testing, use of photonics equipment and facilities and training. The CAPT Laboratory provides access to advanced facilities and equipment, including \$5 million in equipment for material characterization, prototype packaging, measuring, inspection and environmental testing.

Center for Geotechnical Engineering Science

Director: N. Y. Chang

Associate Director: Brian Brady

Telephone: 303-556-2362

The Center for Geotechnical Engineering Science was formed to advance the understanding of the safety, reliability, performance and environmental impact of engineered geotechnical structures. Resolution of geotechnical and environmental remediation problems are addressed through research that is sponsored by public funding agencies and private industry, both national and international. The center serves as a vehicle for technology transfer. Cooperative research with other universities in Colorado, the United States and around the world is welcomed. The center includes research on geotechnical stability, rock engineering, geoenvironmental engineering and expansive soils.

The Expansive Soil Research Laboratory provides leadership in the advancement of technology needed to mitigate damage from expansive soils in Colorado. Studies cover national and international problems, as expansive soils underlie more than one-third of the earth's land surface. In the United States, these materials are prevalent in the

southern, western and Rocky Mountain states. As development takes place in these areas, structures may experience damaging effects of expansive soil resulting in the loss of millions of dollars annually. The current frequency and severity of damage clearly demonstrate that important deficiencies persist in our understanding and application of the current technology in engineering designs. The Expansive Soil Research Laboratory identifies and conducts research aimed at better understanding of the mechanisms and processes that characterize expansive soil; promotes education and training for engineering students and professionals, the construction industry and the public; assists consulting industries and governments with realistic guidelines on design, construction and operation of facilities built on expansive soils; and provides a database and clearinghouse for information and technology transfer.

Continuing Engineering Education Program

Program Manager: Heidi Utt

Telephone: 303-556-4907

Web

site: www.ucdenver.edu/academics/colleges/Engineering/discover/ContinuingEngineeringEducationProgram/Pages/CEEP.aspx

Continuing Engineering Education Program (CEEP) courses are offered at convenient times and locations, are taught by academic and industry professionals, and are responsive to changing technologies. By addressing topics for both engineers and non-engineers, the curriculum supplies the knowledge, skills, and competitive edge required in many professional fields. Moreover, CEEP students finish with ready-to-apply expertise. Program disciplines encompass civil, electrical, mechanical, environmental, systems, information technology, project management and more, with a focus on key industry certifications, such as the FE, PE, CAPM, PMP, CCNA, SCJP and others. Most CEEP offerings are non-credit Continuing Education Unit earning courses, although some courses are available for graduate credit.

Other University Campuses

University of Colorado at Boulder

Six engineering departments are located on the campus of the University of Colorado at Boulder. Complete BS, MS and PhD degree programs are offered by the Department of Aerospace Engineering Sciences; the Department of Chemical Engineering; the Department of Civil, Environmental and Architectural Engineering; the Department of Computer Science; the Department of Electrical and Computer Engineering; and the Department of Mechanical Engineering. Undergraduate and graduate degrees also are offered in applied mathematics and engineering physics. The programs at the Boulder campus are primarily oriented to the full-time student who can attend day classes.

University of Colorado at Colorado Springs

Three engineering departments—computer science; electrical and computer engineering; and mechanical and computer engineering—are located on the campus of the University of Colorado at Colorado Springs (UCCS). Complete BS degree programs are offered in computer engineering, computer science, electrical engineering and mechanical engineering; bachelor of innovation programs are offered in computer science, computer science security, electrical engineering and game design and development. Master of engineering programs are offered in information assurance, software engineering and space operations; and MS and PhD programs are awarded in computer science, electrical engineering and mechanical engineering.

General Requirements for Undergraduate Admission

The student must meet the admission requirements described in the [Information for Undergraduate Students](#) and Information for Graduate Students chapters of this catalog and of the College of Engineering and Applied Science in which the degree program selected by the student is offered.

Beginning undergraduate students in engineering should be prepared to start analytic geometry-calculus. No credit toward any degree in engineering will be given for algebra, trigonometry or precalculus mathematics (MATH 1110, 1120 and 1130). (These courses are offered to allow a student to make up deficiencies.) Students who question the adequacy of their precollege background in mathematics should contact the Department of Mathematics office in the College of Liberal Arts and Sciences. Placement tests covering precalculus mathematics are required of new freshmen to select the appropriate beginning mathematics course.

To be prepared for the type of mathematics courses that will be taught, the student must be competent in the basic ideas and skills of ordinary algebra, geometry and plane trigonometry. These include such topics as the fundamental operations with algebraic expressions, exponents and radicals, fractions, simple factoring, solution of linear and quadratic equations, graphical representation, simple systems of equations, complex numbers, the binomial theorem, arithmetic and geometric progressions, logarithms, the trigonometric functions and their use in triangle solving and simple applications, and the standard theorems of geometry, including some solid geometry. It usually takes eight semesters to cover this material adequately in high school.

Refer to the “Minimum Academic Preparation Standards (MAPS)” and “Admission Requirements for Freshmen” sections in the [Information for Undergraduate Students](#) chapter of this catalog for a list of high school subjects required for admission to the College of Engineering and Applied Science.

Former Students

Former students must meet the readmission requirements outlined in the [Information for Undergraduate Students](#) and [Information for Graduate Students](#) chapters of this catalog. Students who interrupt their degree program for more than one academic year will be required to follow the degree program in effect at the time of their readmission to the college. Repetition of course work may be necessary because of the interruption; readmitted applicants will be evaluated on an individual basis. Repeated courses must be taken for no credit (NC). See the “Repetition of Courses” policy under “[Academic Policies](#)” in this chapter of the catalog.

Intercampus Transfer

Transfers between campuses of the University of Colorado should be carefully planned to avoid loss of academic credit. Courses and credits required for engineering degrees vary from campus to campus; therefore, students should plan as far ahead as possible. The campus advisor can help choose the right courses. Such planning should also include contacting the engineering department to which the student plans to transfer at least one semester before the transfer is planned. The transfer student must have at least a 2.0 GPA for 30 hours of credit toward an engineering degree to be eligible to transfer. A higher GPA may be required to transfer directly into the College of Engineering and Applied Science. In general, calculus, physics and chemistry courses will transfer for full credit. In addition, 12 semester hours of humanities and social sciences electives will usually transfer for full credit. Fundamental computing courses may be unique by campus and should be checked with the campus to which the student is transferring. Any minimum academic preparation standards (MAPS) deficiencies should be eliminated before transferring.

Transfer Agreements

The College of Engineering and Applied Science has formal transfer agreements with the following Denver metro-area community colleges:

Arapahoe Community College (Littleton)—303-794-1550
Community College of Aurora—303-360-4790
Community College of Denver—303-556-2600
Front Range Community College (Westminster)—303-466-8811
Red Rocks Community College (Lakewood)—303-988-6160

These transfer agreements provide an opportunity for potential engineering students to complete courses applicable to an engineering program offered at UC Denver. Students interested in a transfer should contact Engineering Student Services at 303-556-4768

and the respective community college counseling office at the phone number indicated above.

Transfer Students

Students applying for transfer from other accredited collegiate institutions will be considered for admission on an individual basis if they meet the requirements outlined in the Information for Undergraduate Students chapter of this catalog and have successfully completed a year each of calculus and physics (calculus-based).

Applications to transfer from another college on the Downtown Campus to the College of Engineering and Applied Science will be considered on an individual basis by the Office of the Dean, if the student's prior academic record includes successful completion of a year each of calculus and calculus-based physics and the student's cumulative GPA is 2.75 or higher.

Transfer Credit

Refer to the Information for Undergraduate Students and Information for Graduate Students chapters of this catalog for descriptions of universitywide policies on transfer credit.

After a prospective transfer student has made application and submitted official transcripts to the University of Colorado Office of Admissions, that office issues an applicant transfer credit evaluation listing those courses that are acceptable by university standards for transfer. A copy of this evaluation is sent to the student and to Engineering Student Services in the Office of the Dean by Office of Admissions processing and is made a part of the permanent record. An advisor will use this form to indicate which courses and credit hours listed are acceptable toward the graduation requirements for the student's degree program. The decisions will be recorded on both the applicant transfer credit evaluation form and the department's study program for BS form, and signed and dated. Both forms are reviewed by Engineering Student Services in the Office of the Dean, and signed and dated. Any modification to the initial evaluation must be by petition, have the recommendation of the transfer advisor and department chair and have approval of the Office of the Dean. All documents will become a part of the student's master file in the Office of the Dean. All transfer credit must be validated by satisfactory achievement in subsequent courses.

Note: All requests for consideration of transfer credit and its application toward a degree in engineering must be submitted prior to the student's last two semesters at the Downtown Campus of UC Denver.

Nontransferable Credits

Courses on basic subjects such as mathematics or physics may be acceptable for direct transfer of credit if they were taught as part of an accredited program for all students and were not specifically designated for engineering technology students. Engineering technology courses (courses with technology designations) will not be considered for transfer into an engineering degree program.

Students may seek credit for course work by examination (see “Transfer of College-Level Credit” section of the [Information for Undergraduate Students](#) chapter of this catalog).

Undergraduate Core Curriculum in Engineering

The faculty of the College of Arts & Media, the Business School, the College of Engineering and Applied Science and the College of Liberal Arts and Sciences have established a core curriculum for undergraduate students. See the General Information section of this catalog for an overview of the common core concept.

Students graduating from the College of Engineering and Applied Science are required to satisfy the humanities and social sciences and writing portions of their engineering program by taking courses from the [UC Denver Core Curriculum](#).

The intent of the humanities and social sciences component of an engineering program is to provide the student with a coherent and well-structured exploration of a substantive issue or theme appropriate to the engineering profession and/or of interest to the student. The required humanities and social sciences electives must include both breadth and depth, must include advanced-level course work and should be planned in consultation with the advisor. A random selection of lower-division courses will not satisfy the humanities and social sciences elective requirement.

Courses such as accounting, contracts, management, elementary foreign languages, public speaking and technical writing are not acceptable as humanities and social sciences electives.

Program Requirements

Social Sciences

(3 semester hours) Choose one course from any of the following courses: ECON, ENVS, ETST, GEOG, HBSC, P SC, SOC.

- ECON 2012 - Principles of Economics: Macroeconomics Summer 2010
Registration: **ECON 2012**
- ECON 2022 - Principles of Economics: Microeconomics Summer 2010
Registration: **ECON 2022**
- ENVS 1342 - Introduction to Environment and Society Summer 2010
Registration: **ENVS 1342**
- ETST 2000 - Introduction to Ethnic Studies Summer 2010 Registration: **ETST 2000**
- GEOG 1102 - World Regional Geography Summer 2010 Registration: **GEOG 1102**
- GEOG 1602 - Introduction to Urban Studies Summer 2010 Registration: **GEOG 1602**
- GEOG 2202 - Natural Hazards Summer 2010 Registration: **GEOG 2202**
- HBSC 2001 - Introduction to Community and Population Health Science Summer 2010 Registration: **HBSC 2001**
- PSCI 1001 - Introduction to Political Science: The Quest for Freedom and Justice Summer 2010 Registration: **P SC 1001**
- PSCI 1101 - American Political System Summer 2010 Registration: **P SC 1101**
- SOCY 1001 - Introduction to Sociology Summer 2010 Registration: **SOC 1001**
- SOCY 2462 - Introduction to Social Psychology Summer 2010 Registration: **SOC 2462**

Humanities

(3 semester hours) Choose one course from any of the following courses: ENGL, ETST, FR, GER, HIST, PHIL, RLST.

- CNST 1000 - China and the Chinese Summer 2010 Registration: **CNST 1000**
- ENGL 1601 - Telling Tales: Narrative Art in Literature and Film Summer 2010
Registration: **ENGL 1601**
- ENGL 2600 - Great Works in British and American Literature Summer 2010
Registration: **ENGL 2600**
- ETST 2155 - African American History Summer 2010 Registration: **ETST 2155**
- FREN 1000 - Introduction to Cultures of the French- Speaking World Summer 2010 Registration: **FR 1000**
- GRMN 1000 - Germany and the Germans Summer 2010 Registration: **GER 1000**
- HIST 1361 - U.S. History to 1876 Summer 2010 Registration: **HIST 1361**
- HIST 1362 - U.S. History Since 1876 Summer 2010 Registration: **HIST 1362**
- HIST 1381 - Paths to the Present I Summer 2010 Registration: **HIST 1381**
- HIST 1382 - Getting Here: Paths to the Present II Summer 2010 Registration: **HIST 1382**

- PHIL 1012 - Introduction to Philosophy: Relationship of the Individual to the World Summer 2010 Registration: **PHIL 1012**
- PHIL 1020 - Introduction to Ethics and Society: The Person and the Community Summer 2010 Registration: **PHIL 1020**
- PHIL 2441 - Logic and Language Summer 2010 Registration: **PHIL 2441**
- RLST 1610 - Introduction to Religious Studies Summer 2010 Registration: **RLST 1610**
- RLST 2660 - World Religions Summer 2010 Registration: **RLST 2660**
- SPAN 1000 - Introduction to Cultures of the Spanish Speaking World Summer 2010 Registration: **SPAN 1000**

Arts

(3 semester hours) Choose one course from any of the following courses: FA, PMUS, THTR.

- FINE 1001 - Introduction to Art Summer 2010 Registration: **F A 1001**
- PMUS 1001 - Music Appreciation Summer 2010 Registration: **PMUS 1001**
- THTR 1001 - Introduction to Theatre Summer 2010 Registration: **THTR 1001**

International Perspectives

(3 semester hours) Choose one course from any of the following courses: ENGR, HIST, P SC.

- ENGL 3798 - International Perspectives in Literature and Film Summer 2010 Registration: **ENGL 3798**
- ENGR 3600 - International Dimensions of Technology and Culture Summer 2010 Registration: **ENGR 3600**
- FREN 3200 - The Francophone World in the Post-Colonial Era Summer 2010 Registration: **FR 3200**
- HIST 3121 - The World at War, 1914-1945 Summer 2010 Registration: **HIST 3121**
- HIST 4032 - Globalization in World History Since 1945 Summer 2010 Registration: **HIST 4032**
- INTB 3000 - Global Perspectives Summer 2010 Registration: **INTB 3000**
- PSCI 3022 - Introduction to Comparative Politics Summer 2010 Registration: **P SC 3022**
- PSCI 3042 - Introduction to International Relations Summer 2010 Registration: **P SC 3042**

Cultural Diversity

(3 semester hours) Choose one course from any of the following courses: ANTH, CMMU, ECON, ENGR, ETST, PHIL, PSY, SOC, THTR, HIST, MGMT, P SC, RLST.

- ANTH 3142 - Cultural Diversity in the Modern World Summer 2010 Registration: **ANTH 3142**
- COMM 3271 - Communication and Diversity Summer 2010 Registration: **CMMU 3271**
- ECON 3100 - Economics of Race and Gender Summer 2010 Registration: **ECON 3100**
- ENGL 3795 - Race and Ethnicity in American Literature Summer 2010 Registration: **ENGL 3795**
- ENGR 3400 - Technology and Culture Summer 2010 Registration: **ENGR 3400**
- ETST 3704 - Culture, Racism and Alienation Summer 2010 Registration: **ETST 3704**
- ETST 3794 - Ethnic Diversity in American Literature Summer 2010 Registration: **ETST 3794**
- HIST 3345 - Immigration and Ethnicity in American History Summer 2010 Registration: **HIST 3345**
- HIST 3349 - Social Movements in 20th Century America Summer 2010 Registration: **HIST 3349**
- MGMT 4100 - Managing Cultural Diversity Summer 2010 Registration: **MGMT 4100**
- PHIL 3500 - Ideology and Culture: Racism and Sexism Summer 2010 Registration: **PHIL 3500**
- PSCI 3034 - Race, Gender, Law and Public Policy Summer 2010 Registration: **P SC 3034**
- PSCI 3035 - Political Movements: Race and Gender Summer 2010 Registration: **P SC 3035**
- PSYC 4485 - Psychology of Cultural Diversity Summer 2010 Registration: **PSY 4485**
- RLST 4000 - Religion and Cultural Diversity Summer 2010 Registration: **RLST 4000**
- SOCY 3020 - Race and Ethnicity in the U.S. Summer 2010 Registration: **SOC 3020**
- THTR 3611 - Drama of Diversity Summer 2010 Registration: **THTR 3611**

Behavioral Sciences

(3 semester hours) Choose one course from any of the following courses: ANTH, CMMU, PSY.

- ANTH 1302 - Introduction to Archaeology Summer 2010 Registration: **ANTH 1302**

- ANTH 2102 - Culture and the Human Experience Summer 2010 Registration: **ANTH 2102**
- COMM 1011 - Fundamentals of Communication Summer 2010 Registration: **CMMU 1011**
- COMM 1021 - Fundamentals of Mass Communication Summer 2010 Registration: **CMMU 1021**
- PSYC 1000 - Introduction to Psychology I Summer 2010 Registration: **PSY 1000**
- PSYC 1005 - Introduction to Psychology II Summer 2010 Registration: **PSY 1005**

Intellectual Competencies*

(6 semester hours)

- ENGL 1020 - Core Composition I Summer 2010 Registration: **ENGL 1020** **
- ENGL 2030 - Core Composition II Summer 2010 Registration: **ENGL 2030**

Total: 24-25 Hours

Please note the above core list does not include mathematics or biological and physical sciences due to the extensive math and physics curricula required by the College of Engineering and Applied Science. Please see the Engineering Student Services advisor for questions.

*English 1020 and English 2030 are the only approved composition courses for the UC Denver Core Curriculum.

**English 1020 should be taken the first semester a student is enrolled at UC Denver.

Academic Policies

Refer to the Information for Undergraduate Students and University Policies chapters of this catalog for descriptions of universitywide policies. The following policies apply specifically to students in the College of Engineering and Applied Science.

Advanced Placement

Advanced placement credit may be granted by special examination or by College Entrance Examination Board (CEEB) tests. If the applicant has scored four or five on the

CEEB Advanced Placement Examination, credit toward graduation may be awarded. Students who have scored three may be considered for advanced placement by the department concerned. All advanced placement and transfer credit must be validated by satisfactory achievement in subsequent courses in accordance with standard transfer policies of the college.

College-Level Examination (CLEP) Credit

Prospective students may earn college-level credit through the College-Level Examination Program (CLEP) subject examinations, provided that they score at the 50th percentile or above. The Engineering Student Services advisor will advise students of the credits accepted for such courses toward a degree program. CLEP general examinations are not acceptable. (See also “College-Level Examination Program” in the Information for Undergraduate Students chapter of this catalog.)

Attendance Regulations

Successful work in the College of Engineering and Applied Science is dependent upon regular attendance in all classes. Students who are absent should make arrangements with instructors to make up the work missed. Students who for illness or other good reason miss a final examination must notify the instructor or Engineering Student Services in the Office of the Dean no later than the end of the day on which the examination is given. Failure to do so may result in an *F* in the course.

Changing Departments

Students who wish to change to another department within the College of Engineering and Applied Science must apply for transfer by submitting a change of major for undergraduate degree student's form, which must have the approval of the new department. (See also discussion of interdepartmental transfer requirements under “Transfer Students” in this chapter of the catalog.)

Advising

Freshman students are advised by Engineering Student Services and by representatives from each academic department. These representatives are readily available to assist students with academic or vocational concerns. Contact Engineering Student Services at 303-556-4768. Students are assigned specific departmental advisors for academic planning and should contact the departmental office for advising appointments.

Counseling

Personal counseling is available through the UC Denver Student and Community Counseling Center. Contact 303-556-4372 for questions or an appointment.

Course Load Policy

Full-time Students. Undergraduate students employed less than 10 hours per week should consider registering for courses as outlined in the departmental curricula. Additional courses may be allowed when there is satisfactory evidence that the student has the capability to handle the added load. Permission to take more than 19 hours may be granted by written petition and approval of the department chair and the dean's office.

Freshman Year

Fundamentals taught in the freshman year are of critical importance in the more advanced classes. Special attention should be given to taking courses in the proper sequence. (Course requirements for freshmen are detailed within the typical curriculum given under each department.) All students are urged to consult their instructors whenever they are experiencing difficulties with course materials or for questions related to the class.

Repetition of Courses

Undergraduate students may not register for credit in a course in which they already have received a grade of C- or higher. An F grade in a required course necessitates subsequent satisfactory completion of the course. Students must repeat a prerequisite course in which a grade of D+ or lower was earned before moving on to the subsequent course, if that course is a prerequisite to another required course. If students do not successfully complete (C- or higher) an engineering class on the second attempt, they must obtain written approval from their major department to enroll for the course for the third time. When a course is retaken because of a D or F grade, both grades will appear on the transcript and both will be averaged into the GPA. Any exceptions to these policies must be made by written petition through Engineering Student Services in the Office of the Dean.

No Credit

An engineering student must request approval before enrolling for no credit (NC) for any course. Required courses must be taken for credit. Once a course has been taken NC, the course cannot be repeated for credit.

Work Experience

The College of Engineering and Applied Science does not award academic credit for work experience.

College Policy on Academic Progress

All undergraduate students must declare a major by the time they have accumulated 60 semester hours. An undergraduate engineering student must maintain a cumulative GPA of 2.0 or better in all hours attempted at the University of Colorado, in those courses applied toward graduation requirements and in all courses taken from the student's major department in order to remain in good standing in the College of Engineering and Applied Science. Grades earned at another institution are not used in calculating the GPA at the University of Colorado. However, grades earned in another school or college of the University of Colorado will be used in determining the student's scholastic standing and progress or lack of progress toward the bachelor of science degree in the College of Engineering and Applied Science.

Read about academic probation and suspension in the [University Policies](#) section.

Dean's List Criteria

UC Denver will use a fixed criterion across all colleges for determining eligibility for the Dean's List. This policy applies to undergraduate students.

For fall and spring semesters, students must successfully complete 9 hours in the semester upon which to determine the grade point. These courses can be both within and outside of the college. Pooled courses will not be included in the calculation nor will they count toward the 9 hours required for consideration. The GPA set for inclusion in the Dean's List is 3.75. In the summer semesters, students must complete 6 hours as a basis for inclusion in the Dean's List. Course inclusion will be the same as in fall and spring semesters. The GPA for Dean's List in summer is also 3.75.

Colleges will collect data each semester on the number of students making the Dean's List and report the numbers and percentage of total students in the college.

Scholarships tied to Dean's Lists in individual college may have additional requirements.

The Registrar's Office will calculate the semester GPAs for all students two weeks prior to the due date for semester grades. Those GPAs will be the basis for determining the

Dean's List. Incompletes will not be considered in the calculation of minimum number of hours. The Dean's List will not be recalculated to include completed incompletes.

Academic Ethics (Dishonesty, Cheating)

Students are expected to conduct themselves in accordance with the highest standards of honesty and integrity. Cheating, plagiarism, illegitimate possession and disposition of examinations, alteration, forgery or falsification of official records and similar acts or attempts to engage in such acts are grounds for suspension or expulsion from the university.

In particular, students are advised that plagiarism consists of any act involving the offering of the work of someone else as the student's own.

At the Denver Campus of UC Denver, there is a student Academic Honor Code. The code is published in a brochure available from the Office of Student Life. Information regarding all student grievance procedures may be obtained in that office.

In addition, the college has a committee on discipline that hears cases of alleged violations of academic ethics and recommends disciplinary action. In a case of proven academic dishonesty/misconduct, the committee may invoke penalties that may include probation, suspension or expulsion. In a case of suspension or expulsion, a distinction may be placed on a student's academic record indicating the action was due to academic dishonesty/misconduct. Students who suspect or observe violations of academic ethics should report them to their instructor, the department chair or the Office of the Dean.

Grading System, Incompletes, Pass/Fail and Drop/Add Procedures

See the Registration and Records chapter of this catalog for the University of Colorado uniform grading system and for additional pass/fail information and drop/add procedures.

Final grades, as reported by instructors, are to be considered permanent and final. Grade changes will be considered only in cases of documented clerical error and must be approved by the dean.

Incompletes

An incomplete may be given by the instructor for circumstances beyond the student's control, such as a documented medical or personal emergency. When it is given, the student, Engineering Student Services and the departmental office must be informed in writing by the instructor, who states what the student is to do in order to remove the incomplete and the date the tasks are to be completed. The instructor will assign an "I"

distinction. The student is expected to complete the course requirements (e.g., the final examination or term paper), within the established deadline and not to retake the entire course. The majority of course requirements (75%) must have been completed with a passing grade to be eligible for an incomplete. An "I" distinction will be converted automatically to a grade of "F" after one year if the specified work is not completed.

Pass/Fail

The primary purpose for offering courses on a pass/fail grade basis is to encourage students, especially juniors and seniors, to broaden their educational experience by electing challenging upper-division humanities and social sciences elective courses without serious risk to their academic records. In general, pass/fail should be limited to 3000- or 4000-level humanities and social sciences courses. Students must process the pass/fail form during the first two weeks of the semester. Engineering students cannot take required courses pass/fail.

Dropping a Course

After the tenth week of the semester, dropping a course requires a petition signed by the department chair and Engineering Student Services. Only under very extenuating circumstances, such as a documented medical or personal emergency, will petitions for dropping courses be approved after the tenth week of the semester.

Sequence of Courses

Full-time students must generally complete the courses in the department in which they are registered, according to the typical curriculum shown under their major department in this catalog. Part-time students may modify the order of courses with their advisor's approval.

Graduate-Level Courses Taken at Undergraduate Level

With faculty advisor approval, an undergraduate engineering student may be granted the opportunity to take graduate courses to be counted toward an undergraduate degree. A maximum of 6 semester hours of graduate-level course work taken as an undergraduate can be considered for credit toward a graduate degree. Only a grade of B (3.0) or above will be considered for graduate-level credit. All consideration of graduate work to be counted toward both an undergraduate and a graduate degree must be approved by a faculty advisor and Engineering Student Services.

Graduation with Honors

In recognition of high scholarship and professional attainments, *Honors*, *Special Honors* or *With Distinction* may be awarded at graduation at the discretion of the student's major department. These honors are recorded on the diploma of the graduate and indicated in the commencement program. Grades earned during the semester of graduation will not be considered.

For *Special Honors*, a student must have a cumulative GPA of at least 3.80, and for *Honors*, a GPA between 3.60 and 3.79. *With Distinction* is awarded at the discretion of the College Executive Council.

Transfer students, to be considered for *honors*, will be expected to complete a minimum of one-half of their work within the University of Colorado System. Grades earned at other institutions will not be considered. Transfer students must have completed at least 54 semester hours at University of Colorado before their last semester and must have a minimum of 64 semester hours completed at graduation.

Planning an Engineering Program

It is the responsibility of all students to do the following:

- meet with department academic advisor at least once each year
- meet with department transfer credit advisor as necessary
- meet with the assistant dean of engineering student services as necessary
- meet with department senior check-out advisor prior to their last 30 semester hours of course work to finalize a graduation program that will be reviewed by the assistant dean of engineering student services
- complete a graduation contract and an application for diploma card before or during the first two weeks of their last semester
- keep the assistant dean of student services informed of any changes in the student's plans throughout their last year

Graduation Requirements

In order to become eligible for one of the bachelor's degrees in the College of Engineering and Applied Science, a student, in addition to being in good standing in the university, must meet the following minimum requirements:

Courses—The prescribed and elective work in any curriculum as determined by the appropriate department must be completed satisfactorily.

Hours—A minimum of 130 semester hours is required for students seeking a civil engineering degree; a minimum of 128 semester hours for computer science and engineering, electrical engineering or mechanical engineering degrees.

Hours in Residence—At least 30 semester hours of course work applicable to a bachelor of science degree in engineering must be taken at the Downtown Campus

while a declared student in good standing at the College of Engineering and Applied Science. Students must be enrolled in the college for at least the final two semesters prior to graduation.

Transfer Credit—All requests for consideration of transfer credit and its application toward a degree in Engineering and Applied Science must be submitted prior to the student's last two semesters at the Downtown Campus.

Grade Point Average (GPA)—A minimum GPA of 2.0 (C) is required for all courses attempted, for all required courses and for all courses taken from the student's major department.

Faculty Recommendation—The recommendation of the faculty of the department offering the degree and the approval of the faculty of the College of Engineering and Applied Science is required.

Incompletes and Correspondence Courses—It is the student's responsibility to ensure that all incompletes and correspondence courses are officially completed before the tenth week of the student's final semester in school.

Simultaneous Conferring of Degrees—For any double degree program, both bachelor's degrees must be conferred at the same commencement.

Commencement Exercises—Commencement exercises are held in December and May. A student finishing in August is encouraged to attend commencement the following December, but may request that the diploma be mailed.

Undergraduate Degrees

In addition to the standard four-year degree programs previously listed, the college is involved in double degree programs.

Business and Engineering

Undergraduates in the College of Engineering and Applied Science with career interests in management may complete all of the requirements for both a BS degree in engineering and a BS degree in business administration by extending their study programs to five years, including one or two summer terms. The business courses required by the Business School may be started in the second, third or fourth year, depending upon the curriculum plan for the particular field of engineering in which the student is enrolled.

Students interested in this undergraduate program are required to submit an application to the Business School. Students should contact a business advisor to obtain the application form and determine an acceptable degree program.

Requirements for the undergraduate business degree and engineering degree must be completed concurrently. At least a 2.0 GPA must be earned in all business courses undertaken in the Business School. No fewer than 30 semester credits in business courses from UC Denver must be earned after admission to business to establish residency credit. Courses offered or required by the Business School may be used in lieu of electives required for undergraduate engineering degrees, subject to the approval of the individual department.

Joint Engineering Degrees

A student may obtain two engineering majors by meeting the requirements of both programs; however, the approval of both departments and the dean is required. Thirty hours of elective or required subjects must be completed in addition to the largest minimum number required by either of the two departments. A course taken for one completed master's degree may not be counted toward a second master's degree.

Premedicine Option

A professional school in a field such as medicine requires a student to have a college education prior to pursuing its professional courses. In practically all cases, medical students are university graduates, although occasionally a student may enter medical school after three years of university training.

The desirability of obtaining an engineering education prior to undertaking a study of medicine is increasing continually as medicine itself is evolving. A great deal of new equipment, most of it electronic, is being developed to assist the medical practitioner in treatment of patients. Bioengineering, engineering systems analysis, probability and communication theory are highly applicable to medical problems. Improved communication techniques also are allowing the storage and retrieval of information not previously available to the medical doctor. An advanced knowledge of basic mathematics and computing techniques, along with increased understanding of physical chemistry, improves the scientific base upon which medical knowledge rests. It is therefore desirable that the future medical practitioner and researcher be well equipped with the tools engineering can offer.

To provide a minimum of the necessary knowledge, the additional courses listed below must be completed with superior grades. Students can meet these requirements by careful substitution of electives in the engineering curriculum. In some cases where additional hours may be required, interested students should consult with the engineering department chair.

General Chemistry (two semesters) (CHEM 2031, 2038, 2061, 2068), 9 semester hours

Organic Chemistry (two semesters) (CHEM 3411, 3421, 3418, 3428), 10

semester hours

General Biology (two semesters) (BIOL 2051, 2061, 2071, 2081), 8 semester hours

English Composition (one semester), 3 semester hours

Literature (two semesters), 6 semester hours

Total: 36 semester hours

Students desiring to enter a premedical program should consult the representative of the department involved. On the Downtown Campus, premedical advising is available through the health careers advisor, North Classroom, 3014B, 303-556-4350.

Graduate Study in Engineering

The College of Engineering and Applied Science at UC Denver offers graduate programs in civil engineering, computer science, electrical engineering, and mechanical engineering.

For information regarding courses and requirements leading to the master of science, master of engineering or the PhD degree, see the appropriate discipline heading in this section. For graduate admission information and policies, see the [Information for Graduate Students](#) chapter of this catalog.

TOEFL/Language Requirements

International graduate students who take the TOEFL English proficiency exam must score at least 525 on the paper-based exam or 71 on the Internet-based exam (IBT). International students must score a 6.0 on the IELTS exam. International students who successfully complete study at Spring International with a grade of B or better are not required to submit TOEFL scores. Students must successfully complete studies through Level Six to be eligible for the waiver consideration. Contact Spring International for more information at www.spring.edu.

Education for Employed Professional Engineers

Continuing education for employed engineers grows more important each year. Therefore, the college puts great emphasis upon making graduate courses available through late afternoon and evening courses. The master of engineering degree permits graduate students more flexibility in defining specialized interdisciplinary fields that meet their professional needs. This degree has standards equivalent to those of the master of science degree.

In addition to credit course work, the college also offers courses of interest to practicing engineers through its Continuing Engineering Education Program, 303-556-4907. (See also information under "[Continuing Engineering Education Program](#)" in this chapter.)

Concurrent BS and MS Degree Program in Engineering

A student who plans to continue on to graduate study after completing the requirements for the BS degree may be admitted to a graduate program through his/her major department in the senior year (after completion of at least 110 semester hours). Requirements are the same as for the two degrees taken separately: 128 or 130 semester hours, depending on the major, for the BS degree; and 30 semester hours for the MS degree. Humanities and social sciences requirements must be completed within the first 128 or 130 semester hours. A 3.0 GPA for all work attempted through the first six semesters (at least 96 semester hours) and written recommendations from at least two major-field faculty members are required.

The purpose of the concurrent degree program is to allow students who qualify for graduate study and expect to continue for an advanced degree to plan their graduate program from the beginning of the senior year rather than from the first year of graduate study. The student can then reach the degree of proficiency required to begin research at an earlier time and can make better and fuller use of courses offered only in alternate years.

Students will be assigned faculty advisors to help them develop the program best suited to their particular interests. The program selected must be planned so that the student may qualify for a BS degree after completing the semester-hour requirements for the degree, if the student so elects, or if the student's GPA falls below the 3.0 required to remain in the program. In this case, all hours completed with a passing grade while in the program will count toward fulfilling the normal requirements for the BS degree.

Graduate Work in Business

Undergraduates in engineering who intend to pursue graduate study in business may complete some of the business background requirements as electives in their undergraduate programs. Seniors in engineering who have such intentions and appear likely to qualify for admission to graduate study in business may be permitted to register for graduate fundamentals courses, which are designed to provide qualified students with needed background preparation in business. Students must see an advisor from the Business School for approval.

Programs of Study

Courses listed in the following curricula are typical illustrations. Changes in specific courses may be necessary to accommodate students' needs and/or changes in

institution requirements; however, students should take courses in logical sequence, i.e., complete all freshman courses before taking sophomore courses.

Civil Engineering

Chair: Kevin L. Rens

Program Administrator: Maria Rase

Office: North Classroom, 3027

Telephone: 303-556-2871

Fax: 303-556-2368

Web site: www.ucdenver.edu/civil

Faculty

Professors:

Nien-Yin Chang, PhD, Ohio State University, Professional Engineer (PE)—Ohio and Colorado

James C.-Y. Guo, PhD, University of Illinois at Urbana-Champaign, PE—Colorado

Bruce N. Janson, PhD, University of Illinois at Urbana-Champaign

Lynn E. Johnson, PhD, Cornell University, PE—Connecticut

Anu Ramaswami, PhD, Carnegie Mellon University

Kevin L. Rens, PhD, Iowa State University, PE—Colorado

Jonathan T.H. Wu, PhD, Purdue University

Assistant Professors:

Stephan A. Durham, PhD, University of Arkansas

Arunprakash Karunanithi, PhD, University of Connecticut

Chengyu Li, PhD, Arizona State University; PE—Colorado, North Carolina, New Mexico, Washington; SE—Utah, Arizona, Washington

Wesley Marshall, PhD, University of Connecticut, PE—Connecticut

David C. Mays, PhD, University of California at Berkeley

Zhiyong (Jason) Ren, PhD, Pennsylvania State University

Frederick R. Rutz, PhD, University of Colorado

Assistant Research Professor:

Saeed Baraghi, PhD, University of Colorado, PE—Colorado

Senior Instructors:

Michael Tang, PhD, University of Wisconsin at Madison

Brian T. Brady, PhD, Colorado School of Mines

Professors Emeriti:

Paul E. Bartlett, MS, University of Colorado, PE—Colorado

David W. Hubly, PhD, Iowa State University, PE—Colorado
Orem G. Strom, PhD, University of Texas at Austin

Mission Statement

The mission of the Department of Civil Engineering is to:

- deliver high-quality comprehensive degree programs (BS, MS, MEng, PhD) to all of our students at both the undergraduate and graduate levels
- matriculate students who excel in professional practice and leadership and who possess compassion and respect for people of all cultural backgrounds
- teach our classes with excellence, whether in a traditional classroom setting or online
- offer our students state-of-the-art laboratories, equipment and classrooms with the latest technology needed for a complete learning experience
- develop ambitious and innovative research programs involving both faculty and students through funding from federal, state and local sources
- provide supportive mentoring and guidance to our students through teaching, research and advising
- produce students who can work as leading professionals in civil engineering and in many other fields for which civil engineering knowledge can be a foundation

Undergraduate

The UC Denver undergraduate civil engineering curriculum places balanced emphasis on five principal areas of civil engineering practice: structures, transportation, environmental, water resources and geotechnical engineering. In each of these areas, the student receives instruction in planning, design and analysis methods. Microcomputer skills are taught early in the program of study and used frequently in subsequent courses.

A minimum of 130 semester hours is required to earn the BS degree. The faculty provide advising to help students develop an efficient study plan. The student must satisfactorily complete all the course work in the curriculum, satisfy all university graduation requirements and maintain at least a 2.0 GPA in the civil engineering courses.

Graduate

Requirements for Admission

Applicants to the master of science in civil engineering (MS) program must satisfy all requirements specified in the Information for Graduate Students chapter of this catalog. Most applicants have an ABET accredited undergraduate degree in civil

engineering. An undergraduate GPA of 3.0 (on a 4-point scale) or better is required for regular admission. Students with lower GPAs may qualify for provisional admission and are strongly encouraged to submit GRE scores. International applicants are required to submit GRE scores to support their applications. Applicants whose undergraduate degree is in a field other than civil engineering may also be admitted into the MS in civil engineering degree program, if they have or will complete undergraduate prerequisite courses as required by the Department of Civil Engineering and the student's graduate advisor.

Applicants to the master of engineering (MEng) program must have a baccalaureate degree in engineering, math, science, economics or planning from an accredited college or university and satisfy all requirements specified by the Graduate School.

Prospective PhD students should contact the Department of Civil Engineering on the Denver Campus to inquire about application requirements and to obtain the "Rules and Policies for the Coordinated PhD Program."

Requests for applications for graduate study in civil engineering should be addressed to UC Denver Department of Civil Engineering, Campus Box 113, P.O. Box 173364, Denver, CO 80217-3364.

Applicants who are not citizens or permanent residents of the United States should apply through the Office of International Admissions, Campus Box 185, P.O. Box 173364, Denver, CO 80217-3364. All applicants for admission must submit complete credentials as outlined in the instructions that accompany the application materials.

Programs

Bachelor of Science

Civil Engineering BS

Program Objectives

The objectives of the bachelor of science in civil engineering program are to produce graduates who:

- are able to perform the technical analyses and design tasks of entry-level civil engineers
- can successfully work toward professional engineering licensure
- communicate effectively, both orally and in writing
- understand the importance of leadership skills, team building and ethical practice

- value lifelong learning and improvement through graduate degrees or professional study
- appreciate the importance of community involvement and social contribution civil engineers are dedicated to improving our living environment

Civil engineering offers an interesting and challenging career in the design, construction, and maintenance of buildings and urban infrastructure; in transportation systems, including highways, airports, rapid transit lines, railroads, and harbor facilities; in the development of water resources, including reservoirs for storage, canals for irrigation, dams for power generation, stormwater management for drainage, groundwater recharge for contamination prevention, wastewater treatment for environmental protection, and water purification for drinking purposes; in the construction industry; including foundations, bridges, concrete and steel structures, in problems concerned with environmental preservation; and in the sustainable development of cities. In preparing for work in such a broad field, the civil engineering student studies mathematics, basic science, communication, social science and humanities, engineering science and civil engineering design. UC Denver's civil engineering graduates usually find their first professional employment with consulting engineering firms, government agencies and various industries.

Typical Curriculum for BS (Civil Engineering)

Freshman Year

First Semester

- CHEM 1130 - Engineering General Chemistry *Summer 2010 Registration: **CHEM 1130** (see note 1)*
- ENGL 1020 - Core Composition I *Summer 2010 Registration: **ENGL 1020***
- MATH 1401 - Calculus I *Summer 2010 Registration: **MATH 1401***
Core Curriculum Elective (see note 2) (3 semester hours)

Total: 15 Hours

Second Semester

- CVEN 1025 - Civil Engineering Graphics & Computer Aided Design *Summer 2010 Registration: **C E 1025***
- CVEN 2212 - Plane Surveying *Summer 2010 Registration: **C E 2212***
- ENGL 2030 - Core Composition II *Summer 2010 Registration: **ENGL 2030***
- MATH 2411 - Calculus II *Summer 2010 Registration: **MATH 2411***
- PHYS 2311 - General Physics I: Calculus-Based *Summer 2010 Registration: **PHYS 2311***
- PHYS 2321 - General Physics Lab I *Summer 2010 Registration: **PHYS 2321***

Total: 18 Hours

Sophomore Year

First Semester

- CVEN 2121 - Analytical Mechanics I Summer 2010 Registration: **C E 2121**
- CVEN 2200 - Computing Methods in Civil Engineering Summer 2010 Registration: **C E 2200**
- MATH 2421 - Calculus III Summer 2010 Registration: **MATH 2421**
- PHYS 2331 - General Physics II: Calculus-Based Summer 2010 Registration: **PHYS 2331**
Core Curriculum Elective (see note 2) (3 semester hours)

Total: 17 Hours

Second Semester

- CVEN 3121 - Mechanics of Materials Summer 2010 Registration: **C E 3121**
- CVEN 3141 - Introduction to Structural Materials Summer 2010 Registration: **C E 3141**
- CVEN 3401 - Introduction to Environmental Engineering Summer 2010 Registration: **C E 3401**
- CVEN 4780 - Engineering Geology Summer 2010 Registration: **C E 4780** or
- GEOL 1072 - Physical Geology: Surface Processes Summer 2010 Registration: **GEOL 1072** or
- MATH 3800 - Probability and Statistics for Engineers Summer 2010 Registration: **MATH 3800**
- MATH 3195 - Linear Algebra and Differential Equations Summer 2010 Registration: **MATH 3195**

Total: 15 Hours

Junior Year

First Semester

- CVEN 3111 - Analytical Mechanics II Summer 2010 Registration: **C E 3111**
- CVEN 3313 - Theoretical Fluid Mechanics Summer 2010 Registration: **C E 3313**
- CVEN 3505 - Structural Analysis Summer 2010 Registration: **C E 3505**
- CVEN 3602 - Transportation Engineering Summer 2010 Registration: **C E 3602**
Core Curriculum Elective (see note 2) (3 semester hours)

Total: 15 Hours

Second Semester

- CVEN 3323 - Applied Fluid Mechanics Summer 2010 Registration: C E 3323
- CVEN 3414 - Design of Water and Wastewater Systems Summer 2010 Registration: C E 3414
- CVEN 3708 - Introduction to Geotechnical Engineering Summer 2010 Registration: C E 3708
- CVEN 4718 - Intermediate Soils Engineering Summer 2010 Registration: C E 4718
- ENGR 3012 - Thermodynamics Summer 2010 Registration: ENGR 3012
Core Curriculum Elective (see note 2) (3 semester hours)

Total: 17 Hours

Senior Year

First Semester

- CVEN 4000 - Senior Seminar Summer 2010 Registration: C E 4000
- ELEC 3030 - Electric Circuits and Systems Summer 2010 Registration: E E 3030
Civil Engineering Design Electives (see note 3) (6 semester hours)
Upper-level Science, Math or Engineering Electives (see note 4) (6 semester hours)
Core Curriculum Elective (see note 2) (3 semester hours)

Total: 18 Hours

Second Semester

- Civil Engineering Design Electives (see note 3) (6 semester hours)
- CVEN 4067 - Senior Design Projects Summer 2010 Registration: C E 4067
Core Curriculum Elective (see note 2) (3 semester hours)
Science, Math or Engineering Electives (see note 4) (3 semester hours)

Total: 15 Hours

Program Total: 130 Hours

1. Or CHEM 2031 and CHEM 2038, which are required for students wishing to take CHEM 2061 and CHEM 2068 as general electives.
2. The communication, humanities and social science electives selected by the student and approved by his/her advisor must satisfy the college core curriculum.
3. Students must satisfactorily complete four of the six civil engineering design courses listed below:

CVEN 4427 Storm Water System Design

CVEN 4565 Timber Structure Design

CVEN 4575 Structural Steel Design

CVEN 4585 Reinforced Concrete Design

CVEN 4602 Highway Engineering

CVEN 4738 Intermediate Foundation Engineering

4. Science, math or engineering electives. The purpose of the electives is to extend the student's knowledge beyond the basic civil engineering requirements. Electives chosen should come from the areas of engineering, mathematics, chemistry, biology, physics or geology. In the case of mathematics, chemistry, physics or geology, the elective must be of higher level than courses in this field required by the civil engineering program. Suggested courses are CVEN 4077, CVEN 4087, CVEN design courses or any 5000-level CVEN course.

Certificate

Geographic Information Systems Graduate Certificate

This certificate is for students who want to get a taste of the geographic information systems (GIS) specialty area before applying for a graduate degree and for professionals who need a working knowledge of GIS. To earn the certificate in GIS, students must complete four of the core GIS classes, equaling 12 semester hours of work. Students can complete this certificate as a master's student or as a nondegree student. Students must already have a baccalaureate degree and must complete any course-specific prerequisites.

Sustainable Urban Infrastructure Graduate Certificate

This certificate is for students and working professionals who seek an interdisciplinary curriculum in the broad field of sustainable infrastructure to address complex water, energy, built environment and transportation challenges using engineering and social science strategies. Students must already have a baccalaureate degree.

Water Resources Graduate Certificate

This certificate is for graduate students who seek an interdisciplinary curriculum in the field of hydrologic and hydraulic engineering to analyze water-related problems and obtain knowledge pertaining to watershed hydrology, groundwater modeling, urban storm water management, flood mitigation and river mechanics. Students must already have a baccalaureate degree

Master of Science

Civil Engineering MS and MEng

► [Graduate School Rules](#) apply to these programs

Graduate

Degree Programs

The civil engineering graduate program is designed for both full-time and part-time students who want to advance their academic and professional skills in civil engineering and related areas. Many students are full time, while many also work full-time jobs and complete evening classes. Depending on a student's pace, the master's program takes 2-4 years to complete (on average). All graduate courses are offered in the afternoons, evenings or on Saturdays. Some courses, including all GIS classes, are offered online.

Specialty Areas:

Master of Science(MS)

- Environmental and Sustainability Engineering
- Geographic Information Systems (GIS)
- Geotechnical Engineering
- Hydrologic and Hydraulic Engineering
- Structural Engineering
- Transportation Engineering

Master of Engineering (MEng)

- Geographic Information Systems (GIS)
- Sustainable Infrastructure
- Transportation Systems

Degree Requirements

Two MS degree programs are available.

Plan I - Master's Thesis: This plan requires 24 credit hours of graduate-level course work and 6 semester hours of master's thesis credit.

Plan II - Master's Report: This plan requires 27 credit hours of graduate-level course work and 3 semester hours master's report credits.

Master of engineering students must follow Plan 2 above. Additionally, of those 30 semester hours, at least 15 hours must be completed with CE classes, including the master's report. The remaining hours may be completed in related disciplines that supplement the chosen area of study. Both the MS and MEng degrees require satisfactory completion of a written comprehensive exam and an oral defense of the master's thesis or master's report to a committee of at least three graduate faculty. Every graduate student must also satisfy the degree requirements of the Graduate

School on the Downtown Campus, specified in the Information for Graduate Students chapter of this catalog. Both the MS and the MEng degree programs must be completed within seven years of the date the student begins the degree program.

Courses for both the MS and MEng degree programs are selected by mutual agreement of the student and his/her faculty advisor after admission to the degree program. The advisor may also specify undergraduate courses that must be completed before starting graduate course work, but these will not count toward the semester hour requirements for the degree. The student's thesis or report topic must also be approved by the faculty advisor.

Requirements for Admission

GPA and GRE

Students with GPA's between 3.0 and 2.75 may be admitted provisionally, but are encouraged to submit official GRE scores to support their applications. Non-international applicants not wishing to take the GRE may gain admittance by registering as a nondegree student and completing three classes with a GPA of 3.25.

Transfer Credit:

Master's students may transfer up to 9 semester hours from another institution towards their master's degree, if approved by their advisor.

Program Prerequisites:

Prerequisite classes are in addition to the 30 semester hours needed to complete a master's degree, as they are necessary background information that is usually included in an engineering bachelor's program.

Students may complete prerequisite classes either before or after being admitted to a degree program. However, applicants with too many prerequisites may not gain admission. For applicants completing prerequisites after admission, all prerequisite courses must be completed before 12 of the 30 master's semester hours are complete.

Requests for applications for graduate study in civil engineering should be addressed to

UC Denver Department of Civil Engineering
Campus Box 113
P.O. Box 173364
Denver, CO 80217-3364.

Applicants who are not citizens or permanent residents of the United States must apply through the Office of International Admissions, Campus Box 185, P.O. Box 173364,

Denver, CO 80217-3364. All applicants for admission must submit complete credentials as outlined in the instructions that accompany the application materials.

Doctor of Philosophy

Civil Engineering PhD

► [Graduate School Rules](#) apply to this program

The PhD degree in civil engineering is offered through a coordinated program with University of Colorado at Boulder.

Specialty Areas for Degrees:

- Environmental and Sustainability Engineering
- Geotechnical Engineering
- Hydrologic and Hydraulic Engineering
- Structural Engineering
- Transportation Engineering
- Civil Engineering Systems

What is civil engineering systems?

The doctoral program in civil engineering systems has different rules than the five other traditional doctoral tracks in order to facilitate more interdisciplinary research. This doctoral track can be the degree that would follow a master's of engineering.

Additional Doctoral Admissions Requirements

In addition to the admissions requirements listed for master's students, doctoral applicants need to have the support of a faculty advisor before they are admitted. Once doctoral students are approved by the graduate admissions committee, their application must be reviewed again by the Department of Civil, Environmental and Architectural Engineering at CU Boulder as the programs are jointly administered. Prospective PhD students should contact the Department of Civil Engineering on the Downtown Campus to inquire about application requirements and to obtain the "Rules and Policies for the Coordinated PhD Program."

Requests for applications for graduate study in civil engineering should be addressed to

UC Denver Department of Civil Engineering
Campus Box 113
P.O. Box 173364
Denver, CO 80217-3364

Computer Science and Engineering

Chair: Gita Alaghband

Program Assistant: Frances Moore

Office: North Classroom, 2605

Telephone: 303-556-4083

Fax: 303-556-8369

Web site: www.ucdenver.edu/cse

Faculty

Professors:

Gita Alaghband, PhD, University of Colorado

Tom Altman, PhD, University of Pittsburgh

Boris Stilman, PhD, National Research Institute for Electrical Engineering, Moscow, Russia

Associate Professors:

Bogdan Chlebus, PhD, Warsaw University, Poland

Min-Hyung Choi, PhD, University of Iowa

Ellen Gethner, PhD, University of British Columbia

Ilkyeun Ra, PhD, Syracuse University

Assistant Professor Clinical Teaching Track:

Richard Osborne, PhD, University of Colorado

Senior Instructor and Undergraduate Advisor:

Will Trobaugh, MS, University of Colorado

Mission and Vision Statement

With the advances in technology and the rapid and prevalent growth of the information-based economy, the computer science has become an enabling science for nearly all disciplines that impact engineering, science, business, health and government. The

future of the discipline promises even more innovative advances. We in the Department of Computer Science and Engineering at the University of Colorado Denver are committed to providing outstanding education and research training to our diverse undergraduate and graduate students for productive careers in industry, academia and government in the Denver metropolitan area, state and beyond. Our faculty strive for excellence in teaching, research and service by covering a broad spectrum of the core fundamentals of the discipline as well as applied aspects including those of interdisciplinary nature. We will actively engage our students in classroom and out-of-classroom research and help them develop the skills needed to solve complex real-world technological problems of our modern society.

The Department of Computer Science and Engineering offers BS, MS and PhD degrees:

- The undergraduate BS degree is awarded in computer science and engineering (CSE). This curriculum is a rigorous study covering theoretical, software, hardware and their interfaces providing students with a coherent and in-depth education of key components of the field.
- The MS degree is awarded in computer science (CS) to those students who wish to pursue graduate studies to further develop their education. The MS in CS graduate program covers the core knowledge of key concepts of the computer science as well as offers flexibility to pursue specializing in various fields of interests.
- The PhD in computer science and information systems (CSIS) program is an interdisciplinary, joint program between the Department of Computer Science and Engineering in the College of Engineering and the Applied Science and Information Systems program in the Business School. The program offers a CS track with PhD degree awarded in CSIS from College of Engineering and an IS track where the degree is awarded in CSIS from the Business School.

Undergraduate

Computer Science and Engineering Program

Computers as a combination of software and hardware have become significant to the whole of society. They affect the way in which business is conducted and the way people study and learn. Very important is the use of computers to develop new avenues of human communication, interaction and cooperation. Communication networks and the combination of text with audio and video are providing more people with fingertip access to a vast array of information and knowledge.

The computer scientist and engineer is a professional who must be prepared to apply his or her skills, knowledge and creativity in a rapidly changing field. The bachelor of science in computer science and engineering at UC Denver prepares students for such creative work. The emphasis is on fundamental concepts and basic principles with a

long useful life. The program is composed of five major study areas: mathematics, basic or engineering science, required computer science and engineering courses, technical electives and the Denver Campus core curriculum.

The computer science and engineering program has dual accreditation from the Computing Accreditation Commission (CAC) and the Engineering Accreditation Commission (EAC) of the Accreditation Board for Engineering and Technology (ABET).

Computer Science and Engineering Curriculum

The mathematics, basic science and computer science and engineering core requirements give the student a broad exposure to the concepts, methods and practice of computer science and engineering; the student learns the fundamentals of producing solutions to problems.

Technical electives are chosen to add depth to a student's knowledge in an area of special interest.

The Denver Campus core curriculum is designed to give the student an exposure to knowledge outside his or her major. For students in the College of Engineering and Applied Science, courses in the humanities, social sciences and human communications are required.

To be awarded the bachelor of science in computer science and engineering, a student must satisfactorily complete all course work shown in the curriculum below, satisfy all university graduation requirements and maintain at least a 2.0 GPA in all computer science courses attempted (see "Policy on Academic Progress" in the introductory section of this chapter). Students must meet with an undergraduate advisor each semester to assure that they are on track within the degree program and are aware of the current requirements of the program. An additional source of information is the "C SE Undergraduate Advising Handbook" or the department's Web site, www.ucdenver.edu/cse. Students are required to set up an appointment with the senior check-out advisor before registering for the last 30 semester hours of their program. Upon completion of the 30-hour checkout, all students are required to schedule an appointment with the CSE undergraduate advisor to complete the graduation agreement. Prerequisites will be strictly enforced. *Note:* Prerequisites must be taken before a course that requires them; co-requisites may be taken before or concurrent with a course that requires them.

Graduate

The Department of Computer Science and Engineering (CSE) offers a master of science in computer science (MSCS). The CSE department, together with the Business School,

also offers a joint program leading to a doctoral degree in computer science and information systems (CSIS).

Expertise expand several areas of research in algorithms, artificial intelligence, computer architectures, computer graphics, computational geometry, communication networks, computer security, database systems, distributed computing, high-performance computing, Internet, operating systems, parallel and distributed systems, simulation, software engineering and virtual reality.

Requests for applications for graduate study in computer science and engineering should be addressed to:

UC Denver Department of Computer Science and Engineering
Campus Box 109
P.O. Box 173364
Denver, CO 80217-3364

Applicants who are not citizens or permanent residents of the United States should make application through the Office of International Admissions, Campus Box 185, P.O. Box 173364, Denver, CO 80217-3364. All applicants for admission must submit complete credentials as outlined in the instructions that accompany the application materials.

Admission Requirements

Applicants should hold a bachelor's degree from an institution comparable to the University of Colorado. They need to have sufficient programming experience and mathematical maturity to understand advanced courses. Qualified applicants holding a degree outside computer science, computer engineering or equivalent fields may need to take additional undergraduate courses before starting the graduate program.

Admission decisions are based on prior academic performance, letters of recommendation, English proficiency, if applicable, as well as the applicant's written statement of purpose.

Additional requirements include:

- (1) 10 credit hours, on the semester basis, of university-level calculus
- (2) at least one math course beyond calculus, such as advanced calculus, differential equations, linear algebra, probability, statistics or combinatorial analysis.

Students lacking some of these requirements, whose background is otherwise satisfactory, may be admitted with the understanding that the certain undergraduate courses have to be completed after admission.

Required GPA

Regular admission: Applicants should have an undergraduate GPA of at least 3.0.

Provisional admission: Applicants may be accepted as “provisional degree students.” This status is indicated in the acceptance letter along with the conditions that need to be satisfied by a specific deadline for the student to obtain regular status.

Transfer Credit

A maximum of 9 semester hours of graduate course work may be transferred into the program based on department approval. In principle, core courses must be taken from the CSE department at UC Denver.

Note: Candidates applying for the MS study will be individually evaluated by the department’s graduate committee. A letter with a decision will be sent to the applicant by the CSE chair.

Computer Science and Information Systems PhD

Admission

Prospective students apply to either the Department of Computer Science and Engineering (CSE) or the Business School. Applicants who pass the initial screening are then reviewed by a joint committee (consisting of the two co-directors of the program) for the final admittance decision.

Admission criteria include GPA (undergraduate and graduate), standardized test scores (GMAT or GRE), letters of recommendation, prior achievements in academia and industry and an application portfolio essay describing an applicant’s motivation and an initial plan for doctoral study. The application portfolio is important to gauge an applicant’s motivation for research training.

Students without a master’s degree in either computer science or information systems will need to take additional course work sufficient to complete the requirements of a master’s degree in one of the two areas.

Supervision of the PhD Program

The PhD program is supervised by the two program co-directors. The duties of the co-directors include scheduling of doctoral courses, setting program policies subject to approval of business and CSE faculty, working with advisors to ensure compliance with the program guidelines, resolving disputes, measuring performance of the program over time and providing the final decision on admittance of students.

Advisor

Upon entering the program, each chooses an advisor to provide mentoring and guidance throughout the program and work with the student to prepare a program of study. Requests to change advisors must be approved by the program co-directors, and this happens in very rare circumstances.

Doctoral Committee

The advisor and four other members form a doctoral committee. To foster interdisciplinary work, you may have your doctoral research co-supervised by two faculty members. At least one co-supervisor must be a full-time current graduate faculty member in the CSE department or Business School. The committee must contain at least one faculty member from the CSE department and at least one from the Business School. At least one committee member is from outside of the CSE department and the information systems faculty.

Programs

Bachelor of Science

Computer Science and Engineering BS

Program Objectives

The objectives of the bachelor of science degree in the computer science and engineering program are to:

1. Produce graduates who are successful professionals in computer science and engineering
2. Prepare students for graduate or professional study
3. Develop team building
4. Involve students in software design and projects
5. Support and enhance leadership skills
6. Produce students who can communicate effectively

Measurable Outcomes

To attain the educational objectives of the BS CSE program, the CSE department intends to produce the following measurable outcomes at the time of graduation. Graduates of the BS CSE program will have the following skills:

- an ability to apply knowledge of mathematics, science and engineering
- an ability to analyze a problem and identify and define the computing requirements appropriate to its solution
- an ability to design and conduct software and/or hardware experiments, as well as to analyze and interpret data
- an ability to design software and/or hardware to meet desired needs
- an ability to function on multidisciplinary teams
- an ability to identify, formulate and solve computer science and engineering problems
- an understanding of professional and ethical responsibility
- an ability to communicate effectively
- the broad education necessary to understand the impact of engineering and computer science solutions in a global and societal context
- a recognition of the need for, and an ability to engage in, lifelong learning
- a knowledge of contemporary issues
- an ability to use the techniques, skills and modern tools necessary for computer science and engineering practice
- an ability to display leadership

Typical Curriculum for BS in Computer Science and Engineering

Freshman Year

First Semester

- CSCI 1410 - Fundamentals of Computing Summer 2010 Registration: **C SC 1410**
- CSCI 1411 - Fundamentals of Computing Laboratory Summer 2010 Registration: **C SC 1411**
- CSCI 1510 - Logic Design Summer 2010 Registration: **C SC 1510**
- ENGL 1020 - Core Composition I Summer 2010 Registration: **ENGL 1020** (see note 1)
- MATH 1401 - Calculus I Summer 2010 Registration: **MATH 1401**
Core Curriculum Elective. Semester Hours: 3 (see note 1)

Total: 17 Hours

Second Semester

- CSCI 2312 - Intermediate Programming Summer 2010 Registration: **C SC 2312**
- MATH 2411 - Calculus II Summer 2010 Registration: **MATH 2411**
- PHYS 2311 - General Physics I: Calculus-Based Summer 2010 Registration: **PHYS 2311**
- PHYS 2321 - General Physics Lab I Summer 2010 Registration: **PHYS 2321**
- ENGL 2030 - Core Composition II Summer 2010 Registration: **ENGL 2030**

Total: 15 Hours

Sophomore Year

First Semester

- CSCI 2421 - Data Structures and Program Design Summer 2010 Registration: **C SC 2421**
 - CSCI 2511 - Discrete Structures Summer 2010 Registration: **C SC 2511**
 - CSCI 2525 - Assembly Language and Computer Organization Summer 2010 Registration: **C SC 2525**
 - PHYS 2331 - General Physics II: Calculus-Based Summer 2010 Registration: **PHYS 2331**
 - PHYS 2341 - General Physics Lab II Summer 2010 Registration: **PHYS 2341**
- Core Curriculum Elective Semester Hours: 3 (see note1)

Total: 17 Hours

Second Semester

- CSCI 2132 - Circuit Analysis I Summer 2010 Registration: **C SC 2132**
 - CSCI 3320 - Advanced Programming Summer 2010 Registration: **C SC 3320**
 - CSCI 3412 - Algorithms Summer 2010 Registration: **C SC 3412**
- Core Curriculum Elective Semester Hours: 3 (see note 1)
- CSCI 3287 - Database System Concepts Summer 2010 Registration: **C SC 3287**

Total: 15 Hours

Junior Year

First Semester

- CSCI 3415 - Principles of Programming Languages Summer 2010 Registration: **C SC 3415**

- CSCI 3453 - Operating System Concepts Summer 2010 Registration: C SC 3453
- CSCI 3511 - Hardware-Software Interface Summer 2010 Registration: C SC 3511
- CSCI 3560 - Probability and Computing Summer 2010 Registration: C SC 3560
CSE Tech Elective. Semester Hours: 3
Core Curriculum Elective Semester Hours: 3 (see note 1)

Total: 18 Hours

Second Semester

- CSCI 3508 - Introduction to Software Engineering Summer 2010 Registration: C SC 3508
- MATH 3195 - Linear Algebra and Differential Equations Summer 2010 Registration: MATH 3195
CSE Tech Elective. Semester Hours: 3
CSE Tech Elective. Semester Hours: 3
Core Curriculum Elective. Semester Hours: 3 (see note 1)

Total: 16 Hours

Senior Year

First Semester

- CSCI 3287 - Database System Concepts Summer 2010 Registration: C SC 3287
- CSCI 4034 - Theoretical Foundations of Computer Science Summer 2010 Registration: C SC 4034
- CSCI 4650 - Numerical Analysis I Summer 2010 Registration: C SC 4650
- CSCI 4738 - Senior Design I Summer 2010 Registration: C SC 4738
CSE Tech Elective. Semester Hours: 3

Total: 15 Hours

Second Semester

- CSCI 4739 - Senior Design II Summer 2010 Registration: C SC 4739
- CSCI 4591 - Computer Architecture Summer 2010 Registration: C SC 4591
- CSCI 4761 - Introduction To Computer Networks Summer 2010 Registration: C SC 4761

CSE Tech Elective. Semester Hours: 3

Core Curriculum Elective Semester Hours: 3 (see note 1)

Total: 15 Hours

Program Total: 128 Hours

In addition to planning for sequences of courses based on prerequisites, students should plan to complete sophomore-level courses before taking junior-level courses.

1. Downtown Campus core curriculum: core requirements of the College of Engineering and Applied Science are outlined in the section titled "Undergraduate Core Curriculum in Engineering" or at www.ucdenver.edu/cse. In the communication area, students must pass ENGL 1020-3, Core Composition I, with a C- or better prior to taking either CSCI 2421 or CSCI 4739.
2. Computer science and engineering technical electives: The student must take five courses (15 semester hours) chosen from any CSCI 3000 or 4000-level courses that are not part of the required bachelor of science in computer science and engineering curriculum. The 2000-level CSCI "Practical Systems Administration" course will be counted as one CSCI elective. ELEC 4000-level computer engineering courses may be taken to satisfy a CSE tech elective with prior approval of a CSE academic advisor.

Non Degree

Computer Science Minor

The Department of Computer Science and Engineering offers a minor in computer science. The requirements for the minor are listed below.

Program Requirements

1. Any undergraduate student currently enrolled in a UC Denver degree program with a major other than computer science and engineering may earn a minor in

computer science. This includes students from the College of Engineering and Applied Science, the College of Liberal Arts and Sciences, the Business School, the College of Arts & Media and the School of Public Affairs.

2. The student must complete the following classes with a grade of C- or better:

- CSCI 1410 - Fundamentals of Computing *Summer 2010 Registration: C SC 1410*
- CSCI 2421 - Data Structures and Program Design *Summer 2010 Registration: C SC 2421*
- CSCI 2511 - Discrete Structures *Summer 2010 Registration: C SC 2511*
- MATH 1401 - Calculus I *Summer 2010 Registration: MATH 1401*
- MATH 2411 - Calculus II *Summer 2010 Registration: MATH 2411*

3. The student must complete (with a C- or better) three additional computer science courses at the 3000 level or higher with the approval of an undergraduate advisor.

Note: Some courses at the 3000 level and above require additional prerequisites. A student must fulfill all prerequisites for the courses he/she selects. See the catalog course descriptions for prerequisite information for each course.

4. All computer science courses 3000 level and above must be taken at the Downtown Campus of UC Denver.

5. At the time of graduation, the student must have a UC Denver cumulative GPA of 2.0 and must have a 2.0 GPA for the eight classes taken for the minor.

6. The student must file a minor declaration form with an undergraduate advisor or with the Engineering Student Services office in North Classroom, 3024. For more information or an advising appointment, contact the Department of Computer Science and Engineering in North Classroom, 2605, or by phone at 303-556-4314.

Master of Science

Computer Science MS

► Graduate School Rules apply to this program

General MS Degree Requirements

In addition to the basic requirements of the university, the Department of Computer Science and Engineering requires master's degree candidates to complete an approved program of study consisting of at least 30 semester hours of graduate-level computer science courses and a thesis or project while maintaining a GPA of at least 3.0. With prior approval of the graduate committee, a student may substitute up to 9 semester hours of graduate-level mathematics or other engineering courses. All courses must be taught by University of Colorado graduate faculty.

A student must submit an approved plan of study to the department during the first semester of his/her admission. An academic advisor will consult with each student to develop a plan of study.

Adequate Progress toward MS in Computer Science Degree

Students are expected to finish the MS degree program within five years. Candidates for the MS degree may not get credit for a course taken longer than five years before the date on which the degree is to be granted.

Students who do not enroll for any course work relevant to computer science in a given semester (summer semesters excluded) must supply the Department of Computer Science and Engineering with a written statement describing the reason for the inactivity. Students who are inactive for three consecutive semesters (summer semesters excluded) will be removed from the program, and must re-apply for admission.

Students may choose either Plan I (thesis) or Plan II (MS project).

Plan I—Thesis

Students choosing Plan I take 24 semester hours of graduate course work and conclude their program with 6 semester hours of thesis work. A minimum of three courses must be chosen from among five “core” courses and must be passed with a grade of B or better. Three additional courses must be chosen from among more than a dozen “breadth” courses. Plan I students must also write a thesis and defend it before a thesis committee. The students in Plan I may take one independent study course for a maximum of 3 hours.

Plan II—MS Project

Students choosing Plan II take 27 semester hours of graduate course work and conclude their program with 3 semester hours of MS project work. A minimum of three courses must be chosen from among five “core” courses and must be passed with a grade of B or better. Three additional courses must be chosen from among more than a dozen “breadth” courses. Plan II students must also write an MS project report and defend it before an MS project committee. The students in Plan II may take one independent study course for a maximum of 3 semester hours.

Note: Students can take only graduate engineering (21 semester hours must be CS courses) and graduate mathematics courses. No more than 6 semester hours can be taken in the form of online courses.

Doctor of Philosophy

Computer Science and Information Systems PhD

► Graduate School Rules apply to this program

Program co-directors: Gita Alaghband (CSE) and Mike Mannino (Business School)

Web site: business.ucdenver.edu/Disciplines/InfoSystems/PhD/index.htm

The Department of Computer Science and Engineering (CSE) and the Business School offer a joint doctor of philosophy degree program in computer science and information systems (CSIS). The program targets students with a master's-level education in either computer science or information systems who seek research training that combines CS and IS along with strong industry interaction. The joint PhD program provides training for academic positions, industrial research positions and senior consulting positions. The specific goals of the program complement these general goals:

- create a pool of graduates with CSIS research training who are qualified for academic and nonacademic careers
- meet student demand for advanced training in CSIS with accommodations for full-time and part-time students
- promote interdisciplinary research between CSE and the Business School
- enhance technology transfer between CSIS academic units and Front Range technology businesses through joint research, student internships, faculty externships and committee participation

Advisor

Upon entering the program, each chooses an advisor to provide mentoring and guidance throughout the program and work with the student to prepare a program of study. Requests to change advisors must be approved by the program co-directors, and this happens in very rare circumstances.

Doctoral Committee

The advisor and four other members form a doctoral committee. To foster interdisciplinary work, you may have your doctoral research co-supervised by two faculty members. At least one co-supervisor must be a full-time current graduate faculty member in the CSE department or Business School. The committee must contain at least one faculty member from the CSE department and at least one from the Business

School. At least one committee member is from outside of the CSE department and the information systems faculty.

Program Components

Plan of Study

A list of course work and other requirements for the degree should be prepared with the advisor and then submitted to the co-directors for approval. The successful completion of all work indicated on the plan of study is an important prerequisite for the conferring of the degree. A plan of study should be submitted for approval by the end of the first semester of the program. The current plan of study should be updated before the beginning of the second year of the program and submitted for reapproval by the co-directors.

Preliminary Exam

According to Graduate School rules, students are required to demonstrate their basic knowledge and preparation toward more advanced doctoral level work. For more information visit the PhD CSIS Web site.

Comprehensive Exam

Students will submit a paper to fulfill the graduate school's comprehensive exam requirement. The paper should describe an area of research including literature review, problem definition, and possible methodologies/models to study a significant problem in computer science or information systems. The paper will be evaluated by a committee of three faculty members. An oral presentation of the paper will be open to the entire CSIS faculty. The committee may adopt additional guidelines to evaluate the paper and presentation. According to graduate school rules, the comprehensive exam must be completed by the end of the fourth year in the program. In addition to these requirements, the comprehensive exam must meet the other graduate school requirements.

Dissertation Proposal

Each student should prepare a proposal that will be evaluated by the doctoral committee. A proposal should be ready for review at least one semester before the expected completion date of the degree. The proposal is submitted for review and approval by the doctoral committee. An oral presentation of the dissertation proposal

before the doctoral committee is required for approval. An approved proposal is then submitted to the co-directors of the program for final approval.

Dissertation Completion

Once the dissertation proposal is approved, each student prepares and submits a dissertation. The dissertation is defended before the doctoral committee in a public meeting. Final approval for the dissertation is given by a vote of the dissertation committee after the public defense.

Graduation

Upon completion of all degree requirements including the dissertation defense, the student receives the degree of doctor of philosophy. Students applying through CSE receive the PhD from the College of Engineering and Applied Science, while students applying through information systems receive the PhD from the Business School.

Electrical Engineering

Acting Chair: Miloje (Mike) Radenkovic

Administrative Assistant: Janiece Hockaday

Office: North Classroom, 2615

Telephone: 303-556-2872

Fax: 303-556-2383

Web site: www.ucdenver.edu/electrical

Faculty

Professor:

Titsa Papantoni, PhD, University of Southern California, Professional Engineer (PE)—Greek Chamber of Professional Engineers and Texas

Associate Professors:

Jan Bialasiewicz, PhD, DSc, Silesian Technical University, Poland, PE—Colorado

Hamid Fardi, PhD, University of Colorado Boulder

Miloje Radenkovic, PhD, University of Belgrade, Yugoslavia

Assistant Professors:

Yiming (Jerry) Deng, PhD, Michigan State University

Mark Golkowski, PhD, Stanford University
Tim Chifong Lei, PhD, University of Michigan
Fernando Mancilla-David, PhD, University of Wisconsin at Madison
Jaedo Park, PhD, Pennsylvania State University

Senior Instructors:

Brian Atkinson, MS, University of Colorado Denver
Robert Grabbe, MS, University of Colorado Denver

Professor Adjunct:

Carl Johnk, PhD, University of Illinois at Urbana-Champaign

Modern electrical engineering is a very broad and diverse field. Never before has there been such a challenge and opportunity for electrical engineering to serve mankind. Today's electrical engineers are involved in the development of technology, materials and products to improve the quality of life. They are concerned with the generation and transmission of power, the control and utilization of natural and synthetic resources, the communication of data and information and the intelligent use of computers in consumer as well as industrial products and processes. Systems in electrical engineering range in size from microprocessors through megawatt energy conversion systems to global audio and video communication networks.

At UC Denver, the electrical engineering curriculum prepares students for careers in product design, manufacturing, research, development, operation and plant engineering, technical sales and application engineering. The goal is to educate and inspire students to achieve their maximum career potential.

Mission Statement

We provide graduate programs and an ABET-accredited undergraduate program that are accessible to a diverse group of students—students of different racial and cultural backgrounds, full-time students as well as those who have considerable work and family commitments outside their academic learning and students with a wide variety of work experiences.

Undergraduate

Entering students begin their program with a solid foundation in mathematics, physics, chemistry and computers. Social science, humanities and communication courses provide a diverse background. Intensive courses follow in the theory and laboratory application of digital logic and electrical circuits, electromagnetic fields, electronics, computer engineering and digital hardware design, linear systems, controls, electrical machines and power systems and microprocessors. Throughout the entire course of study, students reinforce their understanding of theory through laboratory experience

and extensive design projects. A strong background is provided in all of the major fields of electrical engineering: circuits and electronics, microcomputers, signal and image processing, communications, autonomous and robotic systems, power and energy conversion, and automatic control systems and instrumentation. Ethics is an integral part of the curriculum. During the senior year, advanced undergraduate-level courses in different specialty areas, design projects and professional electives allow the student to explore areas of special interest.

Students should supplement this information about the curriculum by consulting a copy of the "E E Advisement Guide," which may be obtained in the Department of Electrical Engineering office located in North Classroom, 2615. The "E E Advisement Guide" contains the latest information concerning the curriculum as well as guidelines and procedures with which each student should be familiar. To be awarded the bachelor of science in electrical engineering, a student must satisfactorily complete 128 semester hours, satisfy all university graduation requirements and maintain at least a 2.0 GPA in all electrical engineering and computer science courses attempted. Appointments to see any of the departmental advisors may be made by calling 303-556-2872.

Graduate

The Department of Electrical Engineering offers graduate programs with the following areas of emphasis: communications and signal processing; controls and signal processing; microelectronics and VLSI; fields, waves and optics; computer engineering and embedded systems design; and energy and power systems. The department offers graduate programs leading to the degrees of master of science in electrical engineering and master of engineering.

Requirements for Admission

Applicants, who are U.S. citizens or permanent residents, should request an application through:

Department of Electrical Engineering
University of Colorado Denver
110 UCD
P.O. Box 173364
Denver, CO 80217-3364
Telephone: 303-556-2872
Facsimile: 303-556-2383

Applicants, who are not U.S. citizens or permanent residents of the United States, should make application through the University of Colorado Denver, Office of International Education, 185UCD, P.O. Box 173364, Denver, CO 80217-3364, U.S.A.; telephone 303-315-2231; facsimile 303-315-2246. All applicants for admission need to

submit complete credentials as outlined in the instruction sheet which accompanies the application materials. Three recommendations are required.

The minimum requirements for “regular” admission to the master's program are: BS in electrical engineering, or equivalent degree in math, physics or other engineering disciplines, from a reputable institution, with a GPA of at least 3.0, on a 4.0 scale. Satisfaction of minimum requirements does not guarantee admission: The grades obtained in the student’s area of concentration are important factors in the consideration, and so are possible multiple repetitions of fundamental courses. Students who do not meet the requirements for direct admission to the program may be admitted “conditionally”: that is, they may be required to take or repeat certain undergraduate courses before their admission to the program is official.

For those undergraduate students with degrees in science and non-electrical engineering wishing to pursue graduate study in the Electrical Engineering Department there is no restriction or constraint in being admitted into the master of science in electrical engineering graduate program. However, they must fulfill any prerequisite course requirements assigned to any graduate course in the department. Students with an undergraduate degree in areas other than electrical engineering must also see their graduate instructor to receive approval before registering for a class in electrical engineering.

Students must plan a program of study in consultation with their departmental advisor(s), during the first semester of study, and submit for approval to the department.

Programs

Bachelor of Science

Electrical Engineering BS

Undergraduate Program Objectives

Objectives of the bachelor of science in electrical engineering are to develop graduates:

- who are immediately productive engineers and can advance their careers on different professional tracks in the engineering industry
- who can pursue graduate education in engineering or other fields such as business, medicine and law

These objectives are consistent with the mission of the University of Colorado Denver, congruent with the goals of the College of Engineering and Applied Science and reflective of the mission of the Department of Electrical Engineering.

Typical Curriculum for BS (Electrical Engineering)

Freshman Year

First Semester

- CHEM 1130 - Engineering General Chemistry Summer 2010 Registration: **CHEM 1130**
- ELEC 1201 - Introduction to Electrical Engineering Summer 2010 Registration: **E E 1201**
- ELEC 1510 - Logic Design Summer 2010 Registration: **E E 1510**
- ENGL 1020 - Core Composition I Summer 2010 Registration: **ENGL 1020** (see note 1)
- MATH 1401 - Calculus I Summer 2010 Registration: **MATH 1401**

Total: 16 Hours

Second Semester

- ELEC 1520 - Embedded Systems Engineering I Summer 2010 Registration: **E E 1520**
- ELEC 2531 - Logic Laboratory Summer 2010 Registration: **E E 2531**
- MATH 2411 - Calculus II Summer 2010 Registration: **MATH 2411**
- PHYS 2311 - General Physics I: Calculus-Based Summer 2010 Registration: **PHYS 2311**
- PHYS 2321 - General Physics Lab I Summer 2010 Registration: **PHYS 2321**
Core Curriculum Elective (see note 1) (3 semester hours)

Total: 16 Hours

Sophomore Year

First Semester

- ELEC 2132 - Circuit Analysis I Summer 2010 Registration: **E E 2132**
- ENGL 2030 - Core Composition II Summer 2010 Registration: **ENGL 2030**
- MATH 2421 - Calculus III Summer 2010 Registration: **MATH 2421**
- MATH 3195 - Linear Algebra and Differential Equations Summer 2010 Registration: **MATH 3195**

- PHYS 2331 - General Physics II: Calculus-Based Summer 2010 Registration: **PHYS 2331**

Total: 18 Hours

Second Semester

- ELEC 2142 - Circuit Analysis II Summer 2010 Registration: **E E 2142**
- ELEC 2552 - Sophomore Circuits Laboratory Summer 2010 Registration: **E E 2552**
- ELEC 2520 - Embedded Systems Engineering 2 Summer 2010 Registration: **E E 2520**

Total: 13 Hours

Junior Year

First Semester

- ELEC 3133 - Electromagnetic Fields Summer 2010 Registration: **E E 3133**
- ELEC 3215 - Electronics I Summer 2010 Registration: **E E 3215**
- ELEC 3316 - Linear Systems Theory Summer 2010 Registration: **E E 3316**
- ELEC 3651 - Digital Hardware Design Summer 2010 Registration: **E E 3651**
- ELEC 3715 - Electronics Laboratory Summer 2010 Registration: **E E 3715**
Core Curriculum Elective (see note 1) (3 semester hours)

Total: 16 Hours

Second Semester

- ELEC 3164 - Energy Conversion Summer 2010 Registration: **E E 3164**
- ELEC 3225 - Electronics II Summer 2010 Registration: **E E 3225**
- ELEC 3724 - Energy Conversion Laboratory Summer 2010 Registration: **E E 3724**
- ELEC 3735 - Junior Laboratory Summer 2010 Registration: **E E 3735**
- ELEC 3817 - Engineering Probability and Statistics Summer 2010 Registration: **E E 3817**
Core Curriculum Elective (see note 1) (3 semester hours)

Total: 17 Hours

Senior Year

First Semester

- ELEC 4309 - Senior Design Project I Summer 2010 Registration: E E 4309
Engineering Science Elective (see *note 4*) (3 semester hours)
ELEC Specialty and Laboratory (see *note 5*) (4 semester hours)
ELEC Specialty Course (3 semester hours)

Total: 16 Hours

Second Semester

- ELEC 4319 - Senior Design Project II Summer 2010 Registration: E E 4319 (see *note 3*)
Professional Elective (see *note 3*) (3 semester hours)
ELEC Specialty and Laboratory (see *note 6*) (4 semester hours)
ELEC Specialty (see *note 6*) (3 semester hours)
Core Curriculum Elective (see *note 1*) (3 semester hours)

Total: 16 Hours

Program Total: 128 Hours

The particular curriculum to be satisfied by each student is the one published in the catalog current at the time of his/her 30-hour senior checkout. A graduation agreement should be requested by each student after completing registration for his/her last semester. Additional information is contained in the "E E Advisement Guide." Students should also refer to the section in this catalog on "Academic Policies of the College of Engineering and Applied Science."

1. Common core requirements of the College of Engineering and Applied Science are outlined in the section titled "Undergraduate Core Curriculum in Engineering" in this catalog or in the "E E Advisement Guide."
2. All electrical engineering students must satisfactorily complete ELEC 4309, Senior Design Project I, and ELEC 4319, Senior Design Project II, in consecutive semesters.

3. Professional electives may be selected from an approved list of upper-division or graduate-level courses or cooperative education. The electrical engineering advisor must be consulted prior to the selection of these electives.
4. The engineering science elective may be satisfied by taking ENGR 3012, Thermodynamics.
5. Seventeen semester hours of electrical engineering elective and specialty courses in association with the laboratories are required.

Laboratory Requirements

Students are required to take at least two laboratories out of the following six groups. Theory components are either prerequisites or corequisites to the laboratory components. The theory component may be taken as a specialty course.

- ELEC 4136 - Control Systems Analysis Summer 2010 Registration: **E E 4136**
- ELEC 4276 - Digital Control Systems Summer 2010 Registration: **E E 4276**
- ELEC 4406 - Control Systems Laboratory Summer 2010 Registration: **E E 4406**

- ELEC 4225 - Advanced Electronics Summer 2010 Registration: **E E 4225**
- ELEC 4435 - Advanced Electronics Laboratory Summer 2010 Registration: **E E 4435**

- ELEC 4247 - Communication Theory Summer 2010 Registration: **E E 4247**
- ELEC 4248 - Digital Communication Systems Summer 2010 Registration: **E E 4248**
- ELEC 4467 - Communications Laboratory Summer 2010 Registration: **E E 4467**

- ELEC 4133 - Advanced Electromagnetic Fields Summer 2010 Registration: **E E 4133**
- ELEC 4423 - Microwave Laboratory Summer 2010 Registration: **E E 4423**

- ELEC 4501 - Microprocessor Based Design Summer 2010 Registration: **E E 4501**
- ELEC 4521 - Microprocessor Laboratory Summer 2010 Registration: **E E 4521**

- ELEC 4511 - Hardware-Software Interface Summer 2010 Registration: **E E 4511**
- ELEC 4561 - Hardware-Software Lab Summer 2010 Registration: **E E 4561**

Other courses available (without any laboratory component) as electrical engineering specialty courses include the following:

- ELEC 4174 - Power Electronic Systems Summer 2010 Registration: **E E 4174**
- ELEC 4184 - Power Systems Analysis Summer 2010 Registration: **E E 4184**

- ELEC 4025 - Device Electronics Summer 2010 Registration: **E E 4025**
- ELEC 4555 - Vlsi Circuit Simulation Summer 2010 Registration: **E E 4555**

Computer Engineering Option

Students can add a computer engineering emphasis to their electrical engineering degree program by making the following changes in the curriculum described above:

Junior Year

First Semester

Substitute ELEC 3651, Digital Hardware Design, for ELEC 3817, Engineering Probability and Statistics.

- ELEC 3651 - Digital Hardware Design Summer 2010 Registration: **E E 3651**

Second Semester

Substitute ELEC 3817, Engineering Probability and Statistics, ELEC 3701, Professional Elective, for ELEC 3651, Digital Hardware Design, ELEC 3724, Power Laboratory, and a humanities and social sciences course.

- ELEC 3817 - Engineering Probability and Statistics Summer 2010 Registration: **E E 3817**

Senior Year

First Semester

Choose ELEC 4501, Microprocessor-based Design, and ELEC 4521, Microprocessor Laboratory, as one electrical engineering specialty and laboratory selection.

- ELEC 4501 - Microprocessor Based Design Summer 2010 Registration: **E E 4501**
- ELEC 4521 - Microprocessor Laboratory Summer 2010 Registration: **E E 4521**

Second Semester

Choose ELEC 4511, Hardware-Software Interface Design, ELEC 4561, Hardware-Software Laboratory, and a humanities and social sciences elective as professional elective and electrical engineering specialty and laboratory selections.

- ELEC 4511 - Hardware-Software Interface Summer 2010 Registration: **E E 4511**

- [ELEC 4561 - Hardware-Software Lab Summer 2010 Registration](#): **E E 4561**

Master of Engineering

Electrical Engineering MEng

- ▶ [Graduate School Rules](#) apply to this program

The master of engineering (MEng) degree program is broad based and is designed especially for that person who wants to further his/her education in more than just electrical engineering. A minimum of 30 semester hours of academic work is required for the MEng degree. At least 15 of these hours must be in electrical engineering courses at the 5000-level or above. At least 15 semester hours must be taken in the Department of Electrical Engineering at UC Denver. As many as 15 semester hours may be taken outside of engineering. The student who wishes to enter the master of engineering program should apply to the electrical engineering department in the same manner as a master of science applicant.

Master of Science

Electrical Engineering MS

- ▶ [Graduate School Rules](#) apply to this program

The master of science (MS) program offers two plans, thesis (Plan I) and master's project (Plan II). In each, the student must complete 30 graduate semester hours. To satisfy the breadth requirement, two courses outside the area of specialization are required and two mathematics courses are recommended. Plan I requires a minimum of 24 semester hours of graduate course work and 6 semester hours of MS thesis work. Plan II requires a minimum of 27 semester hours of graduate course work and 3 semester hours of MS project. A minimum of 21 graduate semester hours must be earned through the electrical engineering department at UC Denver. Candidates with a BS degree from UC Denver can count 6 electrical engineering UC Denver graduate credits toward both undergraduate and graduate degrees if their undergraduate GPA is at least 3.0. Double counting applies only to credits earned with a B or better grade.

Mechanical Engineering

Chair: Samuel W. J. Welch
Program Assistant: Petrina M. Morgan
Office: North Classroom, 3502
Telephone: 303-556-8516
Fax: 303-556-6371
Web site: www.ucdenver.edu/mechanical

Faculty

Professors:

Peter E. Jenkins, PhD, Purdue, MBA, Pepperdine, Professional Engineer, PE—Texas
J. Kenneth Ortega, PhD, University of Colorado
John A. Trapp, PhD, University of California at Berkeley

Associate Professors:

Ronald A. L. Rorrer, PhD, Virginia Polytechnic Institute and State University, PE—Colorado
L. Rafael Sanchez, PhD, Michigan Technological University, PE—Colorado
Mohsen Tadi, PhD, Virginia Polytechnic Institute and State University
Samuel W. J. Welch, PhD, University of Colorado
Sean E. Wright, PhD, University of Victoria

Assistant Research Professor:

Atousa Plaseied, PhD, University of Toledo

Senior Instructor:

Joseph F. Cullen Jr., MS, University of Colorado

Professor Emeritus:

James Gerdeen, PhD, Stanford University

Associate Professor Emeritus:

B. Thomas Arnberg, MS, University of Colorado

Mission Statement

The mission of the Department of Mechanical Engineering is to contribute to the economic development of the state of Colorado and the Denver metropolitan area by providing high-quality bachelor's and master's programs (BS, MS and MEng) in mechanical engineering for a diverse group of working students

Program Objectives

The programs offered by the Department of Mechanical Engineering of the University of Colorado Denver can be completed in the afternoon and evening hours to accommodate both working and traditional students. The department seeks to graduate a diverse population of students with bachelor's and master's degrees, enabling them to:

- be employed by a diverse group of industries, research laboratories and educational institutions
- pursue careers in traditional engineering, interdisciplinary areas, research and education
- pursue postgraduate education and advanced degrees

Undergraduate

The mechanical engineer is concerned with satisfying the needs of society using a combination of material, human and economic resources. Mechanical engineering covers a wide spectrum of activities in the engineering profession. These activities include the conversion and transmission of energy and associated power processes; the kinematic, dynamic, strength and wear considerations, as well as economic aspects of the development, design and use of materials, machines and processes; and the analysis, synthesis and control of entire engineering systems.

The mechanical engineering curriculum begins with a strong emphasis on mathematics, physics and chemistry. It continues with a concentration in engineering sciences, including solid and fluid mechanics; thermodynamics, heat and mass transport; materials; and systems analysis and control. It concludes with laboratory and design courses that demonstrate the ways in which scientific knowledge is applied in the design and development of useful devices and manufacturing processes.

The mechanical engineering program may be roughly subdivided into two-year groupings. In the first two years, the program emphasizes the fundamentals of mathematics and basic science that are essential for an understanding of most branches of engineering. In the last two years of the program, the curriculum emphasizes engineering science and design and provides technical electives in the following areas:

- thermodynamics
- heat transfer

- fluid mechanics
- solid mechanics
- power
- bioengineering
- dynamics and controls
- computer-aided design and manufacturing
- thermomechanical systems
- composite materials

To be awarded the BS in mechanical engineering, a student must complete a minimum of 128 semester hours of course work, must satisfy all university graduation requirements and maintain at least a 2.0 GPA in all mechanical engineering courses. All students are required to set up an appointment with the senior check-out advisor before registering for the last 30 hours of their degree program. The last 30 hours must be earned as a degree-seeking student in the College of Engineering and Applied Science at UC Denver.

Graduate

The Department of Mechanical Engineering offers graduate courses, a master of science (MS) degree program and a master of engineering (MEng) program. The PhD in mechanical engineering is offered through the Department of Mechanical Engineering, University of Colorado at Boulder. The areas of research interest in which a student may undertake studies at the Denver Campus include manufacturing processes, fluid mechanics, solid mechanics, bioengineering, energy thermodynamics and composite materials.

As a student in the MS or MEng program, you must meet with your graduate advisor before or during your first semester and design a sequence of elective courses that form a coherent program plan.

Requests for applications for graduate study in mechanical engineering should be addressed to:

UC Denver Department of Mechanical Engineering
Campus Box 112
P.O. Box 173364
Denver, CO 80217-3364

Applicants who are not citizens or permanent residents of the United States should make application through the Office of International Admissions, Campus Box 185, P.O. Box 173364, Denver, CO 80217- 3364. All applicants for admission must submit complete credentials as outlined in the instructions that accompany the application materials.

Concurrent Bachelor's/Master's Degrees

Students wishing to obtain a BS degree with a major in mechanical engineering and either the MS or the MEng degree in mechanical engineering may do so with up to 6 semester hours of 5000-level or above courses applying to both degrees. The 5000-level courses must meet the degree requirements for the graduate degree sought and must be suitable technical electives for the undergraduate degree. This option is open only for students seeking both degrees at UC Denver. Students must meet admission requirements to be accepted into the graduate program. Completion of two 5000-level courses does not guarantee admission into the graduate program. Please see an Engineering Student Services advisor for restrictions and guidelines.

PhD Program

The PhD in mechanical engineering is available through the Department of Mechanical Engineering at University of Colorado at Boulder. Denver Campus faculty may serve as research advisors by individual arrangement.

Programs

Bachelor of Science

Mechanical Engineering BS

Typical Curriculum for BS (Mechanical Engineering—see note 1)

Freshman Year

First Semester

- CHEM 1130 - Engineering General Chemistry Summer 2010 Registration: **CHEM 1130**
- ENGL 1020 - Core Composition I Summer 2010 Registration: **ENGL 1020** (see note 2)
- MECH 1025 - CAD and Graphics for Mechanical Engineering Summer 2010 Registration: **M E 1025**
- MATH 1401 - Calculus I Summer 2010 Registration: **MATH 1401**

Total: 15 Hours

Second Semester

- MATH 2411 - Calculus II Summer 2010 Registration: **MATH 2411**
- PHYS 2311 - General Physics I: Calculus-Based Summer 2010 Registration: **PHYS 2311**
- PHYS 2321 - General Physics Lab I Summer 2010 Registration: **PHYS 2321**
Core Curriculum Electives (see note 3) (6 semester hours)

Total: 15 Hours

Sophomore Year

First Semester

- MATH 2421 - Calculus III Summer 2010 Registration: **MATH 2421**
- MECH 2023 - Statics Summer 2010 Registration: **M E 2023** (see note 4)
- PHYS 2331 - General Physics II: Calculus-Based Summer 2010 Registration: **PHYS 2331**
- PHYS 2341 - General Physics Lab II Summer 2010 Registration: **PHYS 2341**
Core Curriculum Electives (see note 3) (6 semester hours)

Total: 18 Hours

Second Semester

- ENGL 2030 - Core Composition II Summer 2010 Registration: **ENGL 2030**
- ENGR 3012 - Thermodynamics Summer 2010 Registration: **ENGR 3012**
- MATH 3195 - Linear Algebra and Differential Equations Summer 2010 Registration: **MATH 3195**
- MECH 2033 - Dynamics Summer 2010 Registration: **M E 2033** (see note 4)
- MECH 3030 - Electric Circuits and Systems Summer 2010 Registration: **M E 3030**
- MECH 3032 - Electric Circuits and Systems Lab Summer 2010 Registration: **M E 3032**

Total: 17 Hours

Junior Year

First Semester

- MECH 3010 - Elementary Numerical Methods and Programming Summer 2010 Registration: **M E 3010**

- MECH 3021 - Introduction to Fluid Mechanics Summer 2010 Registration: **M E 3021**
- MECH 3022 - Thermodynamics II Summer 2010 Registration: **M E 3022**
- MECH 3027 - Measurements Summer 2010 Registration: **M E 3027**
- MECH 3028 - Laboratory of Mechanical Measurements Summer 2010 Registration: **M E 3028**
- MECH 3043 - Strength of Materials Summer 2010 Registration: **M E 3043**

Total: 16 Hours

Second Semester

- MECH 3023 - System Dynamics I: Vibrations Summer 2010 Registration: **M E 3023**
- MECH 3024 - Introduction to Materials Science Summer 2010 Registration: **M E 3024**
- MECH 3031 - Fluids/Thermal Laboratory Summer 2010 Registration: **M E 3031**
- MECH 3034 - Properties of Engineering Materials Summer 2010 Registration: **M E 3034**
- MECH 3035 - Design of Mechanical Elements Summer 2010 Registration: **M E 3035**
- MECH 3042 - Heat Transfer Summer 2010 Registration: **M E 3042**
- MECH 3065 - Intermediate Dynamics Summer 2010 Registration: **M E 3065**

Total: 17 Hours

Senior Year

First Semester

- MECH 3145 - Manufacturing Processes Design Summer 2010 Registration: **M E 3145**
- MECH 4023 - System Dynamics II: Controls Summer 2010 Registration: **M E 4023**
- MECH 4035 - Senior Design I Summer 2010 Registration: **M E 4035**
MECH Technical Electives (see note 5) (6 semester hours)

Total: 15 Hours

Second Semester

- MECH 4045 - Senior Design II Summer 2010 Registration: **M E 4045**
MECH Technical Electives (6 semester hours)

Core Curriculum Electives (*see note 3*) (6 semester hours)

Total: 15 Hours

Notes

1. Students enrolled prior to fall 2006 may choose either the new core curriculum or the old core curriculum.
2. The communication requirements include ENGL 1020 and ENGL 2030.
3. Common core requirements of the College of Engineering and Applied Science. Refer to the "Undergraduate Core Curriculum in Engineering" in this catalog or to the "Common Core Requirements" guide available from your advisor for further information.
4. CVEN 2121 and CVEN 3111 may be substituted for MECH 2023 and MECH 2033 respectively.
5. Not all courses may be offered every semester. Students should check the current *Schedule Planner*.

Program Total: 128 Hours

Students should check with departmental advisors to determine their degree requirements. The particular curriculum to be satisfied by each student is the one published in the catalog *current* at the time of their matriculation. For additional information, see the departmental advisor.

Students should refer to the section in this chapter on "Academic Policies" of the College of Engineering and Applied Science. In addition to planning for sequences of courses based on prerequisites, students should plan to complete sophomore-level courses before taking junior level courses and should have completed their junior-level mechanical engineering courses before starting their senior-level mechanical engineering electives. All students should see their advisors at least once each semester.

Master of Engineering

Mechanical Engineering MEng

► Graduate School Rules apply to this program

The master's of engineering (MEng) is an interdisciplinary degree program designed to meet the needs of those practicing engineers who wish to follow an integrated program of studies in engineering and allied subjects related to the individual student's

professional work. Students can combine advanced engineering course work with graduate-level non-engineering courses such as business administration, environmental sciences, social sciences, biological sciences or public administration.

Prospective students are required to present a well-defined objective in order to be admitted to the program. In consultation with faculty advisors, an academic program is developed to meet this objective.

An advisory committee will be appointed for each student by the department. The advisory committee that guides the student is responsible for approving the individual's degree program and admission to candidacy, and approves the student's written report and the awarding of the degree.

The requirements for admission are the same as those for the MS degree awarded through the College of Engineering and Applied Science. A minimum of 30 semester hours of academic work are required for the MEng degree. At least 15 of these hours must be at the 5000 level or above in mechanical engineering. A maximum of 12 semester hours may be taken outside of engineering. In addition to course work, a written report is required in the MEng program as a final project (3 semester hours). The report may be related to the student's professional work. The report will be of the same general quality as that required for the master of science thesis and must be defended orally. It may be based on work done for credit under independent study.

Master of Science

Mechanical Engineering MS

► Graduate School Rules apply to this program

For the master of science (MS) degree in mechanical engineering, students may choose between two plans with each plan totaling 30 semester hours. Students following Plan I (thesis option) take 24 semester hours of formal course work plus 6 semester hours of thesis work. Students following Plan II (project option) take 27 semester hours of formal course work plus a 3 semester hour final project requiring a report. Students following Plan I or Plan II must submit a proposal to their examination committee prior to the semester in which they register for their thesis or project semester hours, and the examination committee must approve the proposal for the thesis or project.

Students in either plan may choose one of three options. In the first two options, the student may choose to specialize in either thermal science or mechanics. The third option is the general mechanical engineering option.

The **thermal science option** requires 12 semester hours of course work in analytical methods, numerical methods, fluid mechanics and thermodynamics. The student then

selects 9 semester hours of course work in approved electives from a selection of thermal science electives.

The **mechanics option** requires 12 semester hours of course work in analytical methods, numerical methods, elasticity and dynamics. The student then selects 9 semester hours of course work in approved electives from a selection of mechanics electives. For students following Plan I, both the thermal science and mechanics options allow the student to pick one approved 3-semester-hour elective not necessarily in the chosen specialty. For students following Plan II, both the thermal science and mechanics options allow the student to pick two approved 3-semester hour electives not necessarily in the chosen specialty.

The **general mechanical engineering option** requires the student to take 18 semester hours of required course work in analytical methods, numerical methods, fluid mechanics, thermodynamics, elasticity and dynamics. For students following Plan I, the general mechanical engineering option allows the student to pick two approved 3-semester hour electives. For students following Plan II, the general mechanical engineering option allows the student to pick three approved 3-semester hour electives.

College of Liberal Arts and Sciences

College of Liberal Arts and Sciences

Dean

Daniel J. Howard; Professor of Biology

Associate Deans

Brenda J. Allen, Associate Dean for Planning and Initiatives; Professor of Communication

Laura M. Argys, Associate Dean for Research and Creative Activities; Professor of Economics

Tammy Stone, Associate Dean for Curriculum, Student Affairs and Personnel; Professor of Anthropology

Contact

Administration Office

North Classroom, Suite 5014

Phone: 303-556-2557

Fax: 303-556-4861

Undergraduate Advising Office

Phone: 303-556-2555

Fax: 303-556-6277

Mailing Address

College of Liberal Arts and Sciences

Campus Box 144

P.O. Box 173364

Denver, CO 80217-3364

<http://clas.ucdenver.edu>

Application Deadlines

Undergraduate

Fall—July 22

Spring—December 1

Summer—May 3

Graduate

Varies by department. See individual department sections of this chapter for deadlines.

The beauty of an education in the liberal arts is its simultaneous diversity and specialization, its combination of breadth and depth. Students in the College of Liberal Arts and Sciences at UC Denver specialize in a major such as chemistry, English or psychology while creating a foundation of knowledge through general education requirements. Having a broad background in the arts and sciences prepares you to begin your career or to change careers later, to pursue advanced study in a discipline or to study for a professional career such as law or medicine. We believe it also sets the stage for a rewarding and productive life overall. Pursuing a liberal arts curriculum not only increases your knowledge, it enables you to develop such skills as logical argumentation and clear expression, gain insights about relationships in nature and society, develop critical thinking and interpretive ability, solve complex problems rationally and heighten your aesthetic appreciation.

At the College of Liberal Arts and Sciences (CLAS), we coordinate undergraduate programs with our own graduate programs as well as UC Denver's professional schools, through which you can combine technical expertise with the broad critical and analytical skills essential to complex decision making. While our dedicated faculty have outstanding academic credentials, their greatest strength is their commitment to highly motivated students representing a broad range of age and experience. Their goal is not

only to teach, but to instill in our students a lifelong love for learning and respect for free and independent thinking.

Our curriculum maintains traditionally high university academic standards while providing numerous flexible learning opportunities to meet our students' varied objectives. We offer opportunities to study urban programs, confront contemporary issues, participate in off-campus internships and make use of the city's resources. Advisory committees from the community work with CLAS departments and programs, allowing cultural, historical and environmental efforts in Denver to be supported and enhanced by our academic programs.

Liberal arts and sciences undergraduates receive either a BA or BS degree. Many go on to further study in some of the best graduate and professional schools around the country, while others begin their careers in a variety of positions in industry, commerce and government. Each area of study offers a wide variety of curricula, including traditional undergraduate major programs, interdisciplinary studies and pre-professional programs.

College of Liberal Arts and Sciences Educational Goals

The College of Liberal Arts and Sciences defines liberal education as including four major components:

1. Central elements of knowledge including:
 - a. knowledge of the diversity and significant dimensions of human culture and a specific understanding of American culture, including its political and ethnic diversity
 - b. aesthetic awareness and appreciation of the cultural contributions made to the human experience by the social sciences and humanities
 - c. an understanding of the methods of inquiry and development of theory that form the basis of knowledge in the natural and physical sciences
2. Essential skills for analysis, writing, computation, communication and decision making
3. The development of a constructive orientation toward society through the enhancement of the individual's capacity to make informed and responsible choices based on reflective consideration of the democratic principles of due process, civil liberties and the balance between individualism and the common good
4. The ability to apply knowledge of the arts and sciences to society's specific needs

The college works to instill in students an understanding of these components through required skills and core courses and through the knowledge and skills required by each major program in the college.

Undergraduate Programs

A complete list of major and minor programs appears in [At A Glance: College of Liberal Arts and Sciences](#).

Major Degree Programs

Students can earn baccalaureate degrees (including areas of emphasis indented below the major areas) in the majors listed in the college [At A Glance](#).

Minor Programs

A college minor represents a concentration of content knowledge, but not to the extent afforded in a major. Minors are optional for liberal arts students, but are encouraged to broaden educational experience and enhance occupational skills.

Students interested in a minor should contact the CLAS Advising Office, North Classroom, 4002, 303-556-2555, for information. Students may also contact the department directly.

Double Majors

Students may graduate with more than one major by completing all requirements for each major.

Double Degrees

Students may earn two undergraduate degrees in liberal arts or from two different schools or colleges of the University of Colorado simultaneously by fulfilling all requirements for both degrees. For example, the Business School and the College of Liberal Arts and Sciences have a double-degree program leading to a BS in business administration and a BA in the student's chosen major.

The College of Liberal Arts and Sciences requires that a student complete at least 90 liberal arts semester hours to be granted two bachelor's degrees. Students must complete a minimum of 150 semester hours applied toward the two degrees.

Students planning one of these multiple programs should consult with the CLAS Advising Office at the earliest possible date to get approval for a double-degree program.

Second Degrees

Students who have been awarded a bachelor's degree (either from the college or elsewhere) may be granted a second bachelor's degree provided that (a) all general requirements for that degree have been met; (b) the major for the second bachelor's degree is different from the major for the first; and (c) the college and major department residence requirements are satisfied. A second degree from the college requires a minimum of 30 additional semester hours of credit.

Graduate Programs

Graduate degree programs offered by the faculty of the college through the Graduate School are listed in [At A Glance: College of Liberal Arts and Sciences](#). Many degrees provide the opportunity for students to specialize in concentrations within the discipline; these are listed below the degree title.

Certificate Programs

The college offers undergraduate and graduate certificate programs that demonstrate proficiency in a specialized field of study. These programs differ from minor programs in that certificates may cross traditional disciplinary boundaries and are awarded independently of formal graduation.

Certificate programs are open to degree-seeking students as well as those who aren't seeking a degree but want to enhance their professional expertise, and require the completion of three to six related courses (9-19 semester hours). The list of certificate programs in At A Glance has been approved by the college and will appear on the student's official University of Colorado transcript upon completion of all certificate requirements.

Information about certificate programs can be found in the coordinating department section of this catalog and the departmental Web sites, or by contacting the department directly.

Continuing and Professional Education (CPE)

Managing Director: Laurel Dodds

Telephone: 303-352-3728

E-mail: Laurel.Dodds@ucdenver.edu

The College of Liberal Arts and Sciences (CLAS) participates in the University's Continuing and Professional Education (CPE) programs, which include credit courses offered through extended studies during evenings, weekends and at off-campus sites.

CPE also includes non-credit courses offered for continuing education units (C.E.U.s) or for professional development and personal enrichment. Information about the CLAS CPE program can be found at: <http://thunder1.cudenver.edu/clas/extendedstudies.html>

A full degree program, the MA in political science (politics and public policy option), is available as part of the CLAS CPE. This weekend program is offered by the Center for New Directions in Politics and Public Policy at two off-campus locations: Durango, CO and the University Center at Chaparral in Douglas County. See the [New Directions Program](#) page for further information.

Signature Areas

CLAS has developed a 12-year strategic plan (2008-2020) that includes five signature areas. Based on proposals prepared by faculty from across the college and university, these areas encompass interdisciplinary themes related to diverse contemporary issues, as their titles demonstrate:

- Colorado Center for Public Humanities
- Math and Science Learning and Education
- Social Justice
- Sustainability
- Women's and Gender Studies

Each signature area group has developed and begun to implement its vision. A managing director works with faculty and administrators from CLAS and other academic units to coordinate the development of interdisciplinary curricula, research projects, community outreach and academic programs. There are three minors which have been developed through the signature areas: social justice, sustainability and women's and gender studies. The CLAS Web site will announce activities and post updates about the signature areas at: <http://thunder1.cudenver.edu/clas/signatureAreas.html>

Undergraduate Policies and Procedures

Requirements for Admission

CLAS Advising Office: North Classroom, 4002

Telephone: 303-556-2555

Fax: 303-556-6277

Web site: <http://thunder1.cudenver.edu/clas/advising/index.htm>

New Freshmen

Students planning to enter the College of Liberal Arts and Sciences must meet the requirements described in the Information for Undergraduate Students chapter of this catalog.

Transfer Students

Students who have attended another college or university are expected to meet general requirements for admission of transfer students as described in the Information for Undergraduate Students chapter.

Transfer students with at least 30 semester hours of transferrable credit who have been denied admission to the college by the Downtown Campus Office of Admissions, and who have special circumstances not covered by the regular admission policies, may petition the CLAS Academic Standards Committee for provisional admission. The Academic Standards Committee requires evidence of academic performance before provisional admission is granted. Policies and procedures for the CLAS Academic Standards Committee are available through the CLAS Advising Office.

Grading Policies

The College of Liberal Arts and Sciences adheres to the University of Colorado grading policies found in the Registration and Records chapter of this catalog. The college also maintains specific grading policies for liberal arts students.

Incomplete Grades

When a student has special circumstances that make it impossible to complete course assignments, faculty members have discretion to award an incomplete grade. Effective January 1, 2009, all incomplete courses are now assigned a grade of Incomplete (*I*). Incomplete grades are *not* awarded for poor academic performance or as a way of extending assignment deadlines. While not required, a CLAS course completion agreement form (available from the CLAS Advising Office) is strongly suggested when faculty and student agree on an incomplete grade.

To be eligible for an incomplete grade, students must:

- have successfully completed 75 percent of the course
- have special circumstances (verification may be required) that preclude the student from attending class and completing graded assignments
- make arrangements to complete missing assignments with the original instructor within one academic year

Students are allowed up to three semesters (one year) to complete the requirements for the incomplete, after which the *I* reverts to an *F* grade on the student's transcript. Any

request to allow a grade change after the one-year period must be petitioned to the CLAS Academic Standards Committee.

Pass/Fail Grading Option

Students may select the pass/fail grading option for most courses. In addition to Downtown Campus policies covering the pass/fail grading option (see the [Registration and Records](#) chapter of this catalog), CLAS students must adhere to the following college pass/fail grading policies:

1. Courses in a student's major, minor and certificate may not be taken on a pass/fail basis.
2. Courses required to show proficiency may not be taken on a pass/fail basis: ENGL (core curriculum), MATH (core curriculum) and first two semesters of foreign language.
3. Courses used to satisfy the intellectual competencies section of the UC Denver core curriculum may not be taken on a pass/fail basis.
4. Courses in the knowledge area section of the Downtown Campus core curriculum may be taken on a pass/fail basis.
5. Courses used to satisfy CLAS graduation requirements may be taken on a pass/fail basis. (Exception: communicative skills, major/minor courses.)
6. Students must sign up by the drop/add deadline for the semester.

Repeated Courses

Students may re-register for any course. Both (all) courses remain on the transcript and both (all) grades are used to calculate the student's GPA. Course credit toward graduation is counted only once for a given course no matter how many times the course is repeated.

Academic Policies

Students are referred to the [Registration and Records](#) and [University Policies](#) chapters of this catalog for a description of academic policies that apply to all undergraduate students at UC Denver's Downtown campus. [Graduate students are referred to the [Graduate School Rules](#) and the [Graduate Policies and Procedures](#) section below.] The policies that follow apply specifically to College of Liberal Arts and Sciences undergraduate students.

ACADEMIC ADVICE AND INFORMATION

Students in the college are expected to assume responsibility for planning their academic programs in accordance with college policies and major requirements. To

assist students, the college maintains the CLAS Advising Office, North Classroom, 4002, 303-556-2555. Students are assigned to a college advisor in this office according to the students' last names and must meet with this advisor upon matriculation into the college. The CLAS Advising Office also has specialty college advisors in teacher education and health careers. The college advisor is responsible for advising students of college policies and requirements, and the certification of college requirements at graduation.

As soon as students have determined a major, they should meet with a major department advisor. The major department advisor will be responsible for the student's major advising and for certification of the completion of the major program at graduation.

Students planning to ultimately earn a degree from one of the professional schools should also see an advisor in that school or college.

EARLY ALERT

The University of Colorado Denver Downtown Campus participates in a campuswide early alert program to identify undergraduate students needing assistance from academic and student service offices. Providing assistance early in the semester is very important to student success in their baccalaureate program. The College of Liberal Arts and Sciences is committed to actively participate in the program through a collaborative working relationship between faculty and academic advisors in the college.

The early alert program is designed for faculty to identify students in weeks five and six of the semester who need assistance because of academic performance, class participation and/or behavior issues. Assistance is provided to students identified by faculty through academic advising and through referrals to appropriate UC Denver student service offices.

Goals of the early alert program are to:

- increase student academic success
- improve student persistence and graduation rates
- increase communication between students and faculty
- increase communication between students and academic advisors
- increase student utilization of student service offices

Further information about the UC Denver early alert program is available from the Undergraduate Experiences Office at 303-556-6506.

ACADEMIC PROBATION AND SUSPENSION

Students at the University are expected to maintain progress in their degree program, as defined by being in "good academic standing." Good academic standing requires

minimally a cumulative grade point average (GPA) of 2.0 on all University of Colorado course work.

Academic Probation

- Academic probation is a warning to students that they are not progressing toward completion of their degree in a satisfactory manner.
- Students are placed on academic probation when their cumulative CU GPA falls below a 2.0 at the end of any academic term.
- Students are informed in writing (via University-assigned email and postal letter) of their academic probation status.
- Students on academic probation will be required to complete the Academic Success Plan during their first semester on academic probation.
- Students will be required to schedule an appointment and meet with their academic advisor to discuss the completed Academic Success Plan before they will be allowed to register for the subsequent term.
- Students on academic probation will be required to schedule an appointment and meet with their academic advisor every semester that they are on academic probation before they will be allowed to register.
- Academic probation requires that students achieve a minimum 2.3 semester GPA each subsequent term until their cumulative CU GPA is at least a 2.0 to return to good academic standing. Students must achieve a minimum 2.0 cumulative CU GPA to meet graduation requirements.
- Students who fail to earn the 2.3 semester GPA during any semester of academic probation will be placed on restricted academic probation.
- Students have five semesters or 30 credits (whichever happens sooner) to raise their cumulative GPA to above a 2.0, or they will be placed on academic suspension.
- Once a student has raised his/her cumulative CU GPA to at least a 2.0, s/he will be removed from academic probation and notified via University-assigned email that s/he is in academic good standing.

Restricted Academic Probation

- Students who fail to earn the 2.3 semester GPA during any semester of academic probation will be placed on restricted academic probation.
- Students are informed in writing (via University-assigned email and postal letter) of restricted academic probation status.
- Students on restricted academic probation will be allowed to enroll for a maximum of 6 credits/2 classes per semester (whichever is more). A course and its attached lab are considered to be one course in this case.
- Students on restricted academic probation will be required to schedule an appointment and meet with their academic advisor in order to register for courses.

- Students on restricted academic probation will not be able to register online; they will need to register for courses using a Schedule Adjustment Form, which must be submitted to the Service Center (North Classroom #1003) for processing.
- Restricted academic probation requires that students achieve a minimum 2.3 semester GPA each subsequent term until their cumulative CU GPA is at least a 2.0. Students must achieve a minimum 2.0 cumulative CU GPA to return to good academic standing and to meet graduation requirements.
- Students on restricted academic probation who do not meet the 2.3 minimum semester GPA will be placed on academic suspension.
- Students who fail to raise their cumulative GPA to 2.0 or above in five semesters or 30 credit hours on academic probation and restricted academic probation will be placed on academic suspension.

Academic Suspension

- Students on restricted academic probation who do not meet the 2.3 minimum semester GPA will be placed on academic suspension.
- Students are informed in writing via certified/registered letter of their academic suspension status.
- The minimum duration of academic suspension is for a period of one year (three semesters, including summer term). Students placed on academic suspension will be unable to take courses from any CU campus during this time.
- Should a student be placed on academic suspension while registered for the next semester, s/he will be administratively dropped from their courses by the University.
- A student's academic suspension status is permanently indicated on his/her official University of Colorado transcript.
- During the one-year academic suspension period, students who wish to return to the University should consider one (or both) of the following actions:
 - ♦ Attend another regionally-accredited college/university.

Students who choose to attend another institution while on academic suspension can take as many or as few credits as they choose, but must earn a 2.75 cumulative GPA in all transferable course work.

Students should consult their academic advisor to discuss appropriate course work.

- ♦ Use the time off to directly address and resolve the factors that contributed to the academic difficulty.
- After the one-year suspension period has elapsed, students must petition the appellate committee (of the school or college they wish to enter) for readmission and meet and document at least one of the following criteria:

- ♦ Attendance at another regionally accredited college/university where they earned a minimum cumulative GPA of 2.75 in transferable credit.
- ♦ Explanation of their previous academic difficulty, demonstration of what has changed, and how this will allow them to now achieve and maintain good academic standing (including a semester GPA of at least 2.3 and a cumulative GPA of at least a 2.0).
- Students who choose to petition their college's appellate committee for readmission must submit their petitions by the following deadlines:
 - ♦ For fall admission: June 1
 - ♦ For spring admission: December 1
 - ♦ For Maymester/summer admission: April 1
- If a student is granted readmission and his/her CU GPA is below a 2.0, s/he will be readmitted on restricted academic probation. These students must meet the condition of restricted academic probation every semester until their cumulative CU GPA is at least 2.0.

Second Suspension

- Students who are readmitted after their first academic suspension and fail to meet the conditions of restricted academic probation for a second time are placed on a second suspension for an indefinite period of time.
- Students on a second suspension may be readmitted to the University only by petition to the college's appellate committee.
- Students will not be considered for readmission unless they have demonstrated significant improvement in academic performance at the college/university level, and/or considerable and positive change in personal circumstances.

EARNING ACADEMIC CREDIT—SPECIAL OPTIONS

Students in the college may earn credit toward a degree for knowledge gained prior to enrollment in the college or for knowledge gained outside traditional college courses. Specific programs by which credit is awarded are described below. In addition, credit may be earned for ROTC.

General information regarding these options can be found in the "Transfer of College-Level Credit" section of the Information for Undergraduate Students chapter. Students should contact the CLAS Advising Office for specific details of these programs. For credit in a student's major or minor, the appropriate department must be consulted.

Advanced Placement/International Baccalaureate

Students who have taken advanced courses in high school and who have earned high scores on the Advanced Placement or International Baccalaureate standardized exams may be eligible for university credit. See the [Information for Undergraduate Students](#) chapter of this catalog under “Transfer of College-Level Credit” for additional information. Individual departments establish advanced placement criteria for credit. Students should contact the department advisor for specific details concerning advanced placement credit.

College Level Examination Program (CLEP)

College of Liberal Arts and Sciences students may earn university credit by examination in subject areas in which they have obtained college-level proficiency. The use of CLEP subject examinations toward major, minor or certificate requirements is subject to a separate evaluation by the faculty advisor in the department or program. To receive academic credit from CLEP, students must present official test results to the Downtown Campus Office of Admissions. A maximum of 30 hours of CLEP credit will count toward the degree. See the “Transfer of College-Level Credit” in the [Information for Undergraduate Students](#) chapter of this catalog for additional information.

Credit by Examination

Students with sufficient experience and knowledge may receive credit for a specific course by taking a comprehensive examination given by the faculty. Students should consult the [Registration and Records](#) chapter of this catalog for more information.

Internships or Cooperative Education

Undergraduate students may seek credit from an employment experience that contains academic content and is sponsored by a CLAS faculty member. Internships are helpful for career exploration early in a student’s academic career or for job experience after developing academic content in the major.

Students must have a minimum 2.75 cumulative GPA in a minimum of 15 semester hours of UC Denver course work. A maximum of 3 semester hours of internship credit per semester and 9 semester hours overall are allowed toward the 120 semester hours applied toward graduation. Undergraduate students should contact the [Experiential Learning Center](#) for details about the internship contract and faculty sponsorship requirements.

Courses in the Professional Schools and in Physical Education

Students may count up to 24 semester hours of academic course work taken outside of liberal arts, such as business, engineering, architecture, journalism and education.

Up to 8 semester hours of activity courses in physical education will count toward the 120 hours required for the degree; these are included in the 24 semester hours allowed outside CLAS.

Independent Study

Qualified CLAS undergraduate students who seek to further their examination of knowledge outside the structured classroom are encouraged to register for independent study. Undergraduate independent study is a nonstructured, independent research project under the sponsorship and supervision of a faculty member. Students should consult with the faculty sponsor to discuss the project and initiate the independent study contract.

To qualify for independent study credit, students must have a declared major or minor in the discipline of the independent study project and a minimum cumulative UC Denver GPA of 2.5. Those seeking senior level independent study must have a minimum junior standing and sufficient course work to allow independent research in the discipline.

Faculty seeking to sponsor an independent study project must have either instructor or tenure-track rank. Faculty seeking to sponsor an independent study project as part of an undergraduate honors project must be tenure-track rank.

Independent study projects are typically awarded credit on a 3:1 (4:1 in summer) basis for contact hours per week to semester hours. That is, a 3-semester-hour independent study project typically requires 9 hours of effort per week over the semester.

Graduation Requirements

Undergraduate students graduating from the College of Liberal Arts and Sciences must fulfill requirements for the college and for the major department. Residence requirements apply to both college and major department. A checklist of graduation requirements follows in this section.

Students are responsible for knowing the requirements for their degree and for fulfilling these requirements. Upon completion of the college and major requirements, the student will be awarded the appropriate degree.

General Requirements

- a minimum of 120 semester hours passed
- a minimum 2.0 cumulative GPA

- a minimum of 45 semester hours of upper-division work
- a minimum of 30 semester hours of CLAS course work with letter grades at the Downtown Campus
- fulfillment of all college and major requirements

CLAS CORE CURRICULUM AND GRADUATION REQUIREMENTS

Note: Not more than 24 hours outside the college (for example, business and engineering) can be applied toward the 120 hours required for the bachelor's degree.

General Education

The general education graduation requirements are established by the CLAS faculty and combine specific requirements from (1) the Downtown Campus core curriculum, (2) the CLAS graduation requirements and (3) foreign language proficiency.

Major Requirements

In addition to completing the college requirements outlined above, students must declare a major and fulfill all requirements of the major department. Department requirements include at least 30 semester hours of work in the major with a minimum grade of C (2.0), of which at least 16 semester hours in the major are at the upper-division level. The GPA in the major must be at least 2.0.

The college places a maximum number of semester hours (required plus elective courses) in the major department, discipline or program as follows:

Degree Maximum Hours

BA 48

BS 56

The department is responsible for determining when a student has successfully completed the major requirements and for certifying the completion to the dean of the college.

Declaration of Major

It is important that students declare a major as early as possible in order to receive proper advising toward departmental requirements. Students in the college must declare a major by the start of their junior year (greater than 60 hours). Transfer students to the college with junior or senior standing should declare a major in their first semester at UC Denver. Students are allowed to change their major at any time.

Residence Requirements

A minimum number of semester hours must be earned in residence in the College of Liberal Arts and Sciences. All students have college and major residence requirements. Students should check with their major department to ascertain residence requirements for the major.

Students transferring to the Downtown Campus must pay particular attention to residence requirements. Students transferring academic credit from Metropolitan State College of Denver should see the CLAS Advising Office for special consideration of residence credit.

Residence credit hours are earned from CLAS courses taught by UC Denver faculty while the student is enrolled as a degree student in the College of Liberal Arts and Sciences.

All CLAS students must meet college residence requirements.

1. Students must earn a minimum of 30 residence semester hours.
2. For students who exceed the minimum 30-hour residence requirement, a minimum of 21 out of the last 30 semester hours applied toward graduation requirements must be in residence.
3. Departments maintain a residence requirement for the major, minor and certificates. Students should consult with a faculty advisor concerning departmental residence requirements.

Intent to Graduate

Students must submit their [intent to graduate online application](#) by the published deadline for the semester they expect to graduate. If the degree is not completed, they must resubmit the intent to graduate each subsequent semester until graduation. Failure to submit the intent to graduate will result in delayed graduation.

Graduation Application

Students are required to meet with their CLAS major and minor advisors at the beginning of the semester/term in which they plan to graduate to initiate the graduation verification process. CLAS advisors will distribute graduation applications to students who qualify, and then their intent to graduate online application is approved. The deadline for filing a graduation application with the CLAS Advising Office is the published last day to add courses in each semester. Failure to submit the intent to graduate and graduation application with the CLAS Advising Office will result in delayed graduation.

Academic Honors

College Honors

A student who performs superlatively in course work in the college will be awarded a bachelor's degree accompanied by the statement *with distinction*. To be eligible for graduation with distinction, a student must have completed a minimum of 45 semester hours at the University of Colorado (on any CU campus), including the final semester, with a GPA of at least 3.75. The 45 semester hours must be completed in the student's junior and senior years. A maximum of 6 out of the final 45 semester hours may be completed with a grade of *P* (on *P/F* option).

Departmental Honors

Departments in the college offer programs through which students can qualify for Latin honors: *cum laude*, *magna cum laude* or *summa cum laude*. Determination of the level of honors is made by the department. Detailed information can be obtained from the CLAS Advising Office or from the individual department.

Dean's List Criteria

UC Denver will use a fixed criterion across all colleges for determining eligibility for the Dean's List. This policy applies to undergraduate students.

For fall and spring semesters, students must successfully complete 9 hours in the semester, upon which to determine grade point average. These courses can be both within and outside of the college. Pooled courses will not be included in the calculation nor will they count toward the 9 hours required for consideration. The GPA required for inclusion in the Dean's List is 3.75.

In the summer semesters, students must complete 6 hours as a basis for inclusion in the Dean's List. Course inclusion is the same as in fall and spring semesters. The GPA required for Dean's List in summer is also 3.75.

Colleges will collect data each semester on the number of students making the Dean's List and report the number and percentage of total students in the college.

Scholarships tied to Dean's Lists in individual colleges may have additional requirements.

The Office of the Registrar will calculate the semester GPAs for all students two weeks prior to the due date for semester grades. Those GPAs will be the basis for determining the Dean's List. Incompletes will not be considered in the calculation of minimum

number of hours. The Dean's List will not be recalculated to include completed incompletes.

Graduate Policies and Procedures

Admission to Graduate Programs

Each CLAS graduate program handles admissions to its master's or doctoral programs, and defines its own admission standards and procedures based upon the general Graduate School guidelines. Some departments process application files within the department and some have the Office of Admissions process application materials, so be sure to check with the department to which you are applying to learn their specific procedures and deadlines. ApplyYourself, a planned new tool for graduate admissions, is expected to become active by spring 2010. Look for more information as it becomes available.

The criteria for admission shall be based on a combination of the following: minimum 3.0 GPA, standardized examinations, prior professional experience, portfolios or other indicators. Regular admission to master's programs requires the completion of a bachelor's degree or master's degree from an accredited college or university at the time of matriculation or demonstration of the completion of work equivalent to that required of these degrees as specified by UC Denver.

Students are admitted as regular or provisional students. Students receiving provisional admission are subject to certain requirements set out by their programs for a probationary period, not to exceed two years. The requirements may be more stringent, but provisional students must complete each semester's course work with a GPA of 3.0 or higher on all work taken.

International students must meet all requirements for regular admission as well as the requirements of the UC Denver Office of International Affairs. These include: documentation in English or a certified English translation of the completion of a bachelor's degree, master's degree or the equivalent at the time of matriculation as evaluated by International Admissions; financial documents required by the UC Denver Office of Admissions; a certified English translation of all records and references not in English; TOEFL scores above 525. See the Information for International Students chapter for more information.

Transfer Credits

Up to 12 semester hours can be transferred in from another graduate program (including hours taken at UC Denver as a nondegree student with a grade of *B-* or better) and applied toward a CLAS master's degree. Courses taken while still an undergraduate student may be counted as pre-admission credits, but may not exceed 15 and cannot

have been applied toward the undergraduate degree. Only courses numbered 5000 and above or classified as graduate level can be transferred. Up to 30 transfer semester hours or semester hours taken as a nondegree student may be applied toward a PhD degree. Courses taken more than 10 years prior to admission must be revalidated by the department or program.

Readmission

If less than one calendar year has passed since a student in good standing was last enrolled in courses at UC Denver, a student must only notify the program they wish to re-enter. If a student does not register for three consecutive terms, he/she needs to be readmitted. This requires the student to submit Part I of the graduate admission form to their department or program; they must also pay the application fee. Those who have not been active for more than four years must complete the full application process.

PhD students may apply for a time extension or leave of absence as long as the total time to complete the degree does not exceed 10 years. Up to one year of an approved leave of absence may be taken without reapplying to the program upon return.

Changing Degree Programs

Students changing degree programs need to be admitted by the new department. They must provide all items required of students applying for the first time, but may petition the program to which they were originally admitted to release their initial application materials to the new department. Any transfer of courses to the new degree program is at the discretion of the new department or program.

Advisors

Students should consult with their faculty advisors early and often. Each graduate program has a faculty coordinator who should be consulted about program requirements. This may be the same person as a student's faculty advisor. While students are strongly encouraged to meet with their faculty advisor every semester, they *must* meet with their faculty advisor and/or faculty coordinator at the beginning of their last semester to verify that all degree requirements have been met and to have their candidacy form approved and signed.

Graduate Courses

All courses that count toward a graduate degree must be approved by the degree-granting graduate program. At least 30 hours must be considered graduate rank (taught by graduate faculty). Eighteen hours are required at 5000-level or above with the

remainder subject to departmental approval. Courses below the 4000-level can only be applied if taken beyond the 30-hour graduate minimum.

Students may use courses offered through the continuing and professional education program in the pursuit of graduate study only if they obtain proper academic approval from the graduate program.

Graduate students may take up to a total of 7.5 independent study semester hours (in a 30-hour program), or 25 percent of the total program hours, under the direct supervision of a faculty member and with the approval of the CLAS graduate dean. However, it is important that students check with their programs concerning the maximum number of independent study credit hours that may count toward their degree, as this number may vary. The minimum UC Denver GPA required to register for independent study credits is 3.0, and students must be admitted to a CLAS degree program. Each independent study project may be taken for 1-3 semester hours. Students use the special processing form to outline the project and how the grade is determined, which then must be approved by the supervising faculty member and CLAS graduate dean.

Graduate-level internship credit may be earned in some programs. Students must be admitted to a CLAS degree program, have completed a minimum of 6 semester hours and have a minimum 3.0 GPA. A maximum of 6 hours of internship credit is allowed, except where specified by the program (i.e., nonthesis clinical psychology). Students should contact the Experiential Learning Center for details about the internship contract and faculty sponsorship requirements.

Minimum GPA

A minimum cumulative GPA of 3.0 in courses applied to a degree program is required. Grades of *B-* or better are accepted for most master's degree programs; however, some programs have more stringent grade requirements. Doctoral minimum grade is *B-*. Courses applied to a graduate degree may not be taken pass/fail.

Probation

A student whose cumulative GPA falls below 3.0 or who receives a grade lower than a *B-* will be placed on academic probation by the CLAS graduate dean. A registration stop will be placed on students at the time they are placed on probation. This stop keeps probationary students from registering until they meet with their departmental advisor to plan courses that will be taken; then the stop will be removed.

In the two semesters following placement on probation, the student is allowed to take only courses applicable to the degree and all grades must be at or above a *B* grade, or the student will be suspended. At the end of two semesters after being placed on probation, the student must raise his/her cumulative GPA to 3.0 or he/she will be

suspended. A student may petition the CLAS graduate dean for an extension of the probationary period in extenuating circumstances.

Incomplete Grades

When a student has special circumstances that make it impossible to complete course assignments, faculty members have discretion to award an incomplete grade. Effective January 1, 2009, all incomplete courses are now assigned a grade of Incomplete (*I*). Incomplete grades are *not* awarded for poor academic performance or as a way of extending assignment deadlines. While not required, a CLAS course completion agreement form (available from the CLAS Advising Office) is strongly suggested when faculty and student agree on an incomplete grade.

To be eligible for an incomplete grade, students must:

- have successfully completed 75 percent of the course
- have special circumstances (verification may be required) that preclude the student from attending class and completing graded assignments
- make arrangements to complete missing assignments with the original instructor within one academic year

Students are allowed three semesters (one year) to complete the requirements for the incomplete, after which the *I* reverts to an *F* grade on the student's transcript. Any request to allow a grade change after the one-year period must be petitioned to the CLAS Academic Standards Committee.

Thesis/Project/Dissertation

Master's programs can be either thesis plan or nonthesis plan; nonthesis plans may include a project or report. No more than 6 thesis semester hours or 4 project semester hours can be applied toward a master's program. Students may register for one or more thesis or project credits each semester up to the maximum.

For doctoral programs, a minimum of 5 hours and maximum of 10 hours of dissertation credit may be registered for in any semester. Students must receive approval from the CLAS graduate dean and the dean of the Graduate School to register for fewer than 5 dissertation hours.

Doctoral candidates must be registered for dissertation credit each fall and spring semester following successful completion of the comprehensive examination. Students on leave of absence, approved by the program and filed with the Graduate School, do not have to register for dissertation credits.

A student does not have to register for thesis or dissertation credits after a successful final examination and thesis defense even if the final version of the thesis/dissertation

and the record of the final examination are submitted to the Graduate School at a later date.

Thesis/Dissertation Procedures

The thesis/dissertation must comply with specifications outlined in “[Guidelines for Preparing Master’s and Doctoral Theses](#),” and have received a preliminary thesis format approval from the Graduate School. The student’s faculty committee must approve the final draft of the thesis, three copies of which must be filed with the Graduate School before graduation. The thesis binding fee must be paid when the thesis is submitted to the Graduate School.

Research Protocol

Students doing research that involves gathering data from human subjects must have their research protocol approved by the [Human Research Committee](#). Students doing research that uses animals in any form must have their research protocol approved by the [Institutional Animal Care and Use Committee](#).

Graduation Application

Graduate students in a master’s degree program initiate the graduation process through the CLAS Dean’s Office, North Classroom Building 5014. Doctoral candidates initiate the graduation process through the Graduate School, Lawrence Street Center, Suite 300. Both master’s and doctoral candidates must follow deadline dates published in the online [CLAS Graduate Advising Web site](#) and on sheets available from departmental graduate advisors, the CLAS Dean’s Office or the Graduate School.

All graduate students must submit their [intent to graduate online application](#) the semester they intend to graduate, an application for admission to candidacy and a request for graduate examination/thesis defense.

Admission to Candidacy

The application for admission to candidacy form is available in the CLAS Dean’s Office, the Graduate School, the student’s program office or online at the [CLAS Graduate Advising Web site](#). This application must be signed by the student’s advisor and the program coordinator, certifying that the student’s work is satisfactory and that the program outlined in the application meets the requirements set for the student.

A student on probation is not eligible to be awarded a degree until s/he is removed from probation. A student with provisional admission status must be changed to regular admission status before admission to candidacy.

Intent to Graduate

Students must submit their intent to graduate online application by the published deadline for the semester they expect to graduate. If the degree is not completed, they must resubmit the intent to graduate each subsequent semester until graduation. Failure to submit the intent to graduate will result in delayed graduation.

Deadlines

The Graduate School deadlines (to file the application for admission to candidacy and intent to graduate, schedule and hold the comprehensive exam or thesis/project defense, submit thesis for format review, and turn in the final thesis) are published each semester and are available from the CLAS Dean's Office, departmental graduate advisors and the Graduate School. Deadlines and forms are also posted on the CLAS Graduate Advising Web site. It is the student's responsibility to know and to adhere to these deadlines.

Comprehensive Examination or Thesis/Project/Dissertation Defense

Students must be registered when they take the comprehensive examination or defend the thesis or project. This can be accomplished by registering to take a regular course, independent study/thesis/project credits or through candidate for degree registration. The examination may be oral, written or both.

The master's examination must be given by a committee of three members of the graduate faculty, all of whom sign an exam report form signifying that the student has passed the exam or defense. The committee chair must be a regular member of the Downtown Campus graduate faculty, and the other members must hold at least a special graduate faculty appointment. PhD dissertation defense committees include four graduate faculty members, one of whom is from outside the primary department and must unanimously approve the examination.

The record of the thesis defense must be approved by the student's faculty committee and filed with the CLAS Dean's Office before graduation. In programs where the project/report defense counts as the comprehensive exam, this requirement applies to projects/reports as well. A student who fails the comprehensive final examination or defense may retake the examination only once.

Time Limits

Master's degree students admitted after January 2009 have a maximum of five years from the date of the start of course work after admission to the program to complete all degree requirements. This limit can be extended by a leave of absence approved by the student's graduate program. Students admitted prior to January 2009 have seven years to complete their master's degrees (according to previous Graduate School Rules).

Doctoral students have eight years from the date of the start of course work after admission to complete all degree requirements for a PhD (10 years with approved leave of absence).

Note: Individual graduate programs may have time limits that are more stringent.

Residency Requirements

A minimum of two semesters of work must be completed at UC Denver.

Academic Ethics and Petitions

Academic Ethics

[This information applies to both undergraduate and graduate students in the College of Liberal Arts and Sciences.]

As members of the UC Denver academic community, faculty and students accept the responsibility to maintain the highest standards of intellectual honesty and ethical conduct in all forms of academic work. While most violations center around cheating or plagiarism, the UC Denver Academic Honor Code on the Downtown Campus is more comprehensive and includes the following categories: plagiarism, cheating, fabrication and falsification, multiple submission, misuse of academic materials and complicity in academic dishonesty.

The CLAS Academic Ethics Committee, composed of faculty, students and staff, is charged with establishing academic ethics policies and, when necessary, evaluating ethics charges against students or faculty. Faculty and students should be familiar with the Academic Honor Code for the Downtown Campus (see the [University Policies](#) chapter) and the CLAS Academic Ethics Policies, available from the CLAS Advising Office, North Classroom, 4002, and online at the [CLAS advising Web site](#).

Faculty who charge student(s) with a violation of the Academic Honor Code may lower a student's grade without review. Faculty bringing such charges are required to notify the student in writing. Students charged with an ethics violation continue in the class and may appeal the faculty decision to the CLAS Academic Ethics Committee. Students

charged with a violation of the Academic Honor Code are encouraged to meet with an advisor in the CLAS Advising Office to review their rights and obtain assistance with procedures.

Petitioning for Exceptions to Standing Academic Policy

The CLAS Academic Standards Committee is responsible for the administration of the academic policies of the college as established by the faculty. This committee constitutes the bridge between the faculty in its legislative capacity and the students upon whom the legislation comes to bear. The committee is empowered to grant waivers of exemptions from and exceptions to the academic policies of the college. Students wishing to submit a petition to the committee should meet with the advising staff first to discuss the petition.

Students in the College of Liberal Arts and Sciences may appeal a grade. Every attempt is made to resolve grade disputes at the department level. However, unresolved grade issues may be appealed to the CLAS Academic Standards Committee and initiated through the CLAS Advising Office, North Classroom, 4002, 303-556-2555. Details of the grade appeal policies are available in the CLAS Advising Office.

The Office of the Registrar establishes deadlines each semester for registering, adding courses, dropping courses, selecting the pass/fail option and withdrawing from the university. These deadlines are clearly identified on the [Registrar's Web site](#). Students seeking to waive these deadlines must petition the associate dean of the college. Instructions for deadline petitions are available from the CLAS Advising Office.

The Graduate Council reviews grievances related to procedural issues for graduate students that cannot be resolved at the college level.

Preparation for Professions

Completion of the undergraduate curriculum of the College of Liberal Arts and Sciences can prepare students for a number of careers in the professions. See below for information on preparation for those professions most frequently asked about by students in the college. Students seeking information about other professions should contact the CLAS Advising Office, North Classroom, 4002, 303-556-2555.

Law

Students intending to enter a school of law may major in any field while completing the bachelor's degree, since law schools do not typically specify course work entrance requirements. More important to law schools are methods of study, critical thinking and communication skills. Students interested in law school should consider the interdisciplinary minor in law studies (see [Law Studies](#) in the CLAS departmental

descriptions). For further information, contact the CLAS Advising Office or one of the faculty advisors identified in the law studies minor.

Health Careers

The college has faculty health careers advisors to assist students in preparing for careers in the following:

- dentistry
- medicine
- osteopathy
- veterinary medicine

Course programs also have been developed within the college to prepare students for the following specific careers within the general area of health sciences:

- dental hygiene
- medical technology
- nursing
- optometry
- pharmacy
- physical therapy
- physician assistant
- podiatry

Because the prerequisites for these health career programs are continually changing, students interested in pursuing one of these careers should contact a health careers advisor at 303-556-4350 or 303-556-6218 for current requirements and for advising. See the [Health Professions chapter](#) of this catalog for further information.

Education

Liberal arts students seeking certification for teaching at the primary or secondary level must complete a baccalaureate degree plus approximately 40 semester hours of professional education required for licensure from the School of Education & Human Development.

Liberal arts students interested in a K–12 teaching career are encouraged to participate in the educational studies minor program or the K–12 teacher licensure program in collaboration with the School of Education & Human Development. See the [Educational Studies/Teacher Licensure](#) section in the CLAS departmental descriptions.

Collegewide Interdisciplinary Programs

INTERDISCIPLINARY PROGRAMS IN THE COLLEGE OF LIBERAL ARTS AND SCIENCES

Joint Degree Programs BA/MPA

The College of Liberal Arts and Sciences, in cooperation with the School of Public Affairs, offers students the opportunity to complete both a bachelor's degree and master's degree in five years rather than the usual six years. The program combines undergraduate general education and major studies with a specialized curriculum in public affairs and strives to develop intellectual and professional skills in a coordinated manner. Participating major programs in CLAS include communication, economics, political science and sociology, as well as others.

Students in the BA/MPA program must fulfill all of the graduation requirements for the College of Liberal Arts and Sciences; maintain a 3.5 undergraduate GPA in CLAS and have completed 75 percent of their undergraduate program to be eligible for admission; and enroll formally in the programs through the CLAS Advising Office. Students admitted to the program begin taking graduate-level courses in public administration during their senior year. These courses will count toward the bachelor's degree as electives. For further information, contact the CLAS Advising Office, 303-556-2555.

Centers and Institutes

Center for Computational Biology

Director: Stephen Billups

Telephone: 303-556-6269

E-mail: dana.franklin@ucdenver.edu

Web site: <http://ccb.cudenver.edu/>

The Center for Computational Biology (CCB) is a multi-campus center aimed at catalyzing interdisciplinary research and developing educational programs in computational biology throughout the University of Colorado system. The center brings together faculty and students from a variety of fields, including mathematics, computer science and the biosciences, to engage in interdisciplinary research aimed at advancing biological discovery through the development and application of computational tools and mathematical models and techniques. The center leads the development of new courses and educational programs for University of Colorado students. All programs led by the

CCB initiative integrate education with research; students are introduced to research as part of their education.

Center for Computational Mathematics

Director: Jan Mandel

Telephone: 303-556-4475

E-mail: Jan.Mandel@ucdenver.edu

Web site: <http://ccm.ucdenver.edu/index.shtml>

The Center for Computational Mathematics was established to foster research in one of the discipline's most exciting new field. Through extensive ties with industry along the Front Range and government laboratories across the country, the center provides outstanding opportunities for motivated students to receive additional training and experience.

Center for Ethics and Community

Director: Candice L. Shelby

Telephone: 303-556-4803

E-mail: Candice.Shelby@ucdenver.edu

Web site: <http://carbon.cudenver.edu/~cshelby/cec.htm>

The Center for Ethics and Community seeks to strengthen ethics in schools, the community, universities and all professions. Certificate programs are available to members of the UC Denver community, as well as individuals outside the university.

Center for New Directions in Politics and Public Policy

Director: Kathryn Cheever

Telephone: 303-556-5950

E-mail: Kathryn.Cheever@ucdenver.edu

Web site: clas.ucdenver.edu/newdirections/index.htm

The center's programs are based on the notion that effectively addressing the public priorities of the 21st century requires that those working on matters of public interest possess a keen understanding of the political forces that guide or thwart the successful mobilization of resources and the achievement of constituent goals consistent with the public interest. Similarly, the need and opportunity for the active engagement—or leadership—of concerned citizens in the policymaking process is greater than ever before. Accordingly, students in any of the center's academic programs will be representative of not only those working professionals in the public and nonprofit sectors, but also elected officials; community activists; interest-group stakeholders;

educators from a wide range of demographic, occupational and personal backgrounds; and simply concerned citizens.

Center for Research in the Health and Behavioral Sciences

Director: Susan Dreisbach

Telephone: 303-556-6796

E-mail: Susan.Dreisbach@ucdenver.edu

The Center for Research in the Health and Behavioral Sciences (CRHBS) is dedicated to promoting research and community service in health issues facing the local Denver area, Colorado, the nation and beyond. Research conducted by the allied CRHBS faculty is unique in integrating biomedical, public health and social science perspectives. Current external funding of research through CRHBS is focused on such topics as preventing HIV and STD transmission program evaluation. Research assistant and internship positions for students in the health and behavioral sciences doctoral program are commonly available through CRHBS.

Colorado Center for Public Humanities

Director: Philip Joseph

Telephone: 303-556-4648

E-mail: Philip.Joseph@ucdenver.edu

Web site: <http://clas.cudenver.edu/publichumanities/>

The work of this center is oriented around two primary goals. First, as a think-tank, the center investigates the public value of the humanities disciplines in relation to historical change by sponsoring programs that help to clarify the roles that humanities-based scholarship can play within the region, the nation and the world more generally. Our second goal is to direct the engagements of humanities scholars toward extra-academic communities. In pursuing this objective, the center will support scholars whose research programs are designed to reach civic groups outside the university walls and to benefit from the involvement of these groups.

Fourth World Center for the Study of Indigenous Law and Politics

Director: Glenn T. Morris

Telephone: 303-556-2850

E-mail: Glenn.Morris@ucdenver.edu

Web site: <http://carbon.cudenver.edu/public/fwc/>

The Fourth World Center for the Study of Indigenous Law and Politics was founded in 1984 as a resource commons of authoritative information on indigenous peoples' affairs. The major components of the center's educational project are:

- the creation and presentation of a university-level multidisciplinary curriculum focused on the study of indigenous peoples
- the publication of the *Fourth World Bulletin*, a journal on indigenous politics with a global concentration
- the development of university textbooks for the study of indigenous politics
- the presentation of public forums
- the presentation of testimony before international legal organizations

The center features a library, periodicals, audio and visual equipment and online news archives on current development issues surrounding "the Fourth World."

Shared Analytical Services Laboratory

Lab Manager: Jeff Boon

Telephone: 303-556-4520

E-mail: Jeffery.Boon@ucdenver.edu

Web site: clas.ucdenver.edu/sasl/

The Shared Analytical Services Laboratory fosters and promotes disciplinary and interdisciplinary research in the environmental sciences. Faculty represent disciplines within the College of Liberal Arts and Sciences, as well as civil engineering. Services provided by the laboratory are available to all members of the university community, as well as to members of the public and private sectors through joint projects.

Smart-Girl Leadership Institute

Telephone: 303-556-2557

E-mail: Lissa.Gallagher@ucdenver.edu

Web site: <http://thunder1.cudenver.edu/clas/smartgirl/>

The Smart-Girl Leadership Institute is a prevention and enrichment program that trains college students to lead and inspire adolescent girls to make smart choices and become confident, capable and self-reliant women. UC Denver students earn credit while they build the skills to lead small groups of girls through a fun and effective curriculum.

Writing Center

Director: Justin J. Bain

Office: North Classroom, 4014

Telephone: 303-556-4845

Web site: clas.ucdenver.edu/writing/

The Writing Center provides free writing assistance to all members of the UC Denver community, including students, faculty, staff and alumni. Professional writing consultants are available to assist writers in one-on-one sessions. All consultations are by appointment; to schedule an appointment please visit our Web site.

In addition, the center hosts professional development workshops for graduate students and faculty; maintains a library of grammar handbooks, citation manuals and composition texts; and conducts informational class visits. For additional information on our services for students, see the listing in the Student Services chapter.

Departments and Programs

Anthropology

Chair: Stephen Koester

Program Assistant: Connie Turner

Office: Administration Building, 270

Undergraduate Advisor: David Tracer

Graduate Director: Christopher Beekman

Telephone: 303-556-3554

Fax: 303-556-8501

Web site: clas.ucdenver.edu/anthropology/

Faculty

Professors:

Stephen Koester, PhD, University of Colorado

Tammy Stone, PhD, Arizona State University

Associate Professors:

Christopher Beekman, PhD, Vanderbilt University

John Brett, PhD, University of California at San Francisco and Berkeley

David Tracer, PhD, University of Michigan

Assistant Professors:

Sarah Horton, PhD, University of New Mexico

Charles Musiba, PhD, University of Chicago

Marty Otañez, PhD, University of California-Irvine

Julien Riel-Salvatore, PhD, Arizona State University

Instructor:

Tiffany Terneny, PhD, University of Texas-Austin

Adjunct Faculty:

David Ruppert, PhD, University of Arizona

Jean Scandlyn, PhD, Columbia University

Sue Woods, PhD, University of Colorado

Undergraduate

Anthropology is the study of human origins and evolution, the present conditions of human life and the prospects for the future. It considers human beings as biological and social entities and seeks to explain both diversities and commonalities of peoples and cultures. For undergraduates, anthropology provides a rich overview of human life. It also introduces them to a variety of skills and practical research methods anthropologists apply in laboratory and field studies of the ecological constraints on human existence, the cultural bases of individual and organizational behavior and the problems and circumstances relating to the maintenance of today's healthy, productive human action in general.

Anthropological training provides entry to a variety of careers in archaeology, museology, education, community service, public administration, public health, international affairs and business. The specific skills it provides are useful to students of environmental design, city planning, community development, the medical and nursing professions and allied health sciences, law, public affairs and secondary education.

REQUIREMENTS FOR MAJOR

Departmental Honors Requirements

Students wishing to graduate with departmental honors in anthropology must have a cumulative GPA of at least 3.5, with a 3.7 minimum GPA in anthropology for *cum laude* (3.8 for *magna cum laude* and 3.9 for *summa cum laude*), as well as prepare an honors thesis of high quality. They must also take ANTH 4810, Integrating Anthropology. Interested students should inquire in the department no later than two semesters before graduation.

REQUIREMENTS FOR MINOR

Graduate

- ▶ Graduate School rules apply to this program

The unique intellectual challenge of anthropology is to integrate knowledge from many disciplines for a global understanding of cultural and biological diversity in the past and the present. Individual courses in cultural and biological anthropology and archaeology cut across lines of the humanities and social and natural sciences. Because of this integrative perspective on the human condition—and the training provided in objectively assessing cultural patterning and social interaction—anthropology graduates have a strong and versatile base for careers in a variety of fields. Graduates of our program get jobs as professional archaeologists; work in international NGOs as researchers in the health sciences and public health, as college teachers and in international development; while others have been very competitive in prestigious PhD programs (e.g., Berkeley, Pennsylvania, McMaster, Oxford).

Specialties and Tracks

UC Denver's Department of Anthropology provides an outstanding graduate education in anthropology, giving students a broad yet thorough grounding in the three major subfields of anthropology, as well as specialized instruction in one or more research orientations in which department faculty have substantial expertise. The graduate faculty in anthropology are particularly known for their research and publications in medical anthropology; microfinance; human growth and development; experimental economics; visual anthropology; social and cultural factors in HIV and hepatitis; ethnicity; political economy; southwestern, Mexican and Neanderthal archaeology; and urban and community anthropology. Across the specializations there is a strong emphasis on research design and methodology, providing students concrete job-related skills. Area studies emphases include Latin America, East Africa, and the US Southwest. Students

also have opportunities to study abroad, to participate in one of several field schools, and to gain international research experience.

Topical Concentrations

- medical anthropology
- archaeological studies
- biological anthropology
- sustainable development and political ecology

ANTHROPOLOGY MA PLANS OF STUDY

Application Process

Application is open to holders of a BA, BS or higher degree in any field, and we welcome applications from individuals pursuing particular interests and careers, especially those related to one of the areas of concentration noted above. The departmental deadline for receipt of all application materials is **February 15** for admission in the following fall.

Acceptance to the program is competitive and based on:

- an undergraduate record of good quality (3.0 GPA or higher for all undergraduate studies)
- prior training in anthropology
- GRE scores (verbal, analytic and quantitative)
- three letters of recommendation
- a statement of the applicant's purpose in pursuing the degree
- two copies of transcripts from all undergraduate/graduate institutions attended

If you have no prior anthropology training, we encourage you to gain the necessary background as a nondegree student before applying to the graduate program. Prior training required in anthropology corresponds to that required for the minor, consisting of approximately 18 semester hours and including introductory courses in biological/physical anthropology, cultural anthropology and archaeology. Students with exceptional qualifications may be admitted without prior anthropology training but will be required to make up deficiencies without graduate credit during the course of their graduate study.

Financial Aid

The department offers limited tuition assistance, teaching assistantships and research assistantships for graduate students on a semester-by-semester basis. Appointment is competitive and is typically based on a student's academic credentials, GRE scores and preparation in anthropology. Contact the department for details. For information on

grants, federal work-study programs, scholarships and loans, contact the UC Denver financial aid office.

Programs

Bachelor of Arts

Anthropology BA

Students majoring in anthropology for the BA degree must declare such by the time they have completed 60 semester hours. Majors must complete a minimum of 40 semester hours in anthropology with a grade of C (2.0) or better in each course. At least 24 hours must be at the upper-division level and a minimum of 21 semester hours must be taken from Downtown Campus faculty. (Note that all upper-division courses have lower-division prerequisites.)

Program Requirements

Required Anthropology Courses

- ANTH 1302 - Introduction to Archaeology Summer 2010 Registration: **ANTH 1302**
- ANTH 1303 - Introduction to Biological Anthropology Summer 2010 Registration: **ANTH 1303**
- ANTH 2102 - Culture and the Human Experience Summer 2010 Registration: **ANTH 2102**

Choose three:

- ANTH 3101 - Foundations of Cultural Anthropology Summer 2010 Registration: **ANTH 3101**
- ANTH 3121 - Language and Communication Summer 2010 Registration: **ANTH 3121**
- ANTH 3301 - World Prehistory Summer 2010 Registration: **ANTH 3301**
- ANTH 3512 - Human Evolution Summer 2010 Registration: **ANTH 3512**

Total: 20 Hours

Anthropology Electives

Recommended courses:

- ANTH 4050 - Quantitative Methods in Anthropology Summer 2010 Registration: **ANTH 4050**
- ANTH 4810 - Integrating Anthropology Summer 2010 Registration: **ANTH 4810**

Total (minimum): 20 Hours

Major Total: 40 Hours

Non Degree

Anthropology Minor

A minimum of 18 semester hours in anthropology must be completed with an average of C (2.0) or better. Nine of the 18 hours must be upper division and 9 hours must be taken from Downtown Campus faculty.

Program Requirements

Required Courses

Choose a minimum of three courses from the following:

- ANTH 1302 - Introduction to Archaeology Summer 2010 Registration: **ANTH 1302**
- ANTH 1303 - Introduction to Biological Anthropology Summer 2010 Registration: **ANTH 1303**
- ANTH 2102 - Culture and the Human Experience Summer 2010 Registration: **ANTH 2102**
- ANTH 3101 - Foundations of Cultural Anthropology Summer 2010 Registration: **ANTH 3101**
- ANTH 3121 - Language and Communication Summer 2010 Registration: **ANTH 3121**
- ANTH 3301 - World Prehistory Summer 2010 Registration: **ANTH 3301**
- ANTH 3512 - Human Evolution Summer 2010 Registration: **ANTH 3512**

Total: 9-11 Hours

Elective Courses

Total: 7-9 Hours

Minor total: 18 Hours

Master of Arts

Anthropology, MA

► Graduate School Rules apply to this program.

Plans of Study

MA students may pursue the thesis or non-thesis option.

- **Thesis Option:** A thesis is characterized by three factors: 1) it is based in a research question or problem; 2) it involves original research; 3) there is a fully developed research proposal. A thesis can also encompass a range of format alternatives to the traditional thesis (e.g. article submitted for publication to a peer-reviewed journal, or a video production, internship or museum exhibit, each generally accompanied by a companion paper developing a theoretical or problem-oriented question). The thesis option requires 30 semester hours, including 4-6 hours of thesis.
- **Non-Thesis Option:** This track is defined by additional course work in lieu of a thesis. The non-thesis option requires 36 semester hours of course work.

Thesis Option

The thesis is a major requirement for those in the MA in anthropology thesis track. The thesis should demonstrate the student's ability to apply knowledge and skills gained from the anthropology department's curriculum. A desirable goal for an excellent thesis would be a work of sufficient rigor and quality that it could be considered for publication.

Original data collection ("fieldwork") is recommended but not required for the thesis.

Analysis of secondary data—whether quantitative, qualitative, visual or other formats—is perfectly acceptable as long as the research is informed by a clearly articulated research question and undergirded by a research proposal.

The traditional thesis is a single document that often incorporates a literature review, definition of a problem, discussion of methods to address the problem, the subsequent research activity and results. However, the student may design a thesis with different emphases, in consultation with their advisor. For example, the goal may instead be a more compact paper submitted to a peer-reviewed journal. Other thesis plans may combine some research activity such as a video production, museum exhibit or an

internship, with an accompanying paper. Students pursuing the thesis option must develop a topic and research proposal that specifies their plans in the semester after their completion of 18 credit hours.

The thesis must be defended before a committee of three faculty, at least two of whom need to be on the Department of Anthropology faculty (which includes senior instructors and research faculty). The structure of the thesis is largely determined by the University of Colorado Denver Graduate School Rules; i.e., a thesis must conform to the rules.

1. For the thesis, students must prepare a full research proposal which must be approved by their thesis chair before beginning their research. This proposal must be completed by the semester after the student has completed 18 credit hours. Sections of the proposal should include, at a minimum:
 - a. Introduction and statement of the problem: Should include a one sentence statement of the problem on the first page, and a discussion of its significance (i.e., why is it important that this topic be researched).
 - b. Literature review covering theoretical and topical material.
 - c. Research design and methods including a data analysis plan.

Note: Wenner-Gren and National Science Foundation both provide good models and templates for the research proposal. Those in the medical anthropology track might want to consider following the NIH model, depending the nature of their research questions and career goals.

2. All students proposing to work with humans or data on modern humans must apply for and receive approval from the Human Subjects Research Committee before they begin their research. Note: most of the material for the application will be drawn from the research proposal.
3. The draft thesis must be reviewed and approved as “defensible” by the student’s thesis committee faculty chair before a thesis defense date can be set. Defensible means the chair has reviewed the draft and suggested changes have been made.
 - a. The draft sent to the student’s committee must be substantively complete: All references must be in the text and properly formatted in a references cited section; there should be no “track changes” comments in the text; the text should be formatted according to Graduate School requirements.
 - b. Given the complexity of faculty and student schedules, consultation on a defense date should be done as far in advance as possible.
 - c. There must be a minimum of three weeks between the agreed-upon date for the defense and distribution of the draft thesis defined as defensible by the student’s chair. If you would like feedback from your committee members before the defense, you should plan to distribute the thesis at least 4 weeks before the defense date.

Note: If you intend to graduate the same semester you defend your thesis, you must schedule, successfully defend, and complete all

recommended changes in accordance with UC Denver [Thesis and Dissertation Guidelines](#). This effectively translates to having the thesis completed and “defensible” before the middle of the semester.

Non-Thesis Option

The non-thesis option allows students to pursue their own educational goals through the selection of additional courses that fit their interests. We strongly encourage students who choose this option to consider an internship position arranged around an area of expertise or the development of a skill-set. The decision to pursue the non-thesis option should be made by the semester following the completion of 18 credit hours.

Additional Information

Students must maintain an overall GPA of 3.0 to remain in good standing and receive a grade of *B-* or better in a course to have it count toward graduation. The Graduate School on the Downtown Campus requires a minimum of two full years devoted to advanced study and allows up to five years to complete a master's degree, but students are strongly discouraged from spending more than four years. While it is possible to finish the MA in two years, most of our students work part-time, which limits the time they can dedicate to the program; most finish within three years. All students are required to pass a written comprehensive examination, taken after core course work has been completed.

Some students may benefit from adding a specific skills-based certificate program onto their graduate program. For example: archaeology students may wish to gain expertise in Geographic Information Systems through the [GIS certificate](#) offered through the Department of Geography and Environmental Sciences, while medical anthropology students may benefit through the certificate in public health offered through the School of Public Health or the [environmental health certificate](#) through the Master of Science in Environmental Sciences program. Graduate-level courses in certificate programs can often fulfill elective requirements in the anthropology program.

Two doctoral programs on the UC Denver campus that may be of particular interest to graduates of the anthropology graduate program are the [National Science Foundation funded IGERT](#) program on Sustainable Urban Infrastructure, and the [PhD in Health and Behavioral Sciences](#) offered through the Department of Health and Behavioral Sciences. Both are highly interdisciplinary and are natural extensions of a master's degree in anthropology.

Course Requirements

Your graduate anthropology education begins by taking ANTH 5810, Integrating Anthropology, plus two core courses that together encompass contemporary theory in anthropology. These are followed by three courses in research methods and techniques,

including statistics. You are required to take the core series in two of the three subdisciplines. After completing this core, you will select from among the specialized elective courses in the research concentrations described in more detail below. You will work closely with an advisor in selecting the range of courses appropriate both to a problem orientation and to your career objectives.

Tier One: A Survey of Theoretical Perspectives in Contemporary Anthropology

Required in fall of first year

- ANTH 5810 - Integrating Anthropology Summer 2010 Registration: **ANTH 5810**

Choose two:

- ANTH 6103 - Current Theory in Ethnography Summer 2010 Registration: **ANTH 6103**
- * ANTH 6307 - Contemporary Perspectives in Archaeology Summer 2010 Registration: **ANTH 6307**
- † ANTH 6503 - Biological Anthropology Core: The Fossil Record Summer 2010 Registration: **ANTH 6503**

Total: 9 Hours

Tier Two: Methods of the Discipline

All students must complete or demonstrate competence in subjects covered by the following:

- ANTH 5053 - Quantitative Methods in Anthropology Summer 2010 Registration: **ANTH 5053**

Choose two:

- ANTH 6063 - Qualitative Research Design and Methods Summer 2010 Registration: **ANTH 6063**
(same as HBSC 7051-3)
- * ANTH 6317 - Archaeological Research Design and Analysis Summer 2010 Registration: **ANTH 6317**
- † ANTH 6513 - Biological Anthropology Core: Modern Human Variation Summer 2010 Registration: **ANTH 6513**

Total: 9 Hours

** Students who wish to apply for a teaching assistantship in archaeology must have completed this course.*

† Students who wish to apply for a teaching assistantship in biological anthropology must have completed this course.

Tier Three: Research Concentrations (9-21 semester hours)

You will round out your program by selecting from the diverse range of courses offered in the department according to your particular interests in anthropology, your career goals and your plans for future graduate study. You may take courses in one or more concentrations. The courses listed are suggestions only; you must work closely with your advisor in constructing your particular program of study.

MEDICAL ANTHROPOLOGY

Medical anthropology is a subdiscipline of anthropology that includes the study of all aspects of health, illness and disease in human communities and populations. It draws on all of the perspectives that distinguish anthropology as a unique discipline: the analysis of human evolution and adaptation; cultural development, expressions and variability; and historical change and continuity. Medical anthropology takes as its subject a broad range of specific topics, including the study of health care systems, factors that affect the distribution and determinants of disease in populations, maternal and child health, nutrition and food habits, human development, political ecology, health policy and language and communication in health care contexts. Faculty in the department emphasize the applied dimensions of medical anthropology, preparing students for careers in public health, health care and health sciences research. Courses in the department are complemented by electives in other departments (sociology, biology, psychology, history, geography), programs on the Downtown Campus (health administration, public affairs, education) and programs at the Anschutz Medical Campus (schools of medicine, dental medicine, pharmacy and nursing).

Courses

- ANTH 5014 - Global Health Studies I: The Biocultural Basis of Health Summer 2010 Registration: **ANTH 5014**
- ANTH 5030 - Ethnobiology Summer 2010 Registration: **ANTH 5030**

- ANTH 5040 - Anthropology of Food and Nutrition Summer 2010 Registration: **ANTH 5040**
- ANTH 5060 - Evolutionary Medicine Summer 2010 Registration: **ANTH 5060**
- ANTH 5090 - Political Economy of Drugs Summer 2010 Registration: **ANTH 5090**
- ANTH 5150 - Human Biocultural Adaptability Summer 2010 Registration: **ANTH 5150**
- ANTH 5260 - Human Reproductive Ecology Summer 2010 Registration: **ANTH 5260**
- ANTH 5560 - Human Ecology Summer 2010 Registration: **ANTH 5560**
- ANTH 6040 - Advanced Topics in Medical Anthropology Summer 2010 Registration: **ANTH 6040**
- HBSC 7310 - Environmental Epidemiology Summer 2010 Registration: **HBSC 7310**

Note: Students are also strongly encouraged to take elective courses in public health, epidemiology and biostatistics, which are available in the Department of Biometrics and Preventive Medicine on the Anschutz Medical Campus. See the Health Professions chapter of this catalog for further information.

ARCHAEOLOGY

The archaeological studies program concentrates on the study of past human societies using archaeological data collected in field and museum settings. While a quantitative and scientific approach is emphasized, the theoretical perspectives employed also draw heavily from political economy and cultural ecology. The department offers a variety of theoretical, methodological and area courses, which may be supplemented by others in the geography and environmental sciences and history departments. Internships are available in local museums and historic preservation offices in the Denver metropolitan area.

Courses

- ANTH 5210 - Archaeology of the American Southwest Summer 2010 Registration: **ANTH 5210**
- ANTH 5320 - Archaeology of Mexico and Central America Summer 2010 Registration: **ANTH 5320**
- ANTH 5330 - Lithic Analysis Summer 2010 Registration: **ANTH 5330**
- ANTH 5570 - Landscape Archaeology Summer 2010 Registration: **ANTH 5570**
- ANTH 5910 - Field Experience in Archaeology Summer 2010 Registration: **ANTH 5910**
- GEOG 5060 - Remote Sensing I: Introduction to Environmental Remote Sensing Summer 2010 Registration: **GEOG 5060**

- GEOG 5080 - Introduction to GIS Summer 2010 Registration: **GEOG 5080**
- GEOG 5220 - Environmental Impact Assessment Summer 2010 Registration: **GEOG 5220**
- HIST 5231 - History in Museums Summer 2010 Registration: **HIST 5231**
- HIST 5232 - Historic Preservation Summer 2010 Registration: **HIST 5232**
- HIST 5234 - Introduction to Public History Summer 2010 Registration: **HIST 5234**

BIOLOGICAL ANTHROPOLOGY

The biological anthropology concentration is concerned with modern human biological diversity and the past evolutionary history that has led to such diversity. Students in this concentration develop a firm understanding of the evolutionary processes that lead to physical and behavioral variation in humans and nonhuman primates. The concentration also emphasizes the theoretical and quantitative methods used to explore and explain this variation. Students may take courses in diverse areas including evolutionary biology, genetics, ecology, ethnobiology, epidemiology, nutrition, medical anthropology, paleoanthropology, paleontology and primatology. Because biological anthropology is multidisciplinary in nature, students are encouraged to consider courses offered outside the department.

Courses

- ANTH 5014 - Global Health Studies I: The Biocultural Basis of Health Summer 2010 Registration: **ANTH 5014**
- ANTH 5030 - Ethnobiology Summer 2010 Registration: **ANTH 5030**
- ANTH 5040 - Anthropology of Food and Nutrition Summer 2010 Registration: **ANTH 5040**
- ANTH 5060 - Evolutionary Medicine Summer 2010 Registration: **ANTH 5060**
- ANTH 5150 - Human Biocultural Adaptability Summer 2010 Registration: **ANTH 5150**
- ANTH 5500 - Advanced Issues in Human Evolution Summer 2010 Registration: **ANTH 5500**
- ANTH 5520 - Human Biological Variation Summer 2010 Registration: **ANTH 5520**
- ANTH 5530 - Anthropological Genetics Summer 2010 Registration: **ANTH 5530**
- ANTH 5550 - Primate Comparative Anatomy Summer 2010 Registration: **ANTH 5550**
- ANTH 5560 - Human Ecology Summer 2010 Registration: **ANTH 5560**
- ANTH 5580 - Neanderthals and the Origin of Modern Humans Summer 2010 Registration: **ANTH 5580**
- ANTH 5640 - Darwinian Approach to Human Behavior Summer 2010 Registration: **ANTH 5640**

- BIOL 5074 - Human Reproductive Biology Summer 2010 Registration: **BIOL 5074**
- BIOL 5134 - Human Genetics Summer 2010 Registration: **BIOL 5134**
- BIOL 5494 - Population and Evolutionary Genetics Summer 2010 Registration: **BIOL 5494**
- HBSC 7031 - Human Ecology and Environmental Adaptation Summer 2010 Registration: **HBSC 7031**
- HBSC 7310 - Environmental Epidemiology Summer 2010 Registration: **HBSC 7310**

SUSTAINABLE DEVELOPMENT AND POLITICAL ECOLOGY

This concentration provides a critical, multicultural and multidisciplinary perspective on issues of development and resource conservation, with a strong emphasis on the integration of theoretical knowledge with field-based training opportunities. Three major themes are addressed within this concentration:

1. the types of resource management systems present in the world and their relationship to particular ecosystems
2. the types of knowledge systems and ideas associated with this diverse array of resource management systems, environmental knowledge and theoretical perspectives included
3. the culture of institutions—ranging from small-scale NGOs to the World Bank—that design and implement conservation and development

A central goal of this emphasis is to provide students with the information, opportunities and resources required for pursuing a wide variety of career options in conservation and/or development. In addition to offering the following courses, the department encourages students to develop a specialized skill in conjunction with other departments and schools, including areas such as GIS mapping (geography), ecology (biology/anthropology), legal and policy issues (political science, School of Public Affairs), land use (geography, School of Public Affairs) and research/evaluation methodologies (anthropology).

Courses

- ANTH 5030 - Ethnobiology Summer 2010 Registration: **ANTH 5030**
- ANTH 5070 - Culture of Development and Globalization Summer 2010 Registration: **ANTH 5070**
- ANTH 5170 - Culture and the Environment Summer 2010 Registration: **ANTH 5170**
- ANTH 5220 - Community in Global Context Summer 2010 Registration: **ANTH 5220**

- ANTH 5450 - Development and Conservation: Contemporary Issues Summer 2010 Registration: ANTH 5450
 - ANTH 5460 - Development and Conservation: Theory and Practice Summer 2010 Registration: ANTH 5460
- Other courses in consultation with faculty advisor.

RESEARCH CONCENTRATIONS TOTAL: 9-21 HOURS

DEGREE TOTAL HOURS

Thesis Option: 30 Hours (including 4-6 hours of thesis)

Non-Thesis Option: 36 Hours

Chemistry

Chair: Mark R. Anderson

Program Assistant: Laura Cuellar

Office: North Classroom, 3002

Telephone: 303-556-4885

Fax: 303-556-4776

Web site: clas.ucdenver.edu/chemistry/

Faculty

Professors:

Larry G. Anderson, PhD, Indiana University

Mark R. Anderson, PhD, University of Wisconsin

Robert Damrauer, PhD, Massachusetts Institute of Technology

Douglas Dyckes, PhD, Case Western Reserve University

James H. Hageman, PhD, University of California, Los Angeles

John A. Lanning, PhD, University of Tennessee

Associate Professors:

Doris R. Kimbrough, PhD, Cornell University

Xiaotai Wang, PhD, University of Virginia

Assistant Professors:

Karen Knaus, PhD, Cleveland State University

Hai Lin, PhD, University of Science and Technology of China

Yong Liu, PhD, University of Michigan

Scott Reed, PhD, University of Oregon

Instructors:

Margaret Bruehl, PhD, Northwestern University

Priscilla Burrow Crocker, PhD, University of Colorado

Marc Donsky, PhD, University of California, Berkeley

Lisa Lanning, PhD, University of Vermont

Undergraduate

Why study chemistry? A practical reason is that our highly technical society faces many problems that can be solved through an understanding of the science of chemistry and its methods of solving problems. A more intangible reason is that chemistry is central to a variety of other disciplines and that many problems ultimately will have chemical solutions.

At the undergraduate level, students can prepare for:

1. careers in chemical and medical laboratories
2. careers in nursing, medical technology, dental hygiene and other health-oriented fields
3. post-baccalaureate programs in chemistry, biology, biochemistry, medicine, physical therapy and dentistry.

At the graduate level, an MS degree program is offered. Students with MS degrees have job opportunities in research and technical laboratory services. In addition, flexible programs can be designed to combine chemical knowledge and skills with other interests of the MS-level student (e.g., biology or environmental science).

REQUIREMENTS FOR MAJOR

BS/MS PROGRAM

Departmental Honors

Qualified students are encouraged to participate in the chemistry honors program. Three levels of honors are awarded by the Downtown Campus. To earn *cum laude* honors in chemistry, a student must satisfy one of the following criteria: (1) an overall GPA of 3.2 or better and a chemistry GPA of 3.5 or better; or (2) an overall GPA of 3.2, a chemistry GPA of 3.2 or better, and six hours of CHEM 4840, Independent Study, spread over a minimum of two semesters. To earn *magna cum laude* or *summa cum laude* honors in chemistry, a student must satisfy each of the following criteria: an overall GPA of 3.2 or better, a chemistry GPA of 3.5 or better; six hours of CHEM 4840, Independent Study, spread over a minimum of two semesters with a GPA of 3.1 or better; and presentation of a thesis on the independent study research to a faculty advisory committee. The committee decides if *magna cum laude* or *summa cum laude* honors are to be awarded.

REQUIREMENTS FOR MINOR

Graduate

The MS degree offered at the Downtown Campus is a broad-based chemistry degree that allows students to take courses and do research in the following basic fields: analytical, biochemistry, inorganic, organic, physical or environmental chemistry.

The MS program is available to both full- and part-time students. The chemistry faculty strive to ensure that students receive excellent advising and supervision of work. Students enrolled in the program have an opportunity to be appointed as laboratory teaching assistants. Research activities on the part of the chemistry faculty provide opportunities for graduate students to obtain research assistantships.

CHEMISTRY MS

BS/MS PROGRAM

Bachelor of Science

Chemistry BS

Requirements for Major

Students must declare their major by the time they have completed 60 semester hours. The chemistry major requires 45 semester hours in chemistry. Transfer students must

take at least 14 upper-division chemistry hours, including CHEM 4128, 4518 or 4538, in residency at the Downtown Campus. A student who has declared a chemistry major at UC Denver may not take additional chemistry courses outside of the department for the purpose of applying those credits toward meeting the requirements of the major without prior written approval of the undergraduate advisor. Normally, no more than 3 additional hours of transfer credits will be allowed. The minimum grade in chemistry courses is C- (1.7) and a minimum chemistry GPA of 2.0 is required in chemistry and ancillary required courses. All majors must successfully complete the following core:

TRADITIONAL CHEMISTRY MAJOR

Required Chemistry Courses

- CHEM 2031 - General Chemistry I Summer 2010 Registration: **CHEM 2031**
- CHEM 2038 - General Chemistry Laboratory I Summer 2010 Registration: **CHEM 2038**
- CHEM 2061 - General Chemistry II Summer 2010 Registration: **CHEM 2061**
- CHEM 2068 - General Chemistry Laboratory II Summer 2010 Registration: **CHEM 2068**
- CHEM 3011 - Inorganic Chemistry Summer 2010 Registration: **CHEM 3011**
- CHEM 3111 - Analytical Chemistry Summer 2010 Registration: **CHEM 3111**
- CHEM 3118 - Analytical Chemistry Laboratory Summer 2010 Registration: **CHEM 3118**
- CHEM 3411 - Organic Chemistry I Summer 2010 Registration: **CHEM 3411**
- CHEM 3418 - Organic Chemistry Laboratory I Summer 2010 Registration: **CHEM 3418**
- CHEM 3491 - Honors Organic Chemistry II Summer 2010 Registration: **CHEM 3491**
- CHEM 3498 - Honors Organic Chemistry Laboratory II Summer 2010 Registration: **CHEM 3498**
- CHEM 4121 - Instrumental Analysis Summer 2010 Registration: **CHEM 4121**
- CHEM 4128 - Instrumental Analysis Laboratory Summer 2010 Registration: **CHEM 4128**
- CHEM 4511 - Physical Chemistry I Summer 2010 Registration: **CHEM 4511**
- CHEM 4518 - Physical Chemistry Laboratory I Summer 2010 Registration: **CHEM 4518**
- CHEM 4521 - Physical Chemistry II Summer 2010 Registration: **CHEM 4521**
- CHEM 4538 - Physical Chemistry II Laboratory Summer 2010 Registration: **CHEM 4538**

And one of the following two courses:

- CHEM 3018 - Inorganic Chemistry Laboratory Summer 2010 Registration: **CHEM 3018**
- CHEM 4828 - Biochemistry Lab Summer 2010 Registration: **CHEM 4828**

Total Required Courses: 45 Hours

Required Ancillary Courses

- MATH 1401 - Calculus I Summer 2010 Registration: **MATH 1401**
- MATH 2411 - Calculus II Summer 2010 Registration: **MATH 2411**
- MATH 3511 - Mathematics of Chemistry Summer 2010 Registration: **MATH 3511**
- PHYS 2311 - General Physics I: Calculus-Based Summer 2010 Registration: **PHYS 2311**
- PHYS 2321 - General Physics Lab I Summer 2010 Registration: **PHYS 2321**
- PHYS 2331 - General Physics II: Calculus-Based Summer 2010 Registration: **PHYS 2331**
- PHYS 2341 - General Physics Lab II Summer 2010 Registration: **PHYS 2341**

Total Required Ancillary Courses : 22 Hours

Recommended Electives

- CHEM 3018 - Inorganic Chemistry Laboratory Summer 2010 Registration: **CHEM 3018**
 - CHEM 3810 - Biochemistry Summer 2010 Registration: **CHEM 3810**
 - OR-
 - CHEM 4810 - General Biochemistry I Summer 2010 Registration: **CHEM 4810**
 - CHEM 4700 - Environmental Chemistry Summer 2010 Registration: **CHEM 4700**
 - CHEM 4820 - General Biochemistry II Summer 2010 Registration: **CHEM 4820**
- Any CHEM 5000-level lecture class (3-4 semester hours)

Total Electives: 14-16 Hours

Chemistry Major Total: 81-83 Hours

Students interested in the chemistry major should consult regularly with a chemistry advisor. A complete description of the chemistry major's program may be obtained in the Department of Chemistry office or department Web site.

Qualified majors are strongly urged to participate in independent study or departmental honors programs.

Students planning chemistry as a career should be familiar with the recommendations of the American Chemical Society for the professional training of chemists. For ACS certification, students are required to take inorganic laboratory and at least one semester of biochemistry. No course with a grade of less than C (2.0) can be applied toward ACS certification. Students should check with a chemistry advisor for details. The Downtown Campus maintains an ACS chapter of student affiliates.

Bachelor of Science/Master of Science

Chemistry BS/MS

While students are completing a BS degree in chemistry, they may also complete some of the requirements for an MS degree in chemistry under the following guidelines:

- The student must apply and be accepted for participation in the BS/MS program prior to completion of the BS degree and be advised by both the undergraduate and graduate advisors.
- Up to 9 semester hours of graduate-level course work may be taken as an undergraduate and applied toward the MS degree. This course work may not be applied toward the BS degree or ACS certification requirements for the BS degree.
- Up to 3 semester hours of independent study (research) may be applied toward the graduate degree if that research is expanded and continued for a portion of the master's thesis research. This requires approval of the student's graduate research advisor in chemistry, the chemistry graduate program director and the CLAS associate dean for graduate studies.
- The chemistry department will waive the requirement for qualifying examinations in each area of chemistry for which the student has completed the undergraduate sequence of courses and laboratories at the Downtown Campus with grades of *B* or better for each course.
- The student must apply for and be admitted to the graduate program in chemistry beginning the semester immediately following completion of the BS degree in chemistry at the Downtown Campus.

This program allows undergraduate students who have begun their research as undergraduates to complete up to 12 semester hours (with approval of the graduate dean) toward the 30 semester hours required for a Plan I MS degree in chemistry while they are still completing their BS degree. This makes it possible for students to complete an MS degree in chemistry in only one year beyond the BS degree in chemistry. Students entering the program through the BS/MS program option must fulfill all of the requirements of the Plan I or Plan II graduate programs.

Non Degree

Chemistry Minor

The objective of the chemistry minor is to provide broad introductory course work and laboratory experience to science majors without the more technical mathematical and chemical prerequisites required of the chemistry major. The chemistry minor is open to all CLAS students and should prove beneficial for science majors, pre-professional health science majors and students seeking science education certification.

Course work and grade requirements that must be satisfied to obtain a chemistry minor include:

- a minimum of 20 semester hours of chemistry courses
- a minimum of 10 upper-division chemistry hours
- upper-division course work must include three of the six subdisciplines that comprise chemistry: analytical, biochemistry, inorganic, organic, physical and environmental chemistry
- a minimum 2.0 GPA for chemistry courses taken at UC Denver
- all chemistry minor courses must be taken for a letter grade rather than with the pass/fail grading option
- to satisfy the department residency requirement, a minimum of 7 upper-division hours of chemistry must be taken at the Downtown Campus

Course Requirements

All upper division chemistry courses at UC Denver will satisfy course work requirements for the minor. Furthermore, the Department of Chemistry offers courses that have minimum chemistry and mathematics prerequisites and should be considered for the chemistry minor degree.

Analytical

- CHEM 3111 - Analytical Chemistry Summer 2010 Registration: **CHEM 3111**
- CHEM 3118 - Analytical Chemistry Laboratory Summer 2010 Registration: **CHEM 3118**

Biochemistry

- CHEM 3810 - Biochemistry Summer 2010 Registration: **CHEM 3810**

Organic

- CHEM 3411 - Organic Chemistry I Summer 2010 Registration: **CHEM 3411**

- CHEM 3418 - Organic Chemistry Laboratory I Summer 2010 Registration: **CHEM 3418**
- CHEM 3421 - Organic Chemistry II Summer 2010 Registration: **CHEM 3421**
- CHEM 3428 - Organic Chemistry Laboratory II Summer 2010 Registration: **CHEM 3428**
- CHEM 3498 - Honors Organic Chemistry Laboratory II Summer 2010 Registration: **CHEM 3498**

Inorganic

- CHEM 3011 - Inorganic Chemistry Summer 2010 Registration: **CHEM 3011**

Physical

Course selections to be announced.

Environmental

- CHEM 4700 - Environmental Chemistry Summer 2010 Registration: **CHEM 4700**

To register your minor in chemistry, please visit the CLAS advising office in NC 4002. After establishing your minor status, you are encouraged to meet with the chemistry minor advisor, Professor Mark Anderson in NC 3002C.

Master of Science

Chemistry MS

- Graduate School Rules apply to this program

Requirements for Admission

Students must meet the Downtown Campus Graduate School admission requirements with specific chemistry requirements as follows:

- Undergraduate GPA of at least 3.0.
- Undergraduate major in chemistry essentially equivalent to the one offered at UC Denver (see the undergraduate requirements), including two semesters of organic, analytical and physical chemistry with laboratories and one semester of inorganic chemistry. No student will be admitted to the graduate program who is not within two classes of meeting the undergraduate requirements.

- GRE examination is recommended, as is the advanced chemistry GRE examination.
- International students have additional admission requirements concerning immigration status, proof of financial responsibility and acceptable TOEFL scores.
- Failure to meet the full admission standards may lead to provisional admission.

Prospective students are encouraged to contact the graduate program director or visit the [chemistry department Web site](#) for additional details concerning the chemistry program, admission procedures, financial assistance and faculty research interests.

General Program Requirements

At the heart of the graduate program is a set of four core graduate courses in the fields of analytical, inorganic, organic and physical chemistry. A student must qualify in order to register for any core graduate class, either by passing a qualifying examination in that field or by passing the equivalent undergraduate class in that area at UC Denver with a grade of *B* (3.0) or better. All entering students are required to qualify in all four core fields. The qualifying requirements must be completed during the first year in the graduate program. Individual core classes may have additional prerequisites.

Depending on the program option that she/he selects, a student will be required to pass either three (Plan I) or all four (Plan II) of the graduate core courses with no grade in a core course below *B-* (2.7).

The remaining course work for the degree will consist of regular graduate offerings in chemistry, a limited number of which may be substituted by approved classes in related fields. In particular, students interested in interdisciplinary areas, such as biochemistry or environmental chemistry, are encouraged to take cognate courses outside the chemistry department. The chemistry graduate program director must approve in advance any graduate class taken outside the department that is to count toward the degree. All students are required to annually submit an updated program plan for approval and to have their progress evaluated by the graduate program director.

Specific Degree Requirements

There are two options for obtaining a master's degree from the Downtown Campus Department of Chemistry: Plan I, the thesis option, and Plan II, the course work emphasis option. All students must complete at least 3 semester hours of master's report (CHEM 6960). A student is allowed to participate in the thesis option only after the successful completion of the master's report with the proposed advisor, and upon the mutual agreement of both the student and advisor that the student is prepared to work on a master's thesis. Students who select the course work emphasis option may petition

to have up to 3 additional semester hours of master's report research substitute for an equivalent number of course work hours.

Plan I. Thesis Option

Plan I is a research-oriented program involving a minimum of 30 semester hours with the following requirements:

- 21-23 semester hours of formal course work, including three of the four graduate core courses
- 4-6 semester hours of CHEM 6950, Master's Thesis research; successful completion of the thesis research includes the presentation of the results at a departmental seminar
- 3 semester hours of CHEM 6960, Master's Report research
- a grade of *B-* (2.7) or better in all courses completed; *B-* (2.7) or better in all core courses
- a cumulative GPA of 3.0 or better in all courses taken as a graduate student
- an acceptable formal thesis consistent with the guidelines of the Graduate School
- successful oral defense of the master's thesis before a committee of at least three graduate faculty members, two of whom must be tenure track faculty members in the chemistry department
- compliance with all Graduate School Rules
- all work must be completed within five years of completion of the first graduate class in the department

Plan I thesis research must be conducted under the direct supervision of a tenure-track faculty member of the Downtown Campus Department of Chemistry. Plan I students must take a minimum of 15 semester hours of formal course work in chemistry at the 5000 level or above. Students may petition the graduate program director in advance for permission to take one or two courses at the graduate level outside of chemistry that would count toward the requirements for an MS in chemistry.

Plan II. Course Work Emphasis Option

Plan II is a course work-oriented program involving a minimum of 33 semester hours with the following requirements:

- 27-30 semester hours of formal course work, including all four graduate core courses
- at least 3 (but not more than 6) semester hours of CHEM 6960, Master's Report, research
- a grade of *B-* (2.7 or better in all courses completed; *B-* (2.7) or better in all core courses
- a cumulative GPA of 3.0 or better in all courses taken as a graduate student
- a final research report
- presentation of the research project in a final seminar

- successful defense of the project before a committee of at least three graduate faculty members, one of whom must be a tenure-track faculty member in the chemistry department
- compliance with all Graduate School Rules
- all work must be completed within five years of completion of the first graduate class in the department

A Plan II student may petition the graduate program director to substitute up to 3 semester hours of master's report (CHEM 6960) research, beyond the required minimum, for an equivalent number of semester hours of formal course work. Approval will be perfunctory for research performed with the support and under the direct supervision of a faculty member in the Department of Chemistry on the Downtown Campus. Plan II students must take a minimum of 24 semester hours of formal course work in chemistry at the 5000 level or above. Students may petition the graduate program director in advance for permission to take up to two courses at the graduate level outside of chemistry that would count toward the requirements for an MS in chemistry.

Chinese Studies

Director: Stephen C. Thomas

Faculty Advisors:

Ji Chen, Lawrence Street Center 390K, 303-556-6611

Xiaojia Hou, King Center 560, 303-556-8315

Stephen C. Thomas, King Center 520, 303-556-5259

Office: Political Science, King Center 520

Telephone: 303-556-5259

Web site: clas.ucdenver.edu/polisci/chineseStudies.html

This innovative program offers specialized study of China through course work in the related disciplines of language, anthropology, history, geography, literature and political science. China's economic and political presence is increasingly prominent in the United States. According to a recent national survey, Chinese is the fastest-growing foreign language in American colleges and universities. UC Denver is uniquely positioned to make use of its location as the cultural, economic and political center of the Rocky Mountain region and of its diverse, well-trained and highly qualified faculty to offer a course of interdisciplinary studies related to China.

The increasing prominence of China in world affairs has made knowledge of Chinese language and cultures a valuable asset in numerous fields. Today, career opportunities abound for Chinese studies graduates in government, international business, banking and financial services, law, medicine, journalism and graduate study in sinology. The breadth of the program's course offerings, coupled with the resources of the faculty, ensures that its graduates will be especially well prepared for any of these professional pursuits.

The program in Chinese studies offers a host of study abroad opportunities throughout the academic year and every summer. UC Denver has on-going programs at the China Agricultural University in Beijing. Study abroad programs of two weeks to one year in length may be arranged, and program faculty can help students enroll in intensive Chinese language programs. Students pursuing the minor in Chinese language and area studies are encouraged to complete the program with a period of residence and study in China.

REQUIREMENTS FOR CHINESE STUDIES MINOR

Programs

Non Degree

Chinese Studies Minor

The minor requires a total of 21 semester hours. A minimum of 15 semester hours must be taken from Downtown Campus faculty. All courses must be completed with a grade of C (2.0) or better.

Requirements for the Minor

Required Courses

- CHIN 1010 - Beginning Chinese I *Summer 2010 Registration: **CHIN 1010***
- CHIN 1020 - Beginning Chinese II *Summer 2010 Registration: **CHIN 1020***
- * CNST 1000 - China and the Chinese *Summer 2010 Registration: **CNST 1000***

Total: 13 Hours

**Note: CNST 1000 should be taken toward the beginning of the minor.*

Additional Courses

An additional 8 hours of course work should be selected from the following list of courses:

- ANTH 4000 - Special Topics in Anthropology *Summer 2010 Registration: **ANTH 4000***
- ANTH 4995 - Travel Study *Summer 2010 Registration: **ANTH 4995***

- CHIN 2110 - Second Year Chinese I Summer 2010 Registration: **CHIN 2110**
- CHIN 2120 - Second Year Chinese II Summer 2010 Registration: **CHIN 2120**
- FINE 4750 - Arts of China Summer 2010 Registration: **F A 4750**
- GEOG 3160 - Geography of China Summer 2010 Registration: **GEOG 3160**
- HIST 4420 - Traditional China: China to 1600 Summer 2010 Registration: **HIST 4420**
- HIST 4421 - Modern China Summer 2010 Registration: **HIST 4421**
- PSCI 4186 - East Asia in World Affairs Summer 2010 Registration: **P SC 4186**
- PSCI 4615 - Politics and Government of China Summer 2010 Registration: **P SC 4615**
- PSCI 4726 - Russian and Chinese Foreign Policy Summer 2010 Registration: **P SC 4726**
- PSCI 4995 - Travel Study Topics Summer 2010 Registration: **P SC 4995**
Take under the topic title, "Window on China," for 3 semester hours.
- PHIL 3666 - Asian Philosophies and Religions Summer 2010 Registration: **PHIL 3666**
- PHIL 3981 - Chinese Philosophy and Culture Summer 2010 Registration: **PHIL 3981**

Total: 8 Hours

Minor Total: 21 Hours

* New courses may not appear in the course description section of this catalog. Contact the department for further information.

Communication

Chair: Stephen J. Hartnett

Associate Chair: Barbara Walkosz

Graduate Advisor: Lisa Keränen

Program Assistant: Sally Thee

Undergraduate Advisor: Wanda Lakota

Internship Coordinator: Suzanne Stromberg

Office: Plaza Building, 102

Telephone: 303-556-2591

Fax: 303-556-6018

Web site: clas.ucdenver.edu/communication/

Faculty

Professors:

Brenda J. Allen, PhD, Howard University

Sonja K. Foss, PhD, Northwestern University

Associate Professors:

Larry Erbert, PhD, University of Iowa

Stephen J. Hartnett, PhD, University of California at San Diego

Michael Monsour, PhD, University of Illinois-Champaign

James F. Stratman, PhD, Carnegie-Mellon University

Omar Swartz, PhD, Purdue University

Barbara Walkosz, PhD, University of Arizona

Assistant Professors:

Hamilton Bean, PhD, University of Colorado

Lisa Keränen, PhD, University of Pittsburgh

Instructors:

Yvette Bueno-Olson, PhD, University of Miami

Wanda Lakota, MA, University of Denver

Diann Logan, MA, University of Colorado

Kathleen Pounders, MA, University of Colorado

Suzanne Stromberg, MA, Regent University

The Department of Communication seeks to enrich understanding of the roles of communication in everyday life, organizational settings and public affairs. While the roots of the discipline trace back to the ancient arts of philosophy, rhetoric and aesthetics, its contemporary practices speak to the opportunities and dilemmas of participating in a globalized, mediated and multicultural society.

The department's classes are organized in nine pathways, including community service and public affairs, legal communication, health communication, mass media, human resources and organizational communication, mediation and conflict resolution, political communication and government, technical communication and public relations and advertising.

Across these pathways, students are encouraged to merge theoretical studies with practical applications, including in-service learning courses, travel study, internships,

social justice projects and other experiential modes of learning. The Department of Communication therefore provides students the skills, knowledge and opportunities to use communication to help create a more humane and civil world.

Undergraduate

REQUIREMENTS FOR MAJOR

Academic Honors

Academic honors are conferred at graduation on students whose achievements are above those required for the bachelor's degree. Three levels of honors are available to students. *Cum laude* honors may be earned by communication majors with a cumulative GPA of 3.0 and a GPA of 3.5 in 30 hours of communication courses. *Magna cum laude* and *summa cum laude* honors require the completion of a semester-long project during the senior year. Additional information about academic honors may be obtained from the undergraduate advisor in communication.

Undergraduate Internships

Internships are opportunities for students to work in communication-related positions in the community and to receive academic credit for that work. They provide a way for students to maximize their communication background and their understanding of concepts, theories, models and frameworks within the communication discipline.

To qualify to register for internships in communication, undergraduate students must be communication majors and have a cumulative GPA of 2.75.

Students typically receive 3 hours of academic credit for a one-semester internship in which they work between 15 and 30 hours a week. Communication majors may complete up to 6 hours of internship credit (CMMU 3939).

For further information about internships, contact the Experiential Learning Center in Tivoli Student Union, Suite 260, 303-556-6656.

MINOR IN COMMUNICATION

Undergraduate Certificates

UNDERGRADUATE CERTIFICATE IN MEDIATION

UNDERGRADUATE CERTIFICATE IN PUBLIC RELATIONS

UNDERGRADUATE CERTIFICATE IN TECHNICAL AND PROFESSIONAL COMMUNICATION

Grade and Residency Requirements for Certificates

A grade of *B* or better must be earned in each course completed as part of the certificate (*B-* is not acceptable). All semester hours for a certificate must be earned at the Downtown Campus.

Graduate

Grade Requirements

Students must maintain a GPA of 3.0 or higher across all courses applied to a graduate degree or to a graduate certificate.

Course Transfer Policy

A maximum of 6 semester hours of relevant graduate course work may be transferred from another university. Students cannot receive credit for transferred courses in which less than a *B* grade was earned. Course work transferred from another university must be approved by the director of the MA program.

Time Limits for Completion of Degree

Students have seven years from the date of the beginning of their course work to complete all requirements for a master's degree in communication.

MASTER OF ARTS IN COMMUNICATION

Application Procedures for U.S. Citizens

Students must submit the following materials to apply for admission to the MA program:

- letter of application explaining career plans and reasons for interest in the degree
- graduate admission application
- application for graduate admission—part II
- three letters of recommendation, preferably from university faculty (those writing the recommendations must use the request for recommendation form and their own letterhead stationery)
- two official transcripts from every college or university attended
- resume or *vita*
- writing sample
- GRE scores

- \$50 application fee (nonrefundable)

Application forms are available from the communication department program assistant or the [department's Web site](#).

The deadline for application for the fall semester is April 1, for spring semester October

1. All application materials should be sent to:

Program Assistant
University of Colorado Denver
Department of Communication
Campus Box 176; P. O. Box 173364
Denver, CO 80217-3364

Application Procedures for International Students

Students who are not U.S. citizens should begin the process of application to the MA program in communication by contacting the [Office of International Affairs](#) at UC Denver. This office will assist students in compiling their application materials, which then are submitted to the communication department. International students should not apply to the communication department directly. See the [Information for International Students](#) chapter for further information.

Graduate Certificates

GRADUATE CERTIFICATE IN PUBLIC RELATIONS

Grade and Residency Requirements for Certificates

A grade of *B* or better must be earned in each course completed as part of the certificate (*B-* is not acceptable). All semester hours for a certificate must be earned at the Downtown Campus.

Programs

Bachelor of Arts

Communication BA

Requirements for Admission

Undergraduates must declare their intention to major in communication by the time they have completed 60 semester hours; they must apply to the communication department to be accepted as majors.

Program Requirements

The communication major requires that students take a total of 39 hours of course work in communication, 18 of which must be taken in residence at the Downtown Campus. At least 21 of the 39 hours must be upper division. Students must achieve a grade of C (2.0) or higher to receive credit for a course in the major and must maintain a minimum GPA of C+ (2.75) in their communication courses.

Students must complete 12 credits (4 courses) from the menu of core classes; they must complete at least 24 credits (8 classes) from the menu of electives; they must also complete at least 3 credits (1 class) from the menu of “exit” classes.

Core Courses

- COMM 1011 - Fundamentals of Communication *Summer 2010 Registration:*
CMMU 1011
- COMM 1021 - Fundamentals of Mass Communication *Summer 2010 Registration:* **CMMU 1021**
- COMM 2020 - Communication and Citizenship *Summer 2010 Registration:*
CMMU 2020
- COMM 2050 - Business and Professional Speaking *Summer 2010 Registration:*
CMMU 2050
- OR-
- COMM 2101 - Presentational Speaking *Summer 2010 Registration:* **CMMU 2101**

Total: 12 Hours

Electives

Skill Area Electives

In addition to the four communication core courses, students are required to complete at least 24 credits (8 classes) from among the department's nine pathways, which include community service and public affairs, legal communication, health communication, mass media, human resources and organizational communication, mediation and conflict resolution, political communication and government, technical communication and public relations and advertising. Students may use the pathways to help craft a program of study, but *they are not required to do so*; the pathways are simply suggestions for ways to organize courses that will prepare students for careers.

Total: 24 Hours

Upper Division Elective

“Exit” Course—majors are required to complete at least one “exit” class that concludes their course of study with a special experience focused on high-level research, community engagement, international travel or workplace experience. Students may choose from the following courses:

- COMM 3939 - Internship/Cooperative Education Summer 2010 Registration: **CMMU 3939**
- COMM 4282 - Environmental Communication Summer 2010 Registration: **CMMU 4282**
- COMM 4500 - Health Communication Summer 2010 Registration: **CMMU 4500**
- COMM 4510 - Usability Testing Summer 2010 Registration: **CMMU 4510**
- COMM 4620 - Health Risk Communication Summer 2010 Registration: **CMMU 4620**
- COMM 4688 - Senior Seminar: Transitioning from College to Career Summer 2010 Registration: **CMMU 4688**
- COMM 4710 - Topics in Communication Summer 2010 Registration: **CMMU 4710**
Take under topic "Communication, Social Justice, and Prisons"
- COMM 4995 - Travel Study Topics Summer 2010 Registration: **CMMU 4995**

Total: 3 Hours

Major Total: 39 Hours

For more information, see the faculty advisor and the [department's Web site](#).

Certificate

Mediation Undergraduate Certificate

Mediation entails a third-party intervention designed to assist parties in managing conflict. Trained mediators are impartial process experts who learn to utilize communication and conflict philosophy and theories to increase the probability of more favorable outcomes between parties in conflict. The undergraduate certificate is designed for communication majors or any student interested in developing practical skills in alternative dispute resolution. The courses in this certificate focus on alternative dispute processes that include strategies for managing conflict in personal, public, legal, political, governmental and corporate contexts.

Certificate Requirements

The undergraduate certificate in mediation requires 12 semester hours (four courses).

Core Courses

- COMM 4262 - Mediation *Summer 2010 Registration: CMMU 4262*

Students must complete at least one of the following two courses (those who take both classes take one elective rather than two; those who take only one class must select two electives):

- COMM 4255 - Negotiations and Bargaining *Summer 2010 Registration: CMMU 4255*
- COMM 4260 - Communication and Conflict *Summer 2010 Registration: CMMU 4260*

Electives

- COMM 3271 - Communication and Diversity *Summer 2010 Registration: CMMU 3271*
- COMM 4015 - Communication and Civility *Summer 2010 Registration: CMMU 4015*
- COMM 4140 - Argumentation *Summer 2010 Registration: CMMU 4140*
- COMM 4681 - Communication Issues in Trial Court Practices and Processes *Summer 2010 Registration: CMMU 4681*

Total: 12 Hours

Students may be allowed to take courses other than those on this list to fulfill the requirements for the certificate, if those courses better fit their professional goals.

Public Relations Graduate Certificate

Public Relations has been defined as the management function that entails planning, research, publicity, promotion and collaborative decision-making to help any organization's ability to listen to, appreciate and respond appropriately to those persons and groups whose mutually beneficial relationships the organization needs to foster as it strives to achieve its mission and vision. The graduate certificate in public relations is

designed to provide students with the principles and theories that guide the work of public relations practitioners in commercial, public and non-profit contexts.

The graduate certificate in public relations is designed for working professionals who already have earned bachelor's degrees but who would like to enhance or upgrade their skills in the area of public relations. Non-degree students who enroll in the MA program following completion of the certificate may transfer up to 12 hours of credits earned for the certificate into credits for the MA degree. The certificate also is designed for students enrolled in a UCD master's program, including the Department of Communication's MA program. For such students, the certificate can be completed as part of or in addition to the course work required for the master's degree (recipients of the undergraduate certificate in public relations are ineligible to complete this certificate).

Certificate Requirements

The graduate certificate in public relations requires four courses (12 semester hours):

- COMM 5240 - Organizational Communication *Summer 2010 Registration:* **CMMU 5240**
- COMM 5635 - Principles of Public Relations *Summer 2010 Registration:* **CMMU 5635**
- COMM 5640 - Advanced Public Relations *Summer 2010 Registration:* **CMMU 5640**
- COMM 5665 - Principles of Advertising *Summer 2010 Registration:* **CMMU 5665**

Total: 12 Hours

Students may be permitted to take courses other than those listed above to fulfill the requirements for the certificate if those courses fit their professional goals better (CMMU 5635, Principles of Public Relations may not be substituted, however). Requests for approval of substitute courses, including an explanation for the substitution, must be made in writing to Hamilton Bean.

Grade and Residency Requirements

A grade of *B* must be earned in each course completed as part of the certificate. All of the credit hours for the certificate must be earned at the University of Colorado Denver.

Application Procedures and Additional Information

Students should apply for the graduate certificate in public relations after the completion of the required courses. To apply, students must complete the certificate application and return it to Hamilton Bean in his mailbox in room 102-A of the Plaza Building or mail to

Department of Communication; P. O. Box 173364, Campus Box 176; University of Colorado Denver; Denver, CO 80217-3364. The approved certificate is mailed to the student.

Students who are not already enrolled at UCD must also complete an Application for Non-Degree Admission prior to registering for courses. The form should be returned to the Office of Admissions in the annex of the CU Building.

Additional information about the graduate certificate in public relations may be obtained from Hamilton Bean, Department of Communication, Plaza 102-V, 303-352-3876, Hamilton.Bean@ucdenver.edu.

Public Relations Undergraduate Certificate

Public relations has been defined as the management function that entails planning, research, publicity, promotion and collaborative decision-making to help any organization's ability to listen to, appreciate and respond appropriately to those persons and groups whose mutually beneficial relationships the organization needs to foster as it strives to achieve its mission and vision. The undergraduate certificate in public relations is designed for undergraduate communication majors who wish to demonstrate to potential employers that they possess skills and knowledge in the area of public relations. It also is useful for non-degree-seeking working professionals without bachelor's degrees who plan to enter or re-enter the workplace and who seek to acquire the skills and knowledge necessary to perform public relations in their professional environments.

Certificate Requirements

The undergraduate certificate in public relations requires 12 semester hours (four courses). Students must complete the following three courses:

- COMM 4635 - Principles of Public Relations *Summer 2010 Registration:* **CMMU 4635**
- COMM 4640 - Advanced Public Relations *Summer 2010 Registration:* **CMMU 4640**
- COMM 4665 - Principles of Advertising *Summer 2010 Registration:* **CMMU 4665**

Additionally, students choose one course from the following:

- COMM 3680 - Mass Communication Skills *Summer 2010 Registration:* **CMMU 3680**

- COMM 4240 - Organizational Communication Summer 2010 Registration:
CMMU 4240

Total: 12 Hours

Students may be permitted to take courses other than those listed above to fulfill the requirements for the certificate if those courses fit their professional goals better (CMMU 4635, Principles of Public Relations may not be substituted, however). Requests for approval of substitute courses, including an explanation for the substitution, must be made in writing to Hamilton Bean.

Grade and Residency Requirements

A grade of *B* must be earned in each course completed as part of the certificate. All of the credit hours for the certificate must be earned at the University of Colorado Denver.

Application Procedures and Additional Information

Students should apply for the undergraduate certificate in public relations after the completion of the required courses. To apply, students must complete the certificate application and return it to Hamilton Bean in his mailbox in room 102-A of the Plaza Building or mail to Department of Communication; P. O. Box 173364, Campus Box 176; University of Colorado Denver; Denver, CO 80217-3364. The approved certificate is mailed to the student.

Students who are not already enrolled at UCD must also complete an Application for Non-Degree Admission prior to registering for courses. The form should be returned to the Office of Admissions in the annex of the CU Building.

Additional information about the undergraduate certificate in public relations may be obtained from Hamilton Bean, Department of Communication, Plaza 102-V, 303-352-3876, Hamilton.Bean@ucdenver.edu.

Technical and Professional Communication Undergraduate Certificate

The undergraduate certificate in technical and professional communication is designed for several types of students:

- working adults who are employed or who are seeking employment in the field of technical communication but who are not seeking an undergraduate degree
- students who are majoring in communication and want to enhance their technical communication abilities
- students pursuing a major other than communication who want to enhance their technical communication abilities

Students enrolled in this certificate receive state-of-the-art training in core professional skills, including technical writing, technical editing and web design. The certificate is especially helpful for those who plan to enter (or re-enter) the workplace and who want to acquire the knowledge and skills necessary to contribute to technical documentation projects.

Certificate Requirements

The undergraduate certificate in technical and professional communication requires 12 semester hours (four courses), as follows:

Required Core

- COMM 3120 - Technical Communication *Summer 2010 Registration: CMMU 3120*

Electives

Students must complete any three of the following courses:

- COMM 4120 - Writing Technical Reports *Summer 2010 Registration: CMMU 4120*
- COMM 4290 - Web Design *Summer 2010 Registration: CMMU 4290*
- COMM 4300 - Multimedia Authoring *Summer 2010 Registration: CMMU 4300*
- COMM 4410 - Science Writing *Summer 2010 Registration: CMMU 4410*
- COMM 4805 - Graphics *Summer 2010 Registration: CMMU 4805*

Total: 12 Hours

Grade and Residency Requirements

A grade of *B* or higher must be earned in each course completed as part of the Certificate (a grade of *B*-is not acceptable). All of the credit hours for the certificate must be earned at the University of Colorado Denver.

Application Procedures

Students should apply for the undergraduate certificate in technical and professional communication **after the completion of the required courses**. To apply, students must complete the certificate application.

The form should be returned to Jim Stratman, located in the Plaza Building, room 102-F, or put in his mailbox in room PL 102-A, or mailed to him at the Communication Department; Campus Box 176, P. O. Box 173364; Denver, CO 80217-3364. Once the certificate is processed, it will be mailed to the student unless other arrangements have been made by the student to pick up the certificate from the program assistant in PL 102C.

Students need to be registered at the University of Colorado Denver as full-time students, part-time students or as non-degreed students in order to register for these classes. To apply as a non-degreed student, fill out the Application for Non-Degree Admission. Return the form, along with your fee, to the Office of Admissions in the Annex of the CU Building, located at the corner of 14th and Larimer.

Additional Information

Additional information about the undergraduate certificate in technical and professional communication may be obtained from the director of the technical communication program, Jim Stratman, Department of Communication, Plaza Building, room 102-F, 303-556-2884, James.Stratman@ucdenver.edu

Non Degree

Communication Minor

Knowledge in an area of study, such as business, politics, biology or sociology, means little unless it can be communicated effectively. The minor in communication is designed to provide students who are not communication majors with knowledge and skills in communication that are useful in any discipline or profession.

The minor in communication requires 18 semester hours, with 12 hours of required courses and 6 hours of electives.

Requirements

Core Courses

- COMM 1011 - Fundamentals of Communication *Summer 2010 Registration:* **CMMU 1011**
- COMM 2020 - Communication and Citizenship *Summer 2010 Registration:* **CMMU 2020**
- COMM 2101 - Presentational Speaking *Summer 2010 Registration:* **CMMU 2101**
- COMM 4200 - Persuasion *Summer 2010 Registration:* **CMMU 4200**

Total: 12 Hours

Elective Courses

In addition to the four courses specified above, students must take two upper-division courses (3000 level or above) to be selected with the aid of the undergraduate advisor in communication.

Total: 6 Hours

Minor Total: 18 Hours

Grade and Residency Requirements for Minors

A grade of C (2.0) or better must be earned in each course completed as part of the minor. No more than 6 of the semester hours for the minor may be transferred from another university.

Master of Arts

Communication MA

- Graduate School rules apply to this program

The master of arts in communication is a generalist degree designed to enhance students' intellectual and professional growth through the understanding and practice of effective communication.

Degree Requirements

Students have two options for completing the MA degree in communication: the professional track and the academic track.

Professional Track

The professional track requires the completion of 36 hours of graduate course work (5000 level or above). As explained below, students have the option of taking 6 hours of 4000-level courses. In this situation, a student will take 30 hours of graduate credit and 6 hours of 4000-level (undergraduate) course work. The requirements for course work are as follows:

Required Course

- COMM 6013 - Introduction to Graduate Work in Communication Summer 2010
Registration: CMMU 6013
(recommended to be taken the first semester of graduate course work; offered only in the fall semester)

Methods Courses

Most methods courses are offered every other year. The second methods course may be taken outside of the communication department with the approval of the student's advisor.

Choose two:

- COMM 5011 - Research Methods: Quantitative Summer 2010 *Registration: CMMU 5011*
- COMM 5022 - Critical Analysis of Communication Summer 2010 *Registration: CMMU 5022*
- COMM 5221 - Research Methods: Qualitative Summer 2010 *Registration: CMMU 5221*
- COMM 6205 - Empirical Research Methods for Communication and Technical Communication Summer 2010 *Registration: CMMU 6205*

Total: 9 Hours

Graduate Seminars

In addition to the above core requirements, students must take four graduate seminars from the Department of Communication. Graduate seminars are 5000- or 6000-level courses.

Total: 12 Hours

Electives

Students must complete five electives. A minimum of three of these electives must be at the 5000 or 6000 level; the remaining two may be at the 4000 level. At least three of the five electives must be communication courses; the remaining two electives may be taken from outside of the Department of Communication.

[Students whose bachelor's degrees are not in communication are required to take one additional course (CMMU 4031). This course does not count toward the semester hours required for the degree; it is taken in addition to those 36 hours.]

- COMM 4031 - Perspectives on Communication *Summer 2010 Registration:*
CMMU 4031

Total: 15 Hours

Students must receive a grade of *B* or higher in all courses that are applied to the MA degree.

Track Total: 36 Hours

Academic Track

The academic track is distinguished from the professional track in that it requires the completion of a substantial academic writing project or projects. The academic track requires the completion of 36-37 hours of graduate course work. At least 30 of these hours must be at the 5000 or 6000 level; 6 hours (two courses) may be at the 4000 level. The requirements for course work are as follows:

- COMM 6013 - Introduction to Graduate Work in Communication *Summer 2010 Registration:* **CMMU 6013**
(recommended to be taken the first semester of graduate course work; offered only in the fall semester)

Methods Courses

Most methods courses are offered every other year.

Choose two:

- COMM 5011 - Research Methods: Quantitative Summer 2010 Registration:
CMMU 5011
- COMM 5022 - Critical Analysis of Communication Summer 2010 Registration:
CMMU 5022
- COMM 5221 - Research Methods: Qualitative Summer 2010 Registration:
CMMU 5221
- COMM 6205 - Empirical Research Methods for Communication and Technical Communication Summer 2010 Registration: **CMMU 6205**

Total: 9 Hours

Graduate Seminars

In addition to the above core requirements, students must take four graduate seminars from the communication department. Graduate seminars are 5000- or 6000-level courses. The four courses must be approved by the student's advisor.

Total: 12 Hours

Electives

Students must complete five electives. A minimum of two of these electives must be at the 5000 or 6000 level; the remaining two may be at the 4000 level. At least two of the electives must be communication courses; the remaining two may be taken from outside of the communication department. If a thesis is presented, the thesis credits will substitute for one elective course requirement.

[Students whose bachelor's degrees are not in communication are required to take one additional course (CMMU 4031). This course does not count toward the semester hours required for the degree; it is taken in addition to those 36-37 hours.]

- COMM 4031 - Perspectives on Communication Summer 2010 Registration:
CMMU 4031

Total: 12-15 Hours

(12 hours for thesis students; 15 for non-thesis)

Thesis

Students either must present a major paper for publication (no additional course credit) or complete a thesis for 4 semester hours. Credit for a thesis may substitute for one elective course requirement.

Total: 4 Hours

Students must receive a grade of *B* or higher in all courses that are applied to the MA degree.

Track Total: 36-37 Hours

Options for Specialization

The communication department has developed two options for students who wish to create an area of focus or specialization within the MA degree—communication management and doctoral preparation. Students may choose to develop one of these options as they select their electives, or they may earn a general degree by selecting electives across the two areas of specialization. Either option may be pursued by students in the professional track; the doctoral preparation specialization is recommended for students in the academic track.

Communication Management

Communication management is an area of knowledge and skills concerned with the processes involved in managing communication—creating, accessing and delivering communication services within organizational contexts. The area of communication management provides opportunities for the development of communication skills and knowledge by professionals in public, corporate and not-for-profit organizations. Anyone who must manage communication resources for an organization—including account executives, multimedia professionals, human resource specialists and trainers—can advance their career through a specialty in communication management.

Doctoral Preparation

The specialty in doctoral preparation is for students who plan to pursue a PhD after completion of their MA degree. Individuals who earn a PhD typically engage in teaching

and research as university professors, but the degree also may be pursued to increase marketability in the corporate world in areas such as consulting and training.

Economics

Chair: Buhong Zheng

Program Assistant: Christine Lukvec

Office: Lawrence Street Center, 460

Telephone: 303-315-2030

Fax: 303-315-2048

Web site: econ.ucdenver.edu/home/

Faculty

Professors:

Laura M. Argys, PhD, University of Colorado

Steven G. Medema, PhD, Michigan State University

Daniel I. Rees, PhD, Cornell University

W. James Smith, PhD, University of Colorado

Buhong Zheng, PhD, West Virginia University

Associate Professors:

Steven R. Beckman, PhD, University of California Davis

Brian Duncan, PhD, University of California at Santa Barbara

Assistant Professors:

Shu Lin, PhD, University of Oklahoma

Hani Mansour, PhD, University of California at Santa Barbara

Haichun Ye, PhD, University of Oklahoma

Economics is the science of decision making. The rigorous and general approach that characterizes economics lends itself to a remarkably wide field of practical application. Economists are noted for major contributions in a number of fields including government policy, taxation, law, regulation, political economy, international trade and finance, international and U.S. development, marketing, environmental studies, medical policy, portfolio management and banking. The broad and rigorous training of economics majors accounts for their significant demand in virtually every industry and government agency. Economics provides excellent preparation for advanced graduate study as well.

Recent studies indicate that economics is a preferred degree for prestigious MBA programs and law schools.

Undergraduate

REQUIREMENTS FOR MAJOR

REQUIREMENTS FOR MINOR

Honors in Economics

Students wishing to earn departmental honors in economics should consult with their advisor no later than the beginning of their senior year.

Cum laude will be awarded to students who complete an economics major with a 3.5 GPA in all upper-division (3000+) courses in economics taken at UC Denver, with a minimum of eight such courses, and either two additional electives in economics beyond those required for the major, taken at the 4000 or higher level, or an acceptable honors thesis. The thesis must be approved by a three-member committee of department faculty and will include a presentation of the results to that committee. Students should register for the thesis, using ECON 4850 as the course number, as a 3-semester hour independent study, in addition to the regular requirements for the major.

Magna cum laude will be awarded to students who complete an economics major with a 3.7 GPA in all upper-division (3000+) courses in economics taken at UC Denver, with a minimum of eight courses, and who complete an acceptable honors thesis.

Summa cum laude will be awarded to students who complete an economics major with a 3.88 GPA in all upper-division (3000+) courses in economics taken at UC Denver, with a minimum of eight courses, and who complete an outstanding honors thesis.

In order to be recognized in the graduation program as "Honors Pending," a draft of the thesis must be submitted to the chair of the committee four weeks prior to the end of the semester. The oral presentation and other requirements must be completed one week before graduation.

In order to be recognized in the graduation program with the specific honors degree being conferred, e.g., *summa*, *magna*, etc., students must turn in the completed final copy of the honors thesis four weeks prior to the end of the semester, along with meeting other requirements by the week before graduation. Otherwise, recognition will come with the diploma after graduation.

Students who do not have an advisor should contact the department for assignment to an advisor. Students should meet with their advisor at least twice a year.

Graduate

The MA program in economics at UC Denver is directed toward two groups: (1) those who look on the MA as a key to career development in business or government service, and (2) those who desire to go on to pursue the PhD in economics or related fields.

The strong quantitative emphasis of the department's MA program is ideally suited for the pursuit of both these goals. Students are steeped in econometric theory and its applications from the beginning of the program, receiving broad exposure both to the tools of econometric analysis and the application of these tools to a wide range of economic phenomena. The applications involve extensive exposure to the professional literature in various applied fields and a research seminar in which each student will undertake a sophisticated applied research project under faculty supervision.

Students are allowed a great deal of flexibility in choosing their elective courses. Possibilities include advanced quantitative courses in economics, advanced field courses in economics (e.g., money and banking, international economics) business courses and advanced mathematics courses (which are particularly useful for those who wish to pursue the PhD in economics). All of this is intended to give students the opportunity to complement their extensive quantitative training with additional knowledge and skills that will best enhance their prospects upon graduation.

MASTER OF ARTS IN ECONOMICS

MA ECONOMICS/MS FINANCE DUAL DEGREE

MA ECONOMICS/MPA PUBLIC ADMINISTRATION

Programs

Bachelor of Arts

Economics BA

Requirements for Major

Students majoring in economics for the BA degree must declare such by the time they have completed 60 semester hours and complete a minimum of 40 semester hours in

economics. The minimum grade in each UC Denver economics course is a C- (1.7), except that one D- in one economics elective is allowed. A GPA of 2.5 in economics courses taken at UC Denver is required to graduate. No pass/fail grades may count toward the major.

Program Requirements

Required Economics Courses

- ECON 2012 - Principles of Economics: Macroeconomics Summer 2010
*Registration: **ECON 2012***
- ECON 2022 - Principles of Economics: Microeconomics Summer 2010
*Registration: **ECON 2022***
- ECON 3801 - Introduction to Mathematical Economics Summer 2010
*Registration: **ECON 3801***
- ECON 3811 - Statistics with Computer Applications Summer 2010 *Registration: **ECON 3811***
- ECON 4071 - Intermediate Microeconomic Theory Summer 2010 *Registration: **ECON 4071***
- ECON 4081 - Intermediate Macroeconomic Theory Summer 2010 *Registration: **ECON 4081***
- ECON 4091 - History of Economic Thought Summer 2010 *Registration: **ECON 4091***
- ECON 4811 - Introduction to Econometrics Summer 2010 *Registration: **ECON 4811***

Total: 25 Hours

Electives

Economics Courses

Any five 3-semester-hour courses taken in economics may satisfy this requirement, other than internships and independent studies which require the approval of the department chair.

Political Science Course

One political science course. Suggested courses include but are not limited to P SC 1101, American Political System, and PSC 3022, Introduction to Comparative Politics.

Electives Total: 18 Hours

Major Total: 43 Hours

Graduating seniors must submit the three best papers that the student wrote in any three separate courses taken in the Department of Economics at UC Denver for the outcomes assessment of the economics program. The three papers should be handed in at one time in a folder to the economics office, before the first day of the month in which the student plans to graduate.

At least six of the major courses (18 semester hours), including at least three courses out of ECON 3801, 4071, 4081, 4091 and 4811, must be taken from economics faculty on the Downtown Campus.

Once a student has enrolled at UC Denver, no courses in the major may be taken outside the Downtown Campus economics department without permission from the undergraduate advisor. No math is formally required, except for the college algebra prerequisite for ECON 3801. Students desiring a recommendation to a graduate school in economics, however, should consult with economics faculty regarding additional mathematics courses.

Non Degree

Economics Minor

Students minoring in economics must complete a minimum of 15 semester hours in economics. All course work must be completed at the Downtown Campus, or the Department of Economics reserves the right to test the student's competence in the material covered. No grade below C- will be counted toward the minor requirements.

Courses

- ECON 2012 - Principles of Economics: Macroeconomics Summer 2010
*Registration: **ECON 2012***

- ECON 2022 - Principles of Economics: Microeconomics Summer 2010
*Registration: **ECON 2022***

—plus—

Three upper-division electives in economics: **9 semester hours**

(ECON 3100 - Economics of Race and Gender is acceptable)

Total: 15 Hours

At least two upper-division courses must not overlap with courses required in the student's major program.

Master of Arts

Economics MA

► Graduate School Rules apply to this program

Requirements for Admission

- general requirements of the Graduate School (including a 3.0 undergraduate cumulative GPA)
- three letters of recommendation
- 15 semester hours of undergraduate economics (including theory and quantitative methods); variations to be discussed with graduate advisor
- acceptable GRE scores
- two official transcripts from all colleges attended
- international students must submit TOEFL scores

Degree Requirements

The MA degree requires the completion of 30 semester hours of course work, of which 21 hours are core requirements. Each student's plan will be worked out in conjunction with the graduate advisor.

Core Courses

All courses must be completed with a grade of B- or better.

- ECON 5073 - Microeconomic Theory Summer 2010 Registration: **ECON 5073**
- ECON 5083 - Macroeconomic Theory Summer 2010 Registration: **ECON 5083**
- ECON 5803 - Mathematical Economics Summer 2010 Registration: **ECON 5803**
- ECON 5813 - Econometrics I Summer 2010 Registration: **ECON 5813**
- ECON 5823 - Econometrics II Summer 2010 Registration: **ECON 5823**
- ECON 6053 - Seminar In Applied Economics Summer 2010 Registration: **ECON 6053**

- ECON 6073 - Research Seminar Summer 2010 Registration: **ECON 6073**

Total: 21 Hours

Electives

Three elective courses

Total: 9 Hours

Degree Total: 30 Hours

Economics/Public Administration MA/MPA Dual Degree

► Graduate School Rules apply to this program

Admissions Advisor: Brian Duncan (brian.duncan@ucdenver.edu)

Schedule Advisor: Dan Rees (daniel.rees@ucdenver.edu)

The fields of public administration and economics are inextricably linked. Economists provide much of the theory and analytic foundation that administrators use to evaluate and implement policy. Given that the capital of the state of Colorado is in Denver, there is great need for administrators that fully understand methods of program evaluation and have the theoretical background needed to forecast how individuals and institutions will respond to new proposals. Similarly, good theory and practice must take into account how the proposals will be implemented and results interpreted. Both administrators and economists need to be engaged in constructive dialogue for either to be fully effective.

Students interested in completing the dual degree in economics and public administration *must apply separately* to each program, meet the admission requirements of each program, and *be accepted by* each program. If one program accepts a student for the dual degree but the other program does not, then the student may not graduate under the dual degree program. It is possible for students currently admitted to one program to learn about the dual degree and choose to apply after admission to either economics or the School of Public Affairs (SPA).

Admission Requirements

Deadlines for Application:	Fall	June 1
	Spring 1	December

Applicants must:

- Meet all general requirements of the Graduate School (including a 2.50 undergraduate grade-point average).
- Submit three letters of recommendation (at least two of your letters of recommendation should come from individuals who are familiar with your scholarly record)
- Submit two copies of official transcripts from all colleges attended
- Have completed 15 credit hours of undergraduate economics (including intermediate microeconomic theory and intermediate macroeconomic theory)
- Have completed courses in calculus and statistics
- All applicants, international and domestic, must submit GRE scores regardless of prior degrees, course work, or work experience. **The institution code for UCD is 4875.** Most students admitted to the MA program score 690 or above on the quantitative section of the GRE, but there is not a minimum GRE cutoff score.
- International students must submit TOEFL scores. The required minimum score is 197 (computer-based TOEFL), 71 (IBT-based TOEFL), 525 (paper-based TOEFL), or 6.0 (IELTS). **The institution code for UCD is 4875.**

The Department of Economics accepts late applications after these official deadlines. However, there is no guarantee that a late application will be processed in time for the start of the semester. Students are encouraged to apply well before the application deadline.

International students who apply after the June 1 or November 1 deadline may not have time to obtain a student visa. Being admitted to the MA program in economics does not guarantee that a student will receive a student visa in time for the start of the semester. International students who are admitted to the MA program, but fail to obtain a visa in time, may defer admission for up to one year. All questions about student visas should be directed to the [Office of International Education](#).

Course Requirements

The requirements for the dual degree in economics and public administration include completing 21 credit hours in ECON and 27 credit hours in SPA (48 total credit hours).

Core Courses

- ECON 5073 - Microeconomic Theory Summer 2010 Registration: ECON 5073
- ECON 5083 - Macroeconomic Theory Summer 2010 Registration: ECON 5083
- ECON 5803 - Mathematical Economics Summer 2010 Registration: ECON 5803
- ECON 5813 - Econometrics I Summer 2010 Registration: ECON 5813
- ECON 5823 - Econometrics II Summer 2010 Registration: ECON 5823
- PUAD 5001 - Introduction to Public Administration and Public Service Summer 2010 Registration: P AD 5001
- PUAD 5002 - Organizational Management and Change Summer 2010 Registration: P AD 5002
- PUAD 5003 - Research and Analytic Methods Summer 2010 Registration: P AD 5003
- OR-
- PUAD 5004 - Economics and Public Finance Summer 2010 Registration: P AD 5004
- PUAD 5005 - The Policy Process and Democracy Summer 2010 Registration: P AD 5005
- PUAD 5006 - Leadership and Professional Ethics Summer 2010 Registration: P AD 5006
- ECON 6073 - Research Seminar Summer 2010 Registration: ECON 6073
- OR-
- PUAD 5361 - Advanced Seminar in Public Policy and Management Summer 2010 Registration: P AD 5361

Core Total: 33 Hours

Electives

If the student takes ECON 6073, then 3 hours of elective credits must come from economics and 12 hours from public administration.

If the student takes PUAD 5361, then 6 hours of elective credits must come from economics and 9 hours from public administration.

All elective courses must be at the 5000 level and above.

Electives Total: 15 Hours

Dual Degree Total: 48 Hours

Master of Science in Finance/Master of Arts in Economics

Economics/Finance MA/MS Dual Degree

► [Graduate School Rules](#) apply to this program

For students interested in combining the quantitative skills of an economics degree with the specific applications of a business degree, we offer an MA economics/MS finance dual degree. This 42-semester-hour program is offered jointly with the Business School. It is a "dual" degree, meaning that students who complete the program earn two master's degrees: MA in economics and MS in finance. Students must be admitted separately to both the MA program in economics and MS program in finance; they may apply to both programs at the same time or apply to the economics program first, and then to the finance program at the end of their first semester, or vice versa. Both programs must be completed in the same semester to take advantage of the dual degree program. Further information about this program can be obtained from either the Department of Economics or the Business School. [Click here for admissions information for economics.](#)

The dual degree program is intended to create highly-skilled research professionals with considerable econometric skill as well as familiarity with their chosen financial institutions. Given the similarity in course work within the two programs, there can be considerable time savings for the student. Essentially, the program allows students to complete the two programs that separately would require 60 hours of course work with 42 hours of combined course work.

Degree Requirements

Core Courses

- [ECON 5073 - Microeconomic Theory](#) Summer 2010 Registration: **ECON 5073**
- [ECON 5083 - Macroeconomic Theory](#) Summer 2010 Registration: **ECON 5083**
- [ECON 5803 - Mathematical Economics](#) Summer 2010 Registration: **ECON 5803**
- [ECON 5813 - Econometrics I](#) Summer 2010 Registration: **ECON 5813**
- [ECON 5823 - Econometrics II](#) Summer 2010 Registration: **ECON 5823**
- [ECON 6073 - Research Seminar](#) Summer 2010 Registration: **ECON 6073**

- BUSN 6640 - Financial Management Summer 2010 Registration: **BUSN 6640**
- FNCE 6300 - Macroeconomics and Financial Markets Summer 2010 Registration: **FNCE 6300**
- FNCE 6330 - Investment Management Analysis Summer 2010 Registration: **FNCE 6330**

Total: 27 Hours

Electives

Four 6000-level finance elective courses: **12 semester hours**

One 5000-level or above economics elective course: **3 semester hours**

Total: 15 Hours

Dual Degree Total: 42 Hours

Educational Studies / Teacher Licensure

K–12 Teachers Licensure

UC Denver offers an undergraduate teacher licensure program through a collaboration between the College of Liberal Arts and Sciences and the School of Education & Human Development. Students in the undergraduate licensure program earn (1) a broad knowledge background and content specialization in the College of Liberal Arts and Sciences and (2) pedagogy principles and classroom experience in the teacher education program through the School of Education & Human Development. When students have satisfactorily completed requirements, they simultaneously earn their baccalaureate degree, BA or BS, and teacher licensure for the state of Colorado.

The Downtown Campus undergraduate teacher licensure program offers licensure in the following areas with the allowed liberal arts majors:

Elementary Education Licensure *

BA—Individually Structured Major

Secondary English Licensure *

BA—English

Secondary Foreign Language Licensure

BA—French

BA—Spanish

Secondary Social Studies Licensure

BA—History

BA—Political Science

Secondary Mathematics Licensure

BS—Mathematics

* Elementary Education and English licenses with dual endorsements in linguistically diverse education are pending approval by the Colorado Department of Education and the Department of Higher Education.

Students seeking undergraduate K–12 teacher licensure begin in the College of Liberal Arts and Sciences to complete the UC Denver core curriculum, content course work for both the major and licensure and an education internship. Admission to the teacher education program in the School of Education & Human Development is competitive and requires students to do the following:

- attain a minimum 2.75 cumulative undergraduate GPA
- complete 120 hours of supervised experience with children through an approved internship
- complete all general education requirements
- complete all course work in the major
- complete all teacher education admission requirements

Interested students should contact the CLAS Advising Office, North Classroom, 4002, 303-556-2555, and ask to speak to the education academic advisor about undergraduate teacher licensure.

Further information can be found in the [Teacher Education Program description](#) in the School of Education and Human Development section of this catalog.

EDUCATIONAL STUDIES MINOR

Programs

Non Degree

Educational Studies Minor

The preparation of high-quality K–12 teachers is dependent on both content knowledge and teaching methodologies. The College of Liberal Arts and Sciences, in cooperation with the School of Education & Human Development, offers an educational studies minor to assist undergraduate students unable to fit licensure course work into their bachelor's degree and to prepare them for the graduate-level licensure programs.

The CLAS educational studies minor is flexible in design and individually tailored for each student to complete some content requirements required for admission into the graduate-level teacher licensure programs at UC Denver. The educational studies minor requires course work in psychology and human development, democratic schooling principles, a K–12 internship and undergraduate course work required for licensure outside college and major requirements.

The educational studies minor is open to all Downtown Campus undergraduate students. For more information, students should contact the CLAS Advising Office, North Classroom, 4002, 303-556-2555.

English

Chair: Nancy Ciccone

Program Assistant: Francine Olivas-Zarate

Office: 1015 9th Street Park

Telephone: 303-556-2584

Fax: 303-556-2959

Web site: clas.ucdenver.edu/english/

Faculty

Professors:

Susan Linville, PhD, University of Colorado

Bradford K. Mudge, PhD, University of Texas, Austin

Associate Professors:

Joanne Addison, PhD, Purdue University

Pompa Banerjee, PhD, University of Massachusetts

Nancy Ciccone, PhD, University of California, Berkeley

Michelle Comstock, PhD, Purdue University
Colleen Donnelly, PhD, University of Washington
Jeffrey Franklin, PhD, University of Florida
Philip Joseph, PhD, State University of New York, Buffalo
Richard VanDeWeghe, PhD, Michigan State University
Catherine A. Wiley, PhD, University of Wisconsin, Madison
Cynthia Wong, PhD, University of Wisconsin, Milwaukee
Ian Ying, PhD, University of Arizona
Jake York, MFA, PhD, Cornell University

Assistant Professors:

Brian Barker, PhD, University of Houston
Teague Bohlen, MFA, Arizona State University
Jennifer S. Davis, MFA, University of Alabama
Gillian Silverman, PhD, Duke University
Amy Vidali, PhD, University of Washington

English majors learn to acquire and synthesize information and to present their ideas and opinions skillfully. They find employment in fields in which the sophisticated use of language is necessary for achievement and advancement. Many graduates go on to postgraduate study, not only in writing, film studies and literature, but to schools of medicine, law, education, journalism and business.

Undergraduate

English

Undergraduates wishing to major in English must declare the major and option by the time they have completed 60 semester hours. The English major allows a student to choose from one of three options: literature, creative writing or film studies. Students interested in a double major must choose one option in English as well as the English writing major and are required to complete 21 different courses (63 hours).

ENGLISH MAJOR

ENGLISH WRITING MAJOR

BA in English With Secondary Teacher Licensure

Students seeking secondary English teacher licensure may pursue a BA in English with a restricted literature option. This enables them to complete their English major as well

as fulfill requirements for licensure at the undergraduate level. Call 303-556-3790 for more information.

Departmental Honors

Latin honors may be earned by participating in the department's honors program. Students with a 3.5 GPA in English are encouraged to begin the program in their junior year. The program requires additional course work (1-3 hours) and affords students the opportunity to work individually with the professor of their choice. Detailed information is available in the English department office.

Minors

The Department of English also offers four separate minors. No courses taken for a minor may be counted toward an English major.

Literature Minor

Writing Minor

Creative Writing Minor

Film Studies Minor

Certificates

The English department also offers a professional writing certificate and a teaching of English to speakers of other languages certificate.

Professional Writing Certificate

Teaching of English to Speakers of Other Languages (CTESOL)

Additional Information

For additional information on majors, options, minors and certificates call the Department of English office at 303-556-2584.

Graduate

MA IN ENGLISH

Programs

Bachelor of Arts

English BA

The course of study offered by the Department of English is designed to develop a student's ability to read literature responsibly and imaginatively, to foster an understanding and appreciation of our literary inheritance and to provide the historical perspective from which to evaluate contemporary writing. Careful study of the use of the English language also should help a student to resist the misuse and corruption of language in politics, the media and elsewhere. Students who complete the program in English are expected to have mastered the ability to express their ideas in clear and succinct prose.

Requirements for the English Major

Students majoring in English must present a total of 39 hours in the literature, film and/or creative writing options (excluding ENGL 1010, 1020 and 2030), of which 27 hours must be earned in upper-division courses. None of the required 39 hours may be taken on a pass/fail basis. Only courses completed with a grade of C (2.0) or above may be counted toward the major. At least 15 upper-division hours of the student's work in English must be taken from English faculty on the Downtown Campus. Students planning to major in English must consult with an advisor as soon as possible. Students must choose one of the three options.

LITERATURE OPTION

REQUIRED COURSES

- ENGL 1400 - Introduction to Literary Studies *Summer 2010 Registration:* **ENGL 1400**
ENGL 1400 will be replaced during 2010-11 by ENGL 2450 when it becomes available
- ENGL 3001 - Critical Writing *Summer 2010 Registration:* **ENGL 3001**
- ENGL 4999 - Literary Studies Senior Seminar *Summer 2010 Registration:* **ENGL 4999**

Total: 9 Hours

OPTION-SPECIFIC DISTRIBUTION REQUIREMENTS

Choose one course from each of the six areas below. No course is repeatable.

Historical Survey

- ENGL 4080 - History of the English Language Summer 2010 Registration: **ENGL 4080**
- ENGL 4166 - History of American Poetry Summer 2010 Registration: **ENGL 4166**
- ENGL 4200 - History of the English Novel I Summer 2010 Registration: **ENGL 4200**
- ENGL 4210 - History of the English Novel II Summer 2010 Registration: **ENGL 4210**
- ENGL 4230 - The American Novel Summer 2010 Registration: **ENGL 4230**
- ENGL 4236 - The American Short Story Summer 2010 Registration: **ENGL 4236**
- ENGL 4300 - History of British Drama Summer 2010 Registration: **ENGL 4300**
- ENGL 4320 - History of Poetry in English Summer 2010 Registration: **ENGL 4320**
- ENGL 4350 - History of American Drama Summer 2010 Registration: **ENGL 4350**

Old English, Medieval Language and Literature

- ENGL 4400 - Old English I Summer 2010 Registration: **ENGL 4400**
- ENGL 4500 - Medieval Literature Summer 2010 Registration: **ENGL 4500**
- ENGL 4510 - Whores and Saints: Medieval Women Summer 2010 Registration: **ENGL 4510**
- ENGL 4730 - Chaucer's Canterbury Tales Summer 2010 Registration: **ENGL 4730**
- ENGL 4731 - Chaucer's Early Poetry Summer 2010 Registration: **ENGL 4731**

Renaissance, Restoration and 18th Century British Literature

- ENGL 3661 - Shakespeare Summer 2010 Registration: **ENGL 3661**
- ENGL 4520 - English Renaissance Summer 2010 Registration: **ENGL 4520**
- ENGL 4530 - Milton Summer 2010 Registration: **ENGL 4530**
- ENGL 4540 - Restoration and the 18th Century Summer 2010 Registration: **ENGL 4540**

Eighteenth- and Nineteenth-Century British Literature

- ENGL 4200 - History of the English Novel I Summer 2010 Registration: **ENGL 4200**

- ENGL 4210 - History of the English Novel II Summer 2010 Registration: **ENGL 4210**
- ENGL 4560 - English Romanticism Summer 2010 Registration: **ENGL 4560**
- ENGL 4580 - The Victorian Age Summer 2010 Registration: **ENGL 4580**

American Literature

- ENGL 3700 - American Literature to the Civil War Summer 2010 Registration: **ENGL 3700**
- ENGL 3750 - American Literature from the Civil War Summer 2010 Registration: **ENGL 3750**
- ENGL 4166 - History of American Poetry Summer 2010 Registration: **ENGL 4166**
- ENGL 4220 - African-American Literature Summer 2010 Registration: **ENGL 4220**
- ENGL 4230 - The American Novel Summer 2010 Registration: **ENGL 4230**
- ENGL 4236 - The American Short Story Summer 2010 Registration: **ENGL 4236**
- ENGL 4350 - History of American Drama Summer 2010 Registration: **ENGL 4350**

Modern and Contemporary Literature

- ENGL 3450 - Twentieth Century Women Writers Summer 2010 Registration: **ENGL 3450**
- ENGL 3480 - Modern Drama Summer 2010 Registration: **ENGL 3480**
- ENGL 4250 - Twentieth Century Fiction Summer 2010 Registration: **ENGL 4250**
- ENGL 4460 - Contemporary World Literature Summer 2010 Registration: **ENGL 4460**
- ENGL 4600 - Modernism Summer 2010 Registration: **ENGL 4600**

Total: 18 Hours

REQUIRED ELECTIVES

Choose four English courses (literature, film or creative writing); two at the 3000 or 4000 level, and two at any level.

Total: 12 Hours

Literature Option Total: 39 Hours

Additional courses, total not to exceed 48 hours (any level).

CREATIVE WRITING OPTION

Students interested in pursuing careers or graduate work in creative writing should choose the creative writing option in literature.

OPTION-SPECIFIC REQUIREMENTS

- ENGL 1400 - Introduction to Literary Studies Summer 2010 Registration: **ENGL 1400**
ENGL 1400 will be replaced during 2010-11 by ENGL 2450 when it becomes available
- ENGL 1601 - Telling Tales: Narrative Art in Literature and Film Summer 2010 Registration: **ENGL 1601**
-OR-
- ENGL 2250 - Introduction to Film Summer 2010 Registration: **ENGL 2250**
- ENGL 2154 - Introduction to Creative Writing Summer 2010 Registration: **ENGL 2154**
- ENGL 3001 - Critical Writing Summer 2010 Registration: **ENGL 3001**

Total: 12 Hours

ADVANCED COURSE WORK

Complete all courses in either poetry or fiction.

Poetry

- ENGL 3020 - Poetry Workshop Summer 2010 Registration: **ENGL 3020**
- ENGL 4025 - Advanced Poetry Workshop Summer 2010 Registration: **ENGL 4025**
- ENGL 4080 - History of the English Language Summer 2010 Registration: **ENGL 4080**
-OR-
- ENGL 4160 - Poetics Summer 2010 Registration: **ENGL 4160**
- ENGL 4166 - History of American Poetry Summer 2010 Registration: **ENGL 4166**
-OR-
- ENGL 4320 - History of Poetry in English Summer 2010 Registration: **ENGL 4320**

Total: 12 Hours

Fiction

- ENGL 3050 - Fiction Workshop Summer 2010 Registration: **ENGL 3050**
- ENGL 4055 - Advanced Fiction Workshop Summer 2010 Registration: **ENGL 4055**
- ENGL 4200 - History of the English Novel I Summer 2010 Registration: **ENGL 4200**
- -OR-
- ENGL 4210 - History of the English Novel II Summer 2010 Registration: **ENGL 4210**
- ENGL 4230 - The American Novel Summer 2010 Registration: **ENGL 4230**
- -OR-
- ENGL 4236 - The American Short Story Summer 2010 Registration: **ENGL 4236**

Total: 12 Hours

REQUIRED AREA ELECTIVES

Choose three:

- ENGL 3160 - Language Theory Summer 2010 Registration: **ENGL 3160**
- -OR-
- ENGL 4080 - History of the English Language Summer 2010 Registration: **ENGL 4080**
- ENGL 3520 - Religious Narratives Summer 2010 Registration: **ENGL 3520**
- ENGL 3661 - Shakespeare Summer 2010 Registration: **ENGL 3661**
- ENGL 3700 - American Literature to the Civil War Summer 2010 Registration: **ENGL 3700**
- ENGL 3750 - American Literature from the Civil War Summer 2010 Registration: **ENGL 3750**
- * ENGL 4000 - Studies of Major Authors Summer 2010 Registration: **ENGL 4000**
- ENGL 4166 - History of American Poetry Summer 2010 Registration: **ENGL 4166**
- ENGL 4200 - History of the English Novel I Summer 2010 Registration: **ENGL 4200**
- ENGL 4210 - History of the English Novel II Summer 2010 Registration: **ENGL 4210**
- ENGL 4220 - African-American Literature Summer 2010 Registration: **ENGL 4220**
- ENGL 4230 - The American Novel Summer 2010 Registration: **ENGL 4230**
- ENGL 4235 - Faulkner Summer 2010 Registration: **ENGL 4235**
- ENGL 4236 - The American Short Story Summer 2010 Registration: **ENGL 4236**
- ENGL 4250 - Twentieth Century Fiction Summer 2010 Registration: **ENGL 4250**

- OR-
- ENGL 4460 - Contemporary World Literature Summer 2010 Registration: **ENGL 4460**
- OR-
- ENGL 4600 - Modernism Summer 2010 Registration: **ENGL 4600**
- ENGL 4300 - History of British Drama Summer 2010 Registration: **ENGL 4300**
- OR-
- ENGL 4350 - History of American Drama Summer 2010 Registration: **ENGL 4350**
- ENGL 4320 - History of Poetry in English Summer 2010 Registration: **ENGL 4320**
- ENGL 4500 - Medieval Literature Summer 2010 Registration: **ENGL 4500**
- ENGL 4510 - Whores and Saints: Medieval Women Summer 2010 Registration: **ENGL 4510**
- ENGL 4520 - English Renaissance Summer 2010 Registration: **ENGL 4520**
- ENGL 4530 - Milton Summer 2010 Registration: **ENGL 4530**
- ENGL 4540 - Restoration and the 18th Century Summer 2010 Registration: **ENGL 4540**
- ENGL 4560 - English Romanticism Summer 2010 Registration: **ENGL 4560**
- ENGL 4580 - The Victorian Age Summer 2010 Registration: **ENGL 4580**
- ENGL 4730 - Chaucer's Canterbury Tales Summer 2010 Registration: **ENGL 4730**
- OR-
- ENGL 4731 - Chaucer's Early Poetry Summer 2010 Registration: **ENGL 4731**

Total: 9 Hours

* Repeatable if topics differ

Choose one:

- ENGL 2390 - Writing the Short Script Summer 2010 Registration: **ENGL 2390**
- ENGL 2415 - Introduction to Movie Writing Summer 2010 Registration: **ENGL 2415**
- ENGL 3020 - Poetry Workshop Summer 2010 Registration: **ENGL 3020**
- ENGL 3050 - Fiction Workshop Summer 2010 Registration: **ENGL 3050**
- ENGL 3084 - Advanced Composition Summer 2010 Registration: **ENGL 3084**
- ENGL 3154 - Technical Writing Summer 2010 Registration: **ENGL 3154**
- ENGL 3170 - Business Writing Summer 2010 Registration: **ENGL 3170**
- ENGL 3416 - Magazine Writing Summer 2010 Registration: **ENGL 3416**
- ENGL 4180 - Argumentation and Logic Summer 2010 Registration: **ENGL 4180**
- ENGL 4190 - Special Topics in Rhetoric and Writing Summer 2010 Registration: **ENGL 4190**

- ENGL 4701 - Multimedia in the Community Summer 2010 Registration: **ENGL 4701**

Total: 3 Hours

INTERNSHIP OR SENIOR WRITING PROJECT IN CREATIVE WRITING OR FILM STUDIES

- ENGL 3939 - Internship/Cooperative Education Summer 2010 Registration: **ENGL 3939**
- OR-
- ENGL 4990 - Senior Writing Project in Creative Writing or Film Studies Summer 2010 Registration: **ENGL 4990**

Total: 3 Hours

Creative Writing Option Total: 39 Hours

Additional courses, total not to exceed 48 hours (any level).

FILM STUDIES OPTION

The film studies option within the English major is designed to prepare students for a range of professional careers in areas such as screenwriting, film criticism, video production and the teaching of film, as well as those students who plan to pursue graduate programs in film studies. Required courses give students a strong grounding in film history, verbal and visual narrative, and the critical terms and techniques used in both film and literary analysis. Electives give students the option of emphasizing either the creative approach or the critical approach to moving-image media, or a combination of the two. The film studies option also affords students the opportunity to create video productions using state-of-the-art digital video and editing equipment and the possibility of airing their productions on cable TV. Offered in cooperation with the College of Arts & Media (CAM), the film studies option can be completed entirely on the Auraria Campus.

OPTION-SPECIFIC REQUIREMENTS

- ENGL 2250 - Introduction to Film Summer 2010 Registration: **ENGL 2250**
- ENGL 3070 - Film History I Summer 2010 Registration: **ENGL 3070**
- ENGL 3080 - Film History II Summer 2010 Registration: **ENGL 3080**

- ENGL 4420 - Film Theory and Criticism Summer 2010 Registration: **ENGL 4420**

Total: 12 Hours

REQUIRED AREA ELECTIVES

Nine elective courses are required, and may be taken in all areas listed below. Fifteen of the 27-hour minimum must be at the 3000/4000 level. Production courses must be taken through the College of Arts & Media (CAM). Equivalent screenwriting courses may also be taken through CAM.

A. Critical Studies

- ENGL 1400 - Introduction to Literary Studies Summer 2010 Registration: **ENGL 1400**
ENGL 1400 will be replaced during 2010-11 by ENGL 2450 when it becomes available
- ENGL 1601 - Telling Tales: Narrative Art in Literature and Film Summer 2010 Registration: **ENGL 1601**
- ENGL 3001 - Critical Writing Summer 2010 Registration: **ENGL 3001**
- * ENGL 3075 - Film Genres Summer 2010 Registration: **ENGL 3075**
- * ENGL 3085 - Film Directors Summer 2010 Registration: **ENGL 3085**
- ENGL 3200 - From Literature to Film Summer 2010 Registration: **ENGL 3200**
- * ENGL 4190 - Special Topics in Rhetoric and Writing Summer 2010 Registration: **ENGL 4190**
(film and media-focused only; e.g., Film and Rhetoric)
- ENGL 4701 - Multimedia in the Community Summer 2010 Registration: **ENGL 4701**
- * ENGL 4770 - Topics in English: Film and Literature Summer 2010 Registration: **ENGL 4770**
(film and media-focused only)
- ENGL 4990 - Senior Writing Project in Creative Writing or Film Studies Summer 2010 Registration: **ENGL 4990**
(can be taken under B or C)
May also choose from any single approved film course offered through another department or a single 3000/4000-level literature course (3 semester hours)

B. Screenwriting

- ENGL 2390 - Writing the Short Script Summer 2010 Registration: **ENGL 2390**
- ENGL 2415 - Introduction to Movie Writing Summer 2010 Registration: **ENGL 2415**
- ENGL 3415 - Screenwriting Workshop Summer 2010 Registration: **ENGL 3415**

C. Production

- FILM 2000 - Film/Video Production II Summer 2010 Registration: **FILM 2000**
- FILM 2150 - Film and Video Postproduction II Summer 2010 Registration: **FILM 2150**

Total: 27 Hours

* Repeatable if a different genre/director/topic.

Film Studies Option Total: 39 Hours

Additional courses, total not to exceed 48 hours (any level).

College Core Courses for English Majors

Students must complete the College of Liberal Arts and Sciences core curriculum requirements as specified in the [CLAS Core Curriculum/Graduation Requirements chart](#). Check the schedule planner for specific course offerings.

Electives

Elective hours may be selected at the student's discretion, but students are urged to work with their advisor in outlining a program in which electives and requirements support each other. Six hours earned in the internship/cooperative education program may be counted toward the major.

English Writing BA

Especially designed for future writers, the writing major offers a wide range of intensive writing experiences combining such areas as rhetoric, professional, general and creative writing.

Requirements for the English Writing Major

Students majoring in writing must present a total of 39 hours for the major (excluding ENGL 1010, 1020 and 2030), of which 27 hours must be earned in upper-division courses. None of the required 39 hours may be taken on a pass/fail basis. Only courses completed with a grade of C (2.0) or above may be counted toward the major. At least 15 upper-division hours of the student's work in writing must be taken from English

faculty on the Downtown Campus. Students planning to major in writing should consult with an advisor as soon as possible. This major is also available online.

Required Courses

- ENGL 2070 - Grammar, Rhetoric and Style Summer 2010 Registration: **ENGL 2070**
- ENGL 2154 - Introduction to Creative Writing Summer 2010 Registration: **ENGL 2154**
- ENGL 3084 - Advanced Composition Summer 2010 Registration: **ENGL 3084**
- ENGL 3154 - Technical Writing Summer 2010 Registration: **ENGL 3154**
-OR-
- ENGL 3170 - Business Writing Summer 2010 Registration: **ENGL 3170**
- ENGL 3160 - Language Theory Summer 2010 Registration: **ENGL 3160**
-OR-
- ENGL 4080 - History of the English Language Summer 2010 Registration: **ENGL 4080**
- ENGL 4180 - Argumentation and Logic Summer 2010 Registration: **ENGL 4180**
- ENGL 4190 - Special Topics in Rhetoric and Writing Summer 2010 Registration: **ENGL 4190**

Total: 21 Hours

Advanced Course Work

Students pursuing a general writing degree may choose from all writing courses listed. Students pursuing a concentration in professional writing or teaching English as a second language must complete at least 9 hours in those areas.

Professional Writing Concentration

Choose at least three:

- ENGL 3154 - Technical Writing Summer 2010 Registration: **ENGL 3154**
- ENGL 3170 - Business Writing Summer 2010 Registration: **ENGL 3170**
- ENGL 3416 - Magazine Writing Summer 2010 Registration: **ENGL 3416**
- ENGL 3939 - Internship/Cooperative Education Summer 2010 Registration: **ENGL 3939**
- * ENGL 4190 - Special Topics in Rhetoric and Writing Summer 2010 Registration: **ENGL 4190**
(professional writing topic)
- ENGL 4280 - Proposal and Grant Writing Summer 2010 Registration: **ENGL 4280**

- ENGL 4701 - Multimedia in the Community Summer 2010 Registration: **ENGL 4701**
- ENGL 4995 - Senior Writing Project Summer 2010 Registration: **ENGL 4995**

* Repeatable when title/content differ.

Teaching English as a Second Language Concentration

Choose at least three:

- ENGL 3160 - Language Theory Summer 2010 Registration: **ENGL 3160**
- ENGL 4601 - Principles and Practices of Second Language Acquisition Summer 2010 Registration: **ENGL 4601**
- * ENGL 3939 - Internship/Cooperative Education Summer 2010 Registration: **ENGL 3939**
- OR-
- * ENGL 4190 - Special Topics in Rhetoric and Writing Summer 2010 Registration: **ENGL 4190**
- OR-
- * ENGL 4995 - Senior Writing Project Summer 2010 Registration: **ENGL 4995**

* TESOL topics only

General Writing Courses

- ENGL 3020 - Poetry Workshop Summer 2010 Registration: **ENGL 3020**
- ENGL 3050 - Fiction Workshop Summer 2010 Registration: **ENGL 3050**
- ENGL 3415 - Screenwriting Workshop Summer 2010 Registration: **ENGL 3415**
- ENGL 3939 - Internship/Cooperative Education Summer 2010 Registration: **ENGL 3939**
- ENGL 4025 - Advanced Poetry Workshop Summer 2010 Registration: **ENGL 4025**
- ENGL 4055 - Advanced Fiction Workshop Summer 2010 Registration: **ENGL 4055**
- ENGL 4190 - Special Topics in Rhetoric and Writing Summer 2010 Registration: **ENGL 4190**
- ENGL 4990 - Senior Writing Project in Creative Writing or Film Studies Summer 2010 Registration: **ENGL 4990**
- ENGL 4995 - Senior Writing Project Summer 2010 Registration: **ENGL 4995**

Total Advanced Course Work: 9-15 Hours

* Repeatable when title/content differ.

Electives

Students may opt to replace two of the five required “advanced course work” courses with other English 3000-4000 level courses (writing, literature, film, creative writing) and/or approved writing courses from other departments.

Total: 0-6 Hours

Senior Seminar in Writing

- ENGL 4991 - Senior Seminar in Writing *Summer 2010 Registration: ENGL 4991*

Total: 3 Hours

Major Total: 39 Hours

Additional courses, total not to exceed 48 hours (any level).

College Core Courses for English Writing Majors

Students must complete the College of Liberal Arts and Sciences core curriculum requirements as specified in the CLAS Core Curriculum/Graduation Requirements chart. Check the Web Schedule Planner for specific course offerings.

Electives

Elective hours may be selected at the student’s discretion, but students are urged to work with their advisor in outlining a program in which electives and requirements support each other. Up to 6 hours earned in the cooperative education program may be counted toward the major.

Certificate

Professional Writing Certificate

The certificate consists of 12 semester hours that may be completed in one or two semesters. Enrollment is open to undergraduates, graduates, working professionals and returning students, and the certificate has no prerequisites.

Courses

Required Courses

- ENGL 2070 - Grammar, Rhetoric and Style Summer 2010 Registration: **ENGL 2070**
-OR-
- ENGL 2154 - Introduction to Creative Writing Summer 2010 Registration: **ENGL 2154**
- ENGL 3154 - Technical Writing Summer 2010 Registration: **ENGL 3154**
-OR-
- ENGL 3170 - Business Writing Summer 2010 Registration: **ENGL 3170**
- ENGL 3084 - Advanced Composition Summer 2010 Registration: **ENGL 3084**
-OR-
- ENGL 4701 - Multimedia in the Community Summer 2010 Registration: **ENGL 4701**
-OR-
- ENGL 5701 - Multimedia in the Community Summer 2010 Registration: **ENGL 5701**

Total: 9 Hours

Elective

- ENGL 3084 - Advanced Composition Summer 2010 Registration: **ENGL 3084** (if not taken as a required course)
- ENGL 3154 - Technical Writing Summer 2010 Registration: **ENGL 3154** (if not taken as a required course)
- ENGL 3170 - Business Writing Summer 2010 Registration: **ENGL 3170** (if not taken as a required course)
- ENGL 3416 - Magazine Writing Summer 2010 Registration: **ENGL 3416**
- ENGL 3939 - Internship/Cooperative Education Summer 2010 Registration: **ENGL 3939**
- ENGL 4180 - Argumentation and Logic Summer 2010 Registration: **ENGL 4180**
- ENGL 4190 - Special Topics in Rhetoric and Writing Summer 2010 Registration: **ENGL 4190** (with advisor approval)

- ENGL 4280 - Proposal and Grant Writing *Summer 2010 Registration:* **ENGL 4280**

Other writing electives may be taken as offered, with advisor approval.

Total: 3 Hours

Total: 12 Hours

Teaching of English to Speakers of Other Languages (CTESOL)

Program Description

To meet the increasing needs of individuals seeking advanced training in teaching English as a second language, the English department at UC Denver offers a graduate certificate in the teaching of English to speakers of other languages (CTESOL).

The certificate program is designed to build the necessary skills to teach English as a second language through focused preparation. It is primarily aimed at native speakers of English who want to teach overseas, but may serve the needs of international students wanting to teach English in their home country or other countries.

Upon successful completion of the program, CTESOL participants will be able to:

- Discuss the theoretical basis of second language instruction
- Demonstrate a variety of effective ESL teaching techniques
- Explain, in pedagogically relevant ways, the linguistic structures of the English language

Curriculum

The curriculum consists of 12 semester hours (9 semester hours of required courses, and three semester hours of electives). The required courses must be taken at UC Denver. A GPA of 3.0 or better is required for all graduate courses.

Required Courses

- ENGL 5171 - Language Theory *Summer 2010 Registration:* **ENGL 5171**
- ENGL 5601 - Principles and Practices of Second Language Acquisition *Summer 2010 Registration:* **ENGL 5601**

- ENGL 5651 - Second Language Writing Summer 2010 Registration: ENGL 5651

Total: 9 Hours

Elective Courses

- ENGL 5093 - Teaching of Writing Summer 2010 Registration: ENGL 5093
or an alternative elective approved by the program advisor

Total: 3 Hours

Total: 12 Hours

Additional Information

LENGTH OF TIME

The course of study will typically last one academic year, including the summer session.

WHEN YOU MAY BEGIN

You may begin in any semester. There is no fixed deadline for application for admission.

PREREQUISITES

All applicants must have a bachelor's degree or the equivalent to be accepted to the program. Graduate students at UC Denver will also be permitted to apply for the certificate while they are concurrently completing another graduate degree. Permission may not be granted to graduate students in applied linguistics.

Non-native speakers of English are required to submit an official TOEFL (Test of English as a Foreign Language) report showing a score of at least 580. Those who score below 580 but above 525 on the TOEFL may be admitted conditionally to the program. Under these conditions, students will have their English language skills assessed by the faculty of the program immediately after they arrive on campus to determine whether further courses are needed to develop English language proficiency. After assessment, the students may be assigned to full-time language study in an intensive English program, permitted to take graduate-level classes on a conditional basis along with further designated language study or permitted to begin graduate study without further restrictions.

CONTACT INFORMATION

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Non Degree

Creative Writing Minor

The creative writing minor gives students the opportunity to complement their area of major study with experience writing and reading poetry or fiction.

Students minoring in creative writing must complete a total of 15 hours. None of the required courses may be taken pass/fail. Only courses completed with a grade of C (2.0) or better may be counted toward the minor. All upper-division courses must be taken with Downtown Campus English faculty. Students should take ENGL 1020 before beginning the minor.

Courses

Required Courses

- ENGL 1400 - Introduction to Literary Studies *Summer 2010 Registration:* **ENGL 1400**
ENGL 1400 will be replaced during 2010-11 by ENGL 2450 when it becomes available
- ENGL 2154 - Introduction to Creative Writing *Summer 2010 Registration:* **ENGL 2154**

Total: 6 Hours

Requirements for poetry

- ENGL 3020 - Poetry Workshop *Summer 2010 Registration:* **ENGL 3020**
- ENGL 4025 - Advanced Poetry Workshop *Summer 2010 Registration:* **ENGL 4025**
- ENGL 4160 - Poetics *Summer 2010 Registration:* **ENGL 4160**
-OR-
- ENGL 4166 - History of American Poetry *Summer 2010 Registration:* **ENGL 4166**
-OR-
- ENGL 4320 - History of Poetry in English *Summer 2010 Registration:* **ENGL 4320**

Total: 9 Hours

Requirements for fiction

- ENGL 3050 - Fiction Workshop Summer 2010 Registration: **ENGL 3050**
- ENGL 4055 - Advanced Fiction Workshop Summer 2010 Registration: **ENGL 4055**
- ENGL 4200 - History of the English Novel I Summer 2010 Registration: **ENGL 4200**
-OR-
- ENGL 4210 - History of the English Novel II Summer 2010 Registration: **ENGL 4210**
-OR-
- ENGL 4230 - The American Novel Summer 2010 Registration: **ENGL 4230**
-OR-
- ENGL 4236 - The American Short Story Summer 2010 Registration: **ENGL 4236**

Total: 9 Hours

Minor Total: 15 Hours

Film Studies Minor

The film studies minor offers students the opportunity to gain an informed understanding of the sophisticated medium of film, its language and history. Courses cover critical writing about cinema, creative screenwriting, the evolution of Hollywood movies, international cinema and film in its cultural context. The film studies minor makes a valuable complement to a range of undergraduate majors.

Students must complete a total of 15 hours for the film studies minor. None of the required 15 hours may be taken pass/fail. Only courses completed with a grade of C (2.0) or better may be counted toward the minor. A minimum of 9 hours must be taken with Downtown Campus faculty. Students are strongly advised to take ENGL 2250, Introduction to Film, before taking other film courses. Students are also advised to fulfill the liberal arts and sciences core curriculum writing requirements before enrolling in upper-division topics in film courses. No more than two online film studies courses can be counted toward the minor.

Courses

Required Courses

- ENGL 2250 - Introduction to Film Summer 2010 Registration: **ENGL 2250**
- ENGL 3070 - Film History I Summer 2010 Registration: **ENGL 3070**
- OR-
- ENGL 3080 - Film History II Summer 2010 Registration: **ENGL 3080**

Total: 6 Hours

Electives

Choose three:

- ENGL 2415 - Introduction to Movie Writing Summer 2010 Registration: **ENGL 2415**
 - ENGL 3070 - Film History I Summer 2010 Registration: **ENGL 3070**
 - OR-
 - ENGL 3080 - Film History II Summer 2010 Registration: **ENGL 3080**
 - * ENGL 3075 - Film Genres Summer 2010 Registration: **ENGL 3075**
 - * ENGL 3085 - Film Directors Summer 2010 Registration: **ENGL 3085**
 - ENGL 3200 - From Literature to Film Summer 2010 Registration: **ENGL 3200**
 - ENGL 4420 - Film Theory and Criticism Summer 2010 Registration: **ENGL 4420**
 - * ENGL 4770 - Topics in English: Film and Literature Summer 2010 Registration: **ENGL 4770** (film topics only)
- Approved film courses from another department (3 semester hours)

Total: 9 Hours

Total: 15 Hours

* Repeatable with different topic or title.

Literature Minor

This program is designed for students who are interested in the study of English literature but who have elected to major in another area. The recommended series of courses allows students to become acquainted with some of the methods of literary study and with a number of the most important literary works.

The literature minor allows students to complement their area of major study with systematic experience in literature.

Students minoring in literature must complete a total of 15 hours (excluding ENGL 1010, 1020, 2030). None of the required 15 hours may be taken pass/fail. Only courses completed with a grade of C (2.0) or better may be counted toward the minor. A minimum of 9 upper-division hours of work in the minor must be taken with Downtown Campus English faculty.

Courses

Required Courses

- ENGL 1400 - Introduction to Literary Studies *Summer 2010 Registration: ENGL 1400*
ENGL 1400 will be replaced during 2010-11 by ENGL 2450 when it becomes available
- ENGL 3001 - Critical Writing *Summer 2010 Registration: ENGL 3001*

Total: 6 Hours

Electives; distribution requirements

Any three upper division courses, at least two of which must be from those listed as distribution requirements for the major.

Total: 9 Hours

Minor Total: 15 Hours

Restrictions: These requirements may not be met by independent study. All upper-division courses must be taken from a member of the Downtown Campus faculty.

Writing Minor

The writing minor allows students to complement their area of major study with systematic experience in writing.

Students minoring in writing must complete a total of 15 hours (excluding ENGL 1010, 1020, 2030). None of the required 15 hours may be taken pass/fail. Only courses completed with a grade of C (2.0) or better may be counted toward the minor. A minimum of 9 upper-division hours of work in the minor must be taken with Downtown Campus English faculty.

Students are encouraged to take ENGL 1020 and ENGL 2030 before beginning the minor. (ENGL 2154 and ENGL 2030 can be taken concurrently.)

Courses

Required Courses

- ENGL 2070 - Grammar, Rhetoric and Style Summer 2010 Registration: **ENGL 2070**
- ENGL 4180 - Argumentation and Logic Summer 2010 Registration: **ENGL 4180**
- ENGL 4190 - Special Topics in Rhetoric and Writing Summer 2010 Registration: **ENGL 4190**

Total: 9 Hours

Distributed Course

Choose one course from the following:

- ENGL 2154 - Introduction to Creative Writing Summer 2010 Registration: **ENGL 2154**
-OR-
- ENGL 3154 - Technical Writing Summer 2010 Registration: **ENGL 3154**
-OR-
- ENGL 3170 - Business Writing Summer 2010 Registration: **ENGL 3170**

Total: 3 Hours

Elective

One 3000-/4000-level writing course.

Total: 3 Hours

Minor Total: 15 Hours

Master of Arts

English MA

► Graduate School Rules apply to this program

Program Director: Michelle Comstock

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The department offers three programs in the English MA degree: 1) the literature program increases students' knowledge of English and American literature and also their familiarity with a variety of critical methodologies; 2) the rhetoric and teaching of writing program introduces students to the theory, research and pedagogy underlying contemporary instruction in secondary and college composition; 3) the applied linguistics program introduces students to the principles, practices and concerns of teaching English to adults whose first language is not English.

Students concurrently pursuing a master's in education can count up to 6 hours of education courses toward their MA in English with their English advisor's permission.

Contact the graduate program director for more information on these programs.

Requirements for Admission

Applicants for any of the programs described above must submit all application materials by either the spring, summer or fall deadline. The deadline for fall enrollment is April 1; the deadline for spring and summer enrollment is October 1. Complete applications for all three programs must include the following:

- a completed University of Colorado graduate application
- two copies of all graduate and undergraduate transcripts, and for any nondegree courses previously taken
- three letters of recommendation in which the recommender specifically addresses the candidate's ability to pursue successfully the program chosen
- recent scores on the GRE, including the analytical, verbal and quantitative portions. GRE score average should be 600 or higher. Analytical writing score should be 4 or higher.
- evidence of a 3.0 GPA in previous courses
- statement of purpose
- 10-page critical writing sample

In addition to these requirements, applicants for the MA in literature must have successfully completed 24 semester hours in English courses (graduate or

undergraduate), excluding courses in composition, creative writing or speech. At least 15 of these semester hours must be at the upper-division level.

Transfer of Credits from Other CU Campuses

Students admitted to graduate study in English may complete all of their course requirements for the MA degree at UC Denver. Up to 12 semester hours (total) may be transferred from the University of Colorado-Boulder, University of Colorado-Colorado Springs or other graduate program; however, such transfer requires the written approval of the specific program coordinator. Only 12 semester hours of courses taken at UC Denver before acceptance into the program can be counted toward the degree. Further, work already applied toward a graduate degree received at the University of Colorado or at another institution cannot be transferred toward another graduate degree of the same level at UC Denver. (For other rules concerning transfer of graduate credits, see the [Graduate School Rules](#).) For more information, contact the graduate program director at 303-556-4648.

Degree Requirements

The literature program requires 33 semester hours; the rhetoric and teaching of writing program requires 30 hours; the applied linguistics program requires 30 hours. Students must receive a *B-* or above in all courses counted toward the MA degree.

Literature Program

This program provides a general knowledge of English and American literature, a familiarity with the range of theoretical approaches and critical methodologies, and an opportunity to take courses in film studies, creative writing, and ethnic and world literature.

GENERAL REQUIREMENTS

- Satisfactory completion of all required course work
- Satisfactory completion of the MA comprehensive exam OR thesis submission and defense
- Demonstrated fourth-semester proficiency in a foreign language. Old English or Latin will also satisfy this requirement
- Compliance with all graduate school policies and requirements

COURSE REQUIREMENTS (33 SEMESTER HOURS MINIMUM)

All courses are 3 credit hours unless otherwise noted. A minimum of 9 semester hours must be taken at the 6000 level.

REQUIRED COURSES

- ENGL 5100 - Literary Research and Writing *Summer 2010 Registration:* **ENGL 5100**
- ENGL 6001 - Critical Theory in Literature and Film *Summer 2010 Registration:* **ENGL 6001**

Total: 6 Hours

AREA REQUIREMENTS

Choose seven courses at the 5000/6000 level which fulfill seven different areas from the following 9 areas:

1. Classics
2. Medieval literature
3. Renaissance literature
4. Restoration and 18th-century literature
5. Romanticism
6. American literature, pre-1900
7. Victorian literature
8. American literature or film, post-1900
9. British modernism/ 20th century British literature or film

Any graduate literature/film course will fulfill at least one of these areas. Each area can be satisfied by several different courses periodically offered. Historical surveys count within the most appropriate area based on the syllabus. Courses in film, world literature, ethnic literature and women's literature generally fulfill one of the 20th-century areas.

Total: 21 Hours

ELECTIVES

Choose one of the following:

- ENGL 5093 - Teaching of Writing *Summer 2010 Registration:* **ENGL 5093**
- ENGL 5913 - Practicum in Language and Rhetoric *Summer 2010 Registration:* **ENGL 5913**

An ENGL 5000- or 6000-level literature or film course

Total: 3 Hours

THESIS OR NON-THESIS OPTIONS

Non-Thesis Option

Students not writing a thesis must take the MA comprehensive exam. Prior to the exam, students may take

ENGL 6920. Directed Readings

for 1-3 semester hours to help them prepare for the exam, but this is not required. However, the 33-hour course requirement must be met through electives if directed readings or project/independent study credits are not taken.

Students must be registered during the semester in which they take the MA comprehensive exam, which can be met by signing up for candidate for degree (CAND 5940-900) if all course work is completed.

Thesis Option

Students must submit a proposal for a thesis to the graduate program director for permission to proceed to the thesis.

- ENGL 6950 - Master's Thesis *Summer 2010 Registration: ENGL 6950*
For details about writing, submitting and defending a thesis, see the current thesis guidelines.

Total: 3-6 Hours

LANGUAGE REQUIREMENT

Students must demonstrate fourth-semester proficiency in a foreign language. Old English or Latin also satisfies this requirement.

Total Literature Program: 33 Hours

Rhetoric and Teaching of Writing Program

In this program, you'll study rhetorical and language traditions and apply that knowledge to the teaching of writing. Knowledge of multicultural dimensions of literacy will help you understand the rich cultural complexity of the modern classroom. This program also

focuses on developing your own writing and editing skills to fulfill your professional role as a teacher-writer.

COURSE REQUIREMENTS (30 SEMESTER HOURS MINIMUM)

All courses are 3 credit hours unless otherwise noted.

REQUIRED COURSES

- ENGL 5080 - History of the English Language Summer 2010 Registration: **ENGL 5080**
- -OR-
- ENGL 5171 - Language Theory Summer 2010 Registration: **ENGL 5171**
- ENGL 5093 - Teaching of Writing Summer 2010 Registration: **ENGL 5093**
- ENGL 5150 - Research Methods Summer 2010 Registration: **ENGL 5150**
- ENGL 5190 - Special Topics in Rhetoric and Writing Summer 2010 Registration: **ENGL 5190**
- ENGL 5651 - Second Language Writing Summer 2010 Registration: **ENGL 5651**
- ENGL 6002 - Rhetorical Theory Summer 2010 Registration: **ENGL 6002**

Total:18 Hours

AREA OF CONCENTRATION

Chosen by the student and approved by the student's advisor, the area of concentration may be in virtually any field that complements the required core and that meets the student's goals in the program. Representative areas include but are not limited to literature, technical communication, reading, English as a second language and communication.

ENGL 5913. Practicum in Language and Rhetoric may be included among these nine hours.

Total: 9 Hours

THESIS OR PROJECT OPTIONS

Thesis

ENGL 6950. Master's Thesis

For details about writing, submitting and defending a thesis, see the current thesis guidelines.

Total: 4-6 Hours

Project

ENGL 6960. Master's Project

Total: 3-6 Hours

Rhetoric and Teaching of Writing Total: 30 Hours

Applied Linguistics Program

If you want a thorough grounding in the principles and practice of teaching English to non-native adult users of English with a special focus on the discourses of the classroom and on teaching second-language writers, this program is a good choice.

GENERAL REQUIREMENTS

Students must demonstrate fourth semester proficiency in a foreign language prior to graduation; assessment of proficiency depends on the language to be demonstrated.

Those students who are not teaching adult ESL students at the time of their course work will be required to take a 3–6 credit internship in an area language school, workplace or high school/college ESL program, either through the Experiential Learning Center or by arrangement with the program coordinator.

COURSE REQUIREMENTS (30 SEMESTER HOURS MINIMUM)

All courses are 3 credit hours unless otherwise noted.

REQUIRED CORE COURSES

- ENGL 5093 - Teaching of Writing Summer 2010 Registration: **ENGL 5093**
 - ENGL 5150 - Research Methods Summer 2010 Registration: **ENGL 5150**
 - ENGL 5171 - Language Theory Summer 2010 Registration: **ENGL 5171**
 - ENGL 5601 - Principles and Practices of Second Language Acquisition Summer 2010 Registration: **ENGL 5601**
 - ENGL 5651 - Second Language Writing Summer 2010 Registration: **ENGL 5651**
 - ENGL 5913 - Practicum in Language and Rhetoric Summer 2010 Registration: **ENGL 5913**
- OR- an ENGL elective approved by the student's advisor

Total: 18 Hours

ELECTIVE LANGUAGE OR RHETORIC COURSES

- ENGL 5080 - History of the English Language Summer 2010 Registration: **ENGL 5080**
- ENGL 5190 - Special Topics in Rhetoric and Writing Summer 2010 Registration: **ENGL 5190**

Total: 6 Hours

SYNTHESIS OPTIONS

Students may choose from the following three options:

Comprehensive Exam or Portfolio Exam

Students will take a comprehensive exam or portfolio exam in their last semester. Students selecting this option must take two elective courses (6 hours) approved by their advisor.

Thesis

ENGL 5840. Independent Study (3 hours)

ENGL 6950. Master's Thesis (4-6 hours)

For details about writing, submitting and defending a thesis, see the current [thesis guidelines](#).

Project:

ENGL 5840. Independent Study (3 hours) or an internship* (3 hours) — with advisor's approval

ENGL 6960. Master's Project

*** INTERNSHIPS**

Those students who are not teaching adult ESL students at the time of their course work will be required to take a 3-6 credit hour internship in a local area language school, workplace or high school/college ESL program, either through the [Experiential Learning Center](#) or by arrangement with the program coordinator.

Total: 6 Hours

Applied Linguistics Total: 30 Hours

Additional Information

Candidate for Degree: Graduate students must be registered for at least one credit hour during the semester in which they graduate. Those who have completed all required courses and requirements may register for candidate for degree: CAND 5940, section 900. CAND 5940 carries no course credit, but you are billed for one credit of tuition and \$10 in fees.

Teaching Assistantships: Graduate students who receive a teaching assistantship must take the following course in the fall during their first semester as a teaching assistant.

ENGL 5913. Practicum in Language and Rhetoric

Dual Degrees: Students concurrently pursuing a MA in education can count up to six hours of education courses toward their MA in English, with their English graduate advisor's permission.

Ethnic Studies

Director: Donna Langston

Program Assistant: Jennifer L. Williams

Office: Lawrence Street Center, 480

Telephone: 303-315-3616

Fax: 303-315-3610

Web site: clas.ucdenver.edu/ethnic/

Faculty

Professor:

Donna Langston, PhD, University of Washington

Assistant Professor:

Faye Caronan, PhD, University of California

Paula Espinoza, PhD, University of Colorado

Rachel E. Harding, PhD, University of Colorado

Senior Instructors:

Paul Encinias, PhD, University of Colorado

Dennis Green, MSS, University of Colorado

Lecturers:

Jackie Benton
Khushnur Dadabhoy
Peggy Lore
Danny Martinez
Omar Montgomery
Brittany Vuong-Sandoval
Elyse Yamauchi

The ethnic studies minor is designed to help students majoring in the liberal arts and sciences develop a sophisticated and broad understanding of ethnicity and its role in contemporary American society. It provides students with the theories and concepts needed to comprehend and interpret relations between and among ethnic groups in the United States. Students are better prepared to live and work in a pluralistic society when educational institutions foster a positive learning environment in which differences contained within various U.S. communities can be studied not as a social problem, as is often the case, but for their history of struggles and contributions.

The interdisciplinary nature of the ethnic studies program curriculum provides students the opportunity, through academic investigation, to develop a greater understanding of the cultural pluralism of the present day United States and to acquire skills needed in professional and social service fields. This multidisciplinary, comparative approach to contemporary and historical research methodologies provides the basis for students to analyze the diverse social, economic, political and cultural facets of ethnic groups in the United States. Special emphasis is given to new perspectives that recover the history, creative expression and voices previously excluded by the traditional approaches to higher education.

Courses offered under the minor reflect prevailing thought in ethnic studies, draw parallels between various groups in the United States and link the studies of their country of origin with current and historical research on race and ethnic relations in the United States. These courses reflect critical analyses of the dominant perspectives through which ethnic groups have been described and perceived. Also investigated are the intersections of ethnicity with structures of political, educational, gender, business and economic, social and cultural power, all of which are emphasized through the study of materials and works by and about previously excluded groups. The cultural processes through which ethnic groups have sustained or altered their cultural identities are emphasized, as well as the pressures faced by members of various ethnic groups to maintain traditional values and conform to mainstream U.S. society.

REQUIREMENTS FOR THE MINOR

UNDERGRADUATE CERTIFICATE IN CULTURAL DIVERSITY STUDIES

Programs

Certificate

Cultural Diversity Studies Undergraduate Certificate

The undergraduate certificate in cultural diversity studies is designed to appeal to undergraduate students with a background in any major. It will allow students to demonstrate to potential employers that they possess the multicultural skills and knowledge necessary to succeed in the workplace. Students will enroll in department courses that focus on the historical context in which race and culture have emerged in the United States.

This certificate is also targeted to nondegree-seeking professionals who seek to acquire multicultural knowledge and the skills necessary to ensure their success in professional environments. Students will be encouraged to think critically about race and race relations. Their expanded understandings of the implications of race and culture in work environments will ensure employers that they offer the highest quality employees opportunities in employment or advancement.

A certificate in cultural diversity studies offers students an enduring intellectual value based on classic articles, book excerpts and scholars who have shaped the study and understanding of race and ethnicity in contemporary society. Our courses provide the opportunity for students to encounter many of the greatest thinkers in race and ethnicity firsthand. Course curriculum includes carefully edited selections from the works of the most distinguished observers of race and ethnicity, past and present. Students will appreciate the broad range of coverage, the logic of course organization and the accessibility of material covered.

The undergraduate certificate in cultural diversity studies requires 12 semester hours (four courses).

Certificate Requirements

Required Course

- ETST 2000 - Introduction to Ethnic Studies Summer 2010 Registration: **ETST 2000**

Total: 3 Hours

Electives

Choose three courses from any ethnic studies department courses, including the following:

- ETST 2155 - African American History Summer 2010 Registration: **ETST 2155**
- ETST 2294 - Race and the Media Summer 2010 Registration: **ETST 2294**
- ETST 3254 - Race and Ethnicity in the Inner City Summer 2010 Registration: **ETST 3254**
- ETST 3297 - Social History of Asian Americans Summer 2010 Registration: **ETST 3297**
- ETST 3396 - History of the American Indian Summer 2010 Registration: **ETST 3396**
- ETST 3704 - Culture, Racism and Alienation Summer 2010 Registration: **ETST 3704**
- ETST 4558 - Chicano and Latino Politics Summer 2010 Registration: **ETST 4558**

Total: 9 Hours

Certificate Total: 12 Hours

There are crosslisted courses in a variety of departments, including history, political science and sociology. Any crosslisted course is acceptable. You must register for it under ETST numbers. A complete listing of department offerings and crosslisted courses can be obtained every semester from the [ethnic studies department Web page](#) or by calling our office at 303-556-2700 for a copy.

A minimum grade of *B-* must be earned in each of the four courses completed as part of the certificate. All credits for the certificate must be earned at the Downtown Campus.

Additional information about the undergraduate certificate in cultural diversity studies may be obtained from ethnic studies Director Donna Langston, Lawrence Street Center, 480, 303-556-2726, Donna.Langston@ucdenver.edu.

Non Degree

Ethnic Studies Minor

Requirements for the Minor

The minor in ethnic studies offers students the opportunity to enhance and broaden the body of knowledge acquired in their chosen majors and to apply it in a variety of careers involving intercultural relations. Students are required to complete 18 semester hours (6 courses) in ethnic studies with a grade of *C* or better. These hours are to be taken with UC Denver faculty (any exception needs to be approved by the ethnic studies advisor). At least 9 of the required 18 hours must be in courses numbered 3000 or above.

The 18 hours required for the minor must be distributed as follows:

Core Courses

- ETST 2000 - Introduction to Ethnic Studies *Summer 2010 Registration:* **ETST 2000**

Total: 3 Hours

Additional Courses

Select four upper- or lower-division ETST courses from the following four focal U.S. racial/ethnic groups

- Asian-Americans
- African-Americans
- American Indians
- Chicanos/as and Latinos/as

Total: 12 Hours

Elective

ETST elective course of your choice.

Total: 3 Hours

Total: 18 Hours

Geography and Environmental Sciences

Chairs: Brian Page

Program Assistant: Sue Eddleman

Office: North Classroom, 3621

Telephone: 303-556-2276

Fax: 303-556-6197

Web site: clas.ucdenver.edu/ges/

Faculty

Professors:

Anne Chin, PhD, Arizona State University

Professors Emeritus:

Wesley E. Le Masurier, PhD, Stanford University

John G. Weihaupt, PhD, University of Wisconsin, Milwaukee

Associate Professors:

Frederick B. Chambers, PhD, Arizona State University

Brian Page, PhD, University of California, Berkeley

Deborah S. K. Thomas, PhD, University of South Carolina

John W. Wyckoff, PhD, University of Utah

Assistant Professors:

Casey Allen, PhD, Arizona State University

Peter Anthamatten, PhD, University of Minnesota

Rafael Moreno-Sanchez, PhD, Colorado State University

Gregory Simon, PhD, University of Washington

Bryan S. Wee, PhD, Purdue University

Senior Instructors:

Jon Barbour, PhD, University of California, Davis
Rudi Hartmann, PhD, Technical University of Munich

Instructors:

Amanda Weaver, MA, University of Texas, Austin
Ryan Sincavage, MS, University of Colorado

Lecturers:

James Fleming
Jeanne Mayne
Peter Timm
James Tindall

Undergraduate

Geography is a science that focuses on the spatial analysis of human/physical patterns and processes. Geographers attempt to identify the factors affecting the distribution of people and their activities on the surface of the earth and to provide meaningful solutions to problems faced by societies. This discipline is an ideal major for the liberal arts student, providing exposure to the concepts and techniques utilized in investigating the physical sciences, environmental and sustainability issues, socioeconomic problems and planning policies.

The program offers a distinctive curriculum that combines a broad and integrative scientific education with state-of-the-art training in geo-spatial analysis (e.g., computer mapping, GIS, remote sensing). The program is designed to provide the student interested in physical, social or environmental geography with the background necessary for obtaining a rewarding career in government (federal, state, local) or private industry, as well as preparing students for graduate study.

REQUIREMENTS FOR GEOGRAPHY MAJOR

Certificate

GEOGRAPHIC INFORMATION SCIENCE CERTIFICATE

Departmental Honors

The criteria for *cum laude* shall be a GPA of 3.6 in all courses on the Downtown Campus (a minimum of 30 semester hours for transfer students) and an honors thesis that demonstrates independent research skills. The criteria for *magna cum laude* shall be a GPA of 3.75 in all Downtown Campus courses and a superior honors thesis. The criteria for *summa cum laude* shall be a GPA of 3.9 in all Downtown Campus courses and a truly exceptional honors thesis. The GPA alone shall serve only as a minimum criterion for each of the three levels of honors. Evaluation of the honors thesis shall be the deciding criterion for the level that is granted. The department expects that the award of *summa cum laude* would be a rare occurrence reserved for students who demonstrate extraordinary academic promise.

Admission to the honors program and the awarding of departmental honors shall be subject to faculty approval.

Minors

REQUIREMENTS FOR ENVIRONMENTAL SCIENCES MINOR

REQUIREMENTS FOR GEOGRAPHY MINOR

REQUIREMENTS FOR GEOLOGY MINOR

REQUIREMENTS FOR URBAN AND REGIONAL PLANNING MINOR

Graduate

MASTER OF SCIENCE IN ENVIRONMENTAL SCIENCES

Certificate

GRADUATE CERTIFICATE IN ENVIRONMENTAL SCIENCES

Programs

Bachelor of Arts

Geography BA

Requirements for Major in Geography

Students must declare a major by the time they have completed 60 semester hours of course work. The geography program (within the Department of Geography and Environmental Sciences) offers a BA degree that includes a full range of courses in the fundamentals of geography taught mainly by full-time faculty. Five degree options are available for the major in geography: general, environmental science, environmental studies, urban studies and planning and earth science. Total semester-hour requirements vary among the five options, but all options require a minimum of 24 hours of upper-division credit. In addition, for each option, at least 15 semester hours must be taken at the Downtown Campus.

Option 1—General Geography

Option Advisors: Frederick B. Chambers and Brian Page

OPTION 1 REQUIREMENTS

Lower division

- GEOG 1202 - Introduction to Physical Geography Summer 2010 Registration:
GEOG 1202
- GEOG 1302 - Introduction to Human Geography Summer 2010 Registration:
GEOG 1302
- GEOG 2080 - Introduction to Mapping and Map Analysis Summer 2010 Registration: **GEOG 2080**

Upper division

- GEOG 3232 - Weather and Climate Summer 2010 Registration: **GEOG 3232**
- GEOG 3411 - Globalization and Regional Development Summer 2010 Registration: **GEOG 3411**
- GEOG 4080 - Introduction to GIS Summer 2010 Registration: **GEOG 4080**
-OR-
- GEOG 5080 - Introduction to GIS Summer 2010 Registration: **GEOG 5080**

Total: 18 Hours

ADDITIONAL REQUIREMENTS

Choose six additional courses, including at least one course from each of the following subfields:

Physical Geography

- GEOG 3240 - Colorado Climates Summer 2010 Registration: **GEOG 3240**
- GEOG 4010 - Landscape Geochemistry Summer 2010 Registration: **GEOG 4010**
- GEOG 4020 - Earth Environments and Human Impacts Summer 2010
Registration: **GEOG 4020**
- GEOG 4240 - Principles of Geomorphology Summer 2010 Registration: **GEOG 4240**
- GEOG 4270 - Glacial Geomorphology Summer 2010 Registration: **GEOG 4270**

Human Geography

- ENVS 1342 - Introduction to Environment and Society Summer 2010
Registration: **ENVS 1342**
- GEOG 1602 - Introduction to Urban Studies Summer 2010 Registration: **GEOG 1602**
- GEOG 2202 - Natural Hazards Summer 2010 Registration: **GEOG 2202**
- GEOG 3300 - Population and Resources in the World Environment Summer 2010 Registration: **GEOG 3300**
- GEOG 3430 - Geography of Tourism Summer 2010 Registration: **GEOG 3430**
- GEOG 3501 - Geography of Health Summer 2010 Registration: **GEOG 3501**
- GEOG 4265 - Sustainability in Resources Management Summer 2010
Registration: **GEOG 4265**
- OR-
- GEOG 5265 - Sustainability in Resources Management Summer 2010
Registration: **GEOG 5265**
- GEOG 4335 - Contemporary Environmental Issues Summer 2010 Registration: **GEOG 4335**
- OR-
- GEOG 5335 - Contemporary Environmental Issues Summer 2010 Registration: **GEOG 5335**
- GEOG 4350 - Environment and Society in the American Past Summer 2010
Registration: **GEOG 4350**
- OR-
- GEOG 5350 - Environment and Society in the American Past Summer 2010
Registration: **GEOG 5350**
- GEOG 4640 - Urban Geography: Denver and the U.S. Summer 2010
Registration: **GEOG 4640**
- OR-

- GEOG 5640 - Urban Geography: Denver and the U.S. Summer 2010
Registration: **GEOG 5640**
- GEOG 4710 - Disasters, Climate Change, and Health Summer 2010
Registration: **GEOG 4710**

Regional Geography

- GEOG 1102 - World Regional Geography Summer 2010 Registration: **GEOG 1102**
- GEOG 3100 - Geography of Colorado Summer 2010 Registration: **GEOG 3100**
- GEOG 3120 - Geography of Europe Summer 2010 Registration: **GEOG 3120**
- GEOG 3130 - Central America and the Caribbean Summer 2010 Registration: **GEOG 3130**
- GEOG 3140 - Geography of South America Summer 2010 Registration: **GEOG 3140**
- GEOG 3150 - Middle East Summer 2010 Registration: **GEOG 3150**
- GEOG 3160 - Geography of China Summer 2010 Registration: **GEOG 3160**

Techniques for Geographical Analysis

- GEOG 4060 - Remote Sensing I: Introduction to Environmental Remote Sensing Summer 2010 Registration: **GEOG 4060**
-OR-
- GEOG 5060 - Remote Sensing I: Introduction to Environmental Remote Sensing Summer 2010 Registration: **GEOG 5060**
- GEOG 4070 - Remote Sensing II: Advanced Remote Sensing Summer 2010
Registration: **GEOG 4070**
-OR-
- GEOG 5070 - Remote Sensing II: Advanced Remote Sensing Summer 2010
Registration: **GEOG 5070**
- GEOG 4081 - Introduction to Cartography and Computer Mapping Summer 2010
Registration: **GEOG 4081**
- GEOG 4085 - GIS Applications for the Urban Environment Summer 2010
Registration: **GEOG 4085**
-OR-
- GEOG 5085 - GIS Applications for the Urban Environment Summer 2010
Registration: **GEOG 5085**
- GEOG 4090 - Environmental Modeling with Geographic Information Systems Summer 2010 Registration: **GEOG 4090**
-OR-
- GEOG 5090 - Environmental Modeling with Geographic Information Systems Summer 2010 Registration: **GEOG 5090**
- GEOG 4095 - Deploying GIS Functionality on the Web Summer 2010
Registration: **GEOG 4095**

- OR-
- GEOG 5095 - Deploying GIS Functionality on the Web Summer 2010
Registration: **GEOG 5095**
- GEOG 4220 - Environmental Impact Assessment Summer 2010 Registration:
GEOG 4220
- OR-
- GEOG 5220 - Environmental Impact Assessment Summer 2010 Registration:
GEOG 5220
- GEOG 4230 - Hazard Mitigation and Vulnerability Assessment Summer 2010
Registration: **GEOG 4230**
- OR-
- GEOG 5230 - Hazard Mitigation and Vulnerability Assessment Summer 2010
Registration: **GEOG 5230**
- GEOG 4235 - GIS Applications in the Health Sciences Summer 2010
Registration: **GEOG 4235**
- OR-
- GEOG 5235 - GIS Applications in the Health Sciences Summer 2010
Registration: **GEOG 5235**
- GEOG 4770 - Applied Statistics for the Natural Sciences Summer 2010
Registration: **GEOG 4770**

Total: 18 Hours

OPTION TOTAL: 36 HOURS

Option 2—Environmental Science

Option Advisor: Frederick B. Chambers

Option 2 allows geography majors to concentrate on course work in environmental science.

ANCILLARY COURSES

Option 2 students must take one general biology and one general chemistry course (both with labs), OR a sequence of either (BIOL 2051 and 2061 with labs or CHEM 2031 and 2061 with labs). If applying to the MS in Environmental Sciences program, students must have taken both sequences. Also, students must have an introductory statistics course. Course choices with descriptions are below:

- BIOL 2051 - General Biology I Summer 2010 Registration: **BIOL 2051**
- *and* BIOL 2071 - General Biology Laboratory I Summer 2010 Registration:
BIOL 2071
(4 semester hours total), followed by:

- BIOL 2061 - General Biology II Summer 2010 Registration: **BIOL 2061**
- and BIOL 2081 - General Biology Laboratory II Summer 2010 Registration:
BIOL 2081
(4 semester hours total)
- CHEM 2031 - General Chemistry I Summer 2010 Registration: **CHEM 2031**
- and CHEM 2038 - General Chemistry Laboratory I Summer 2010 Registration:
CHEM 2038
(4 semester hours total), followed by:
- CHEM 2061 - General Chemistry II Summer 2010 Registration: **CHEM 2061**
- and CHEM 2068 - General Chemistry Laboratory II Summer 2010 Registration:
CHEM 2068
(5 semester hours total)
- AND-
- One introductory statistics course (3 semester hours). Suitable courses include:
- MATH 2830 - Introductory Statistics Summer 2010 Registration: **MATH 2830**
- PSYC 2090 - Statistics and Research Methods Summer 2010 Registration: **PSY 2090**

OPTION 2 REQUIREMENTS

Lower division

- ENVS 1042 - Introduction to Environmental Sciences Summer 2010 Registration:
ENVS 1042
- GEOG 1202 - Introduction to Physical Geography Summer 2010 Registration:
GEOG 1202
- GEOG 1302 - Introduction to Human Geography Summer 2010 Registration:
GEOG 1302
- OR-
- ENVS 1342 - Introduction to Environment and Society Summer 2010 Registration: **ENVS 1342**
- GEOG 2080 - Introduction to Mapping and Map Analysis Summer 2010 Registration: **GEOG 2080**

Upper division

- GEOG 3232 - Weather and Climate Summer 2010 Registration: **GEOG 3232**
- GEOG 3411 - Globalization and Regional Development Summer 2010 Registration: **GEOG 3411**
- OR-
- GEOG 4335 - Contemporary Environmental Issues Summer 2010 Registration:
GEOG 4335
- OR-

- GEOG 5335 - Contemporary Environmental Issues Summer 2010 Registration: **GEOG 5335**
- GEOG 4080 - Introduction to GIS Summer 2010 Registration: **GEOG 4080**
-OR-
- GEOG 5080 - Introduction to GIS Summer 2010 Registration: **GEOG 5080**

Total: 22 Hours

ADDITIONAL REQUIREMENTS

Choose six additional courses:

Environmental Science

- GEOG 4020 - Earth Environments and Human Impacts Summer 2010 Registration: **GEOG 4020**
- GEOG 4265 - Sustainability in Resources Management Summer 2010 Registration: **GEOG 4265**
-OR-
- GEOG 5265 - Sustainability in Resources Management Summer 2010 Registration: **GEOG 5265**

Plus one class from the following list:

- ENVS 3082 - Energy and the Environment Summer 2010 Registration: **ENVS 3082**
- ENVS 5030 - Environmental Geology Summer 2010 Registration: **ENVS 5030**
- GEOG 3240 - Colorado Climates Summer 2010 Registration: **GEOG 3240**
- GEOG 4010 - Landscape Geochemistry Summer 2010 Registration: **GEOG 4010**
- GEOG 4240 - Principles of Geomorphology Summer 2010 Registration: **GEOG 4240**
- GEOG 4270 - Glacial Geomorphology Summer 2010 Registration: **GEOG 4270**

Upper-Division Environmental-Oriented Biology or Chemistry (3 Hours)

One upper-division biology or chemistry course related to the student's environmental science interest must be taken as part of the environmental science option.

Techniques for Environmental Analysis

Quantitative methods (one course):

- GEOG 4770 - Applied Statistics for the Natural Sciences Summer 2010 Registration: **GEOG 4770**

-OR-

- GEOG 4770 - Applied Statistics for the Natural Sciences Summer 2010
Registration: **GEOG 4770**

Geo-Spatial Analysis (one course):

- GEOG 4060 - Remote Sensing I: Introduction to Environmental Remote Sensing Summer 2010 Registration: **GEOG 4060**

-OR-

- GEOG 5060 - Remote Sensing I: Introduction to Environmental Remote Sensing Summer 2010 Registration: **GEOG 5060**

- GEOG 4085 - GIS Applications for the Urban Environment Summer 2010
Registration: **GEOG 4085**

-OR-

- GEOG 5085 - GIS Applications for the Urban Environment Summer 2010
Registration: **GEOG 5085**

- GEOG 4090 - Environmental Modeling with Geographic Information Systems Summer 2010 Registration: **GEOG 4090**

-OR-

- GEOG 5090 - Environmental Modeling with Geographic Information Systems Summer 2010 Registration: **GEOG 5090**

- GEOG 4230 - Hazard Mitigation and Vulnerability Assessment Summer 2010
Registration: **GEOG 4230**

-OR-

- GEOG 5230 - Hazard Mitigation and Vulnerability Assessment Summer 2010
Registration: **GEOG 5230**

- GEOG 4235 - GIS Applications in the Health Sciences Summer 2010
Registration: **GEOG 4235**

-OR-

- GEOG 5235 - GIS Applications in the Health Sciences Summer 2010
Registration: **GEOG 5235**

Total: 18 Hours

OPTION TOTAL: 40 HOURS

Option 3—Environmental Studies

Option Advisors: Rafael Moreno and Deborah Thomas

Option 3 gives geography majors the opportunity to concentrate on the topic of human-environmental interaction, emphasizing environmental policy, sustainability and social issues.

OPTION 3 REQUIREMENTS

Lower division

- ENVS 1042 - Introduction to Environmental Sciences Summer 2010 Registration:
ENVS 1042
- ENVS 1342 - Introduction to Environment and Society Summer 2010
Registration: **ENVS 1342**
- GEOG 1302 - Introduction to Human Geography Summer 2010 Registration:
GEOG 1302
- GEOG 2080 - Introduction to Mapping and Map Analysis Summer 2010
Registration: **GEOG 2080**

Upper division

- GEOG 3232 - Weather and Climate Summer 2010 Registration: **GEOG 3232**
- GEOG 3411 - Globalization and Regional Development Summer 2010
Registration: **GEOG 3411**
- GEOG 4080 - Introduction to GIS Summer 2010 Registration: **GEOG 4080**
-OR-
- GEOG 5080 - Introduction to GIS Summer 2010 Registration: **GEOG 5080**

Total: 22 Hours

ADDITIONAL REQUIREMENTS

Choose six additional courses:

Environmental Studies

Choose three courses from the following:

- GEOG 3300 - Population and Resources in the World Environment Summer 2010 Registration: **GEOG 3300**
- GEOG 3302 - Water Resources Summer 2010 Registration: **GEOG 3302**
- GEOG 3501 - Geography of Health Summer 2010 Registration: **GEOG 3501**
- GEOG 4335 - Contemporary Environmental Issues Summer 2010 Registration:
GEOG 4335
-OR-

- GEOG 5335 - Contemporary Environmental Issues Summer 2010 Registration:
GEOG 5335
- GEOG 4350 - Environment and Society in the American Past Summer 2010 Registration: **GEOG 4350**
-OR-
- GEOG 5350 - Environment and Society in the American Past Summer 2010 Registration: **GEOG 5350**

Environmental Policy and Planning

Choose two:

- GEOG 4220 - Environmental Impact Assessment Summer 2010 Registration:
GEOG 4220
-OR-
- GEOG 5220 - Environmental Impact Assessment Summer 2010 Registration:
GEOG 5220
- GEOG 4230 - Hazard Mitigation and Vulnerability Assessment Summer 2010 Registration: **GEOG 4230**
-OR-
- GEOG 5230 - Hazard Mitigation and Vulnerability Assessment Summer 2010 Registration: **GEOG 5230**
- GEOG 4260 - Natural Resource Planning and Management Summer 2010 Registration: **GEOG 4260**
-OR-
- PUAD 5631 - Seminar in Environmental Politics and Policy Summer 2010 Registration: **P AD 5631**
- GEOG 4265 - Sustainability in Resources Management Summer 2010 Registration: **GEOG 4265**
-OR-
- GEOG 5265 - Sustainability in Resources Management Summer 2010 Registration: **GEOG 5265**
- GEOG 4710 - Disasters, Climate Change, and Health Summer 2010 Registration: **GEOG 4710**
- PUAD 5633 - Seminar in Natural Resource and Environmental Health Law Summer 2010 Registration: **P AD 5633**

Techniques for Environmental Analysis

Choose one:

- GEOG 4060 - Remote Sensing I: Introduction to Environmental Remote Sensing Summer 2010 Registration: **GEOG 4060**
-OR-
- GEOG 5060 - Remote Sensing I: Introduction to Environmental Remote Sensing Summer 2010 Registration: **GEOG 5060**
- GEOG 4070 - Remote Sensing II: Advanced Remote Sensing Summer 2010 Registration: **GEOG 4070**
-OR-
- GEOG 5070 - Remote Sensing II: Advanced Remote Sensing Summer 2010 Registration: **GEOG 5070**
- GEOG 4081 - Introduction to Cartography and Computer Mapping Summer 2010 Registration: **GEOG 4081**
- GEOG 4085 - GIS Applications for the Urban Environment Summer 2010 Registration: **GEOG 4085**
-OR-
- GEOG 5085 - GIS Applications for the Urban Environment Summer 2010 Registration: **GEOG 5085**
- GEOG 4090 - Environmental Modeling with Geographic Information Systems Summer 2010 Registration: **GEOG 4090**
-OR-
- GEOG 5090 - Environmental Modeling with Geographic Information Systems Summer 2010 Registration: **GEOG 5090**
- GEOG 4095 - Deploying GIS Functionality on the Web Summer 2010 Registration: **GEOG 4095**
-OR-
- GEOG 5095 - Deploying GIS Functionality on the Web Summer 2010 Registration: **GEOG 5095**
- GEOG 4235 - GIS Applications in the Health Sciences Summer 2010 Registration: **GEOG 4235**
-OR-
- GEOG 5235 - GIS Applications in the Health Sciences Summer 2010 Registration: **GEOG 5235**
- GEOG 4770 - Applied Statistics for the Natural Sciences Summer 2010 Registration: **GEOG 4770**

Community/Professional Experience

(optional but highly recommended)

- GEOG 3939 - Internship/Cooperative Education Summer 2010 Registration: **GEOG 3939**

Total: 18 Hours

OPTION TOTAL: 40 HOURS

Note: Up to 4 semester hours of honors thesis course work or up to 3 semester hours of internships may be counted toward the 18 hours of additional requirements. Such substitutions must be approved by a program option advisor.

Option 4—Urban Studies and Planning

Option Advisors: Brian Page and Amanda Weaver

Option 4 allows geography majors to concentrate on social and spatial aspects of metropolitan growth and change. Students are given the opportunity to take advanced planning courses in their junior and senior years.

OPTION 4 REQUIREMENTS

Lower Division

- GEOG 1202 - Introduction to Physical Geography Summer 2010 Registration: **GEOG 1202**
- GEOG 1302 - Introduction to Human Geography Summer 2010 Registration: **GEOG 1302**
- GEOG 1602 - Introduction to Urban Studies Summer 2010 Registration: **GEOG 1602**
- GEOG 2080 - Introduction to Mapping and Map Analysis Summer 2010 Registration: **GEOG 2080**

Upper division

- GEOG 3232 - Weather and Climate Summer 2010 Registration: **GEOG 3232**
- GEOG 3411 - Globalization and Regional Development Summer 2010 Registration: **GEOG 3411**
- GEOG 4080 - Introduction to GIS Summer 2010 Registration: **GEOG 4080**
-OR-
- GEOG 5080 - Introduction to GIS Summer 2010 Registration: **GEOG 5080**

Total: 21 Hours

ADDITIONAL REQUIREMENTS

Choose six additional courses:

Urban Studies and Planning

- GEOG 4640 - Urban Geography: Denver and the U.S. Summer 2010
Registration: **GEOG 4640**
-OR-
- GEOG 5640 - Urban Geography: Denver and the U.S. Summer 2010
Registration: **GEOG 5640**

Plus three courses from the following list:

- GEOG 4000 - Planning Methods I Summer 2010 Registration: **GEOG 4000**
-OR-
- URPL 5510 - Planning Methods I Summer 2010 Registration: **URP 5510**
- GEOG 4220 - Environmental Impact Assessment Summer 2010 Registration: **GEOG 4220**
-OR-
- GEOG 5220 - Environmental Impact Assessment Summer 2010 Registration: **GEOG 5220**
- GEOG 4230 - Hazard Mitigation and Vulnerability Assessment Summer 2010
Registration: **GEOG 4230**
-OR-
- GEOG 5230 - Hazard Mitigation and Vulnerability Assessment Summer 2010
Registration: **GEOG 5230**
- GEOG 4260 - Natural Resource Planning and Management Summer 2010
Registration: **GEOG 4260**
-OR-
- URPL 6653 - Natural Resource Planning and Management Summer 2010
Registration: **URP 6653**
- GEOG 4265 - Sustainability in Resources Management Summer 2010
Registration: **GEOG 4265**
-OR-
- GEOG 5265 - Sustainability in Resources Management Summer 2010
Registration: **GEOG 5265**
- GEOG 4400 - Regional Economic Development Summer 2010 Registration: **GEOG 4400**
-OR-
- URPL 6671 - Regional Economic Development Summer 2010 Registration: **URP 6671**
- GEOG 4630 - Transportation Planning I: Transport Network Analysis Summer 2010 Registration: **GEOG 4630**
-OR-
- URPL 6673 - Transportation Planning I: Land Use and Transport Summer 2010
Registration: **URP 6673**

- GEOG 4670 - Transportation Planning II: Urban Transportation Planning
*Summer 2010 Registration: **GEOG 4670***
-OR-
- URPL 6674 - Transportation Planning II *Summer 2010 Registration: **URP 6674***
- GEOG 4710 - Disasters, Climate Change, and Health *Summer 2010*
*Registration: **GEOG 4710***
- URPL 5501 - Planning Issues and Processes *Summer 2010 Registration: **URP 5501***

Techniques for Urban Analysis

Choose one:

- GEOG 4060 - Remote Sensing I: Introduction to Environmental Remote Sensing
*Summer 2010 Registration: **GEOG 4060***
-OR-
- GEOG 5060 - Remote Sensing I: Introduction to Environmental Remote Sensing
*Summer 2010 Registration: **GEOG 5060***
- GEOG 4070 - Remote Sensing II: Advanced Remote Sensing *Summer 2010*
*Registration: **GEOG 4070***
-OR-
- GEOG 5070 - Remote Sensing II: Advanced Remote Sensing *Summer 2010*
*Registration: **GEOG 5070***
- GEOG 4081 - Introduction to Cartography and Computer Mapping *Summer 2010*
*Registration: **GEOG 4081***
- GEOG 4085 - GIS Applications for the Urban Environment *Summer 2010*
*Registration: **GEOG 4085***
-OR-
- GEOG 5085 - GIS Applications for the Urban Environment *Summer 2010*
*Registration: **GEOG 5085***
- GEOG 4090 - Environmental Modeling with Geographic Information Systems
*Summer 2010 Registration: **GEOG 4090***
-OR-
- GEOG 5090 - Environmental Modeling with Geographic Information Systems
*Summer 2010 Registration: **GEOG 5090***
- GEOG 4095 - Deploying GIS Functionality on the Web *Summer 2010*
*Registration: **GEOG 4095***
-OR-
- GEOG 5095 - Deploying GIS Functionality on the Web *Summer 2010*
*Registration: **GEOG 5095***
- GEOG 4235 - GIS Applications in the Health Sciences *Summer 2010*
*Registration: **GEOG 4235***
-OR-

- GEOG 5235 - GIS Applications in the Health Sciences Summer 2010
Registration: **GEOG 5235**

Community/Professional Experience

(optional but highly recommended)

- GEOG 3939 - Internship/Cooperative Education Summer 2010 Registration:
GEOG 3939

Total: 18 Hours

OPTION TOTAL: 39 HOURS

Note: Up to 4 semester hours of honors thesis course work or up to 3 semester hours of internship may be counted toward the 18 hours of additional requirements. Such substitutions must be approved by a program option advisor.

Option 5—Earth Science

Option Advisor: Ryan Sincavage

Option 5 allows geography majors to concentrate on studying natural and physical processes within and on the surface of the planet.

OPTION 5 REQUIREMENTS

Lower division

- ENVS 1342 - Introduction to Environment and Society Summer 2010
Registration: **ENVS 1342**
-OR-
- GEOG 1302 - Introduction to Human Geography Summer 2010 Registration:
GEOG 1302
- GEOL 1072 - Physical Geology: Surface Processes Summer 2010 Registration:
GEOL 1072
- GEOL 1082 - Physical Geology: Internal Processes Summer 2010 Registration:
GEOL 1082
- GEOG 2080 - Introduction to Mapping and Map Analysis Summer 2010
Registration: **GEOG 2080**

Upper division

- GEOG 3411 - Globalization and Regional Development Summer 2010
Registration: **GEOG 3411**
-OR-
- GEOG 4335 - Contemporary Environmental Issues Summer 2010 Registration:
GEOG 4335
-OR-
- GEOG 5335 - Contemporary Environmental Issues Summer 2010 Registration:
GEOG 5335
- GEOG 4080 - Introduction to GIS Summer 2010 Registration: **GEOG 4080**
-OR-
- GEOG 5080 - Introduction to GIS Summer 2010 Registration: **GEOG 5080**

Total: 20 Hours

ADDITIONAL REQUIREMENTS

Choose six additional courses:

Earth Science

- GEOG 3232 - Weather and Climate Summer 2010 Registration: **GEOG 3232**
- GEOG 4240 - Principles of Geomorphology Summer 2010 Registration: **GEOG 4240**
- GEOL 3011 - Mineralogy Summer 2010 Registration: **GEOL 3011**
- GEOL 3421 - Sedimentation and Stratigraphy Summer 2010 Registration: **GEOL 3421**

Plus one of the following courses:

- GEOG 3240 - Colorado Climates Summer 2010 Registration: **GEOG 3240**
- GEOG 4010 - Landscape Geochemistry Summer 2010 Registration: **GEOG 4010**
- GEOG 4020 - Earth Environments and Human Impacts Summer 2010
Registration: **GEOG 4020**
- GEOG 4095 - Deploying GIS Functionality on the Web Summer 2010
Registration: **GEOG 4095**
-OR-
- GEOG 5095 - Deploying GIS Functionality on the Web Summer 2010
Registration: **GEOG 5095**
- GEOG 4270 - Glacial Geomorphology Summer 2010 Registration: **GEOG 4270**
- GEOL 3032 - Geology of Colorado Summer 2010 Registration: **GEOL 3032**
- GEOL 4030 - Environmental Geology Summer 2010 Registration: **GEOL 4030**
-OR-

- ENVS 5030 - Environmental Geology Summer 2010 Registration: **ENVS 5030**
- GEOL 4111 - Field Geology Summer 2010 Registration: **GEOL 4111**
- GEOL 4402 - Unsaturated Zone Hydrology Summer 2010 Registration: **GEOL 4402**

Techniques for Earth Science Analysis

Choose one:

- GEOG 4060 - Remote Sensing I: Introduction to Environmental Remote Sensing Summer 2010 Registration: **GEOG 4060**
- OR-
- GEOG 5060 - Remote Sensing I: Introduction to Environmental Remote Sensing Summer 2010 Registration: **GEOG 5060**
- GEOG 4090 - Environmental Modeling with Geographic Information Systems Summer 2010 Registration: **GEOG 4090**
- OR-
- GEOG 5090 - Environmental Modeling with Geographic Information Systems Summer 2010 Registration: **GEOG 5090**
- GEOG 4095 - Deploying GIS Functionality on the Web Summer 2010 Registration: **GEOG 4095**
- OR-
- GEOG 5095 - Deploying GIS Functionality on the Web Summer 2010 Registration: **GEOG 5095**
- GEOG 4770 - Applied Statistics for the Natural Sciences Summer 2010 Registration: **GEOG 4770**
- OR-
- GEOL 4770 - Applied Statistics for the Natural Sciences Summer 2010 Registration: **GEOL 4770**
- GEOL 4111 - Field Geology Summer 2010 Registration: **GEOL 4111**

Total: 20 Hours

OPTION TOTAL: 40 HOURS

Senior Exit Examination

All majors are required to take a senior exit examination based on required courses in the discipline.

Certificate

Environmental Sciences Graduate Certificate

The graduate-level certificate in environmental sciences has seven options: air quality, ecosystems, environmental health, environmental science education, geospatial analysis, hazardous waste and water quality. Each option comprises four courses and is designed to approach an environmental issue from various disciplines. To earn a certificate, students are required to satisfactorily complete the courses in the option of their interest. These courses may be taken as electives within an MS degree program or through nondegree admission. Students must have the prerequisites for each course and must meet the requirements listed. Contact the option advisor for the particular option of interest before starting. A certificate will be issued upon proof of satisfactory completion of the courses. For an MS degree, students must coordinate the option courses with electives in their program. The listings of courses in each option are in the electives section of the master's program information.

Geographic Information Science Undergraduate Certificate

GISci Certificate Advisor: Rafael Moreno

Office: North Classroom, 3524

Telephone: 303-352-3762

E-mail: rafael.moreno@ucdenver.edu

The intention of this certificate is to provide undergraduates with a mechanism for demonstrating capabilities in spatial techniques in the social and/or physical sciences. The focus of this certificate is on a broad array of geotechniques, including geographic information systems, remote sensing, cartography and statistics, which give students additional analytical skills to take into the workplace or on to graduate school. This certificate is designed for geography majors as well as nonmajors.

Upon successful completion of the certificate, students will be able to:

- understand basic theoretical underpinnings of spatial analysis
- apply geo-spatial technologies to real-world problems
- have a basic knowledge of how to operate at least three types of software used for spatial analysis

Students must have a 3.0 GPA average in all approved geographic technology courses to earn the certificate. The certificate will be awarded when the student graduates with the bachelor's degree. For those who already have a bachelor's degree, the certificate will be awarded upon completion of the program.

Application

Students may begin the program in any semester or during the summer by making arrangements with Dr. Rafael Moreno, the GISci certificate coordinator, and completing and signing the **Application for GISci Certificate** . This should be done once you have elected to pursue the certificate. Those who are not current students must apply for non-degree admission (go to Information for Undergraduate Students and click on Nondegree Students link at top of page) before registering for any classes.

Curriculum

To obtain the certificate, students must complete four core courses, one elective, and a 1-hour independent study, totaling 16 hours. Although the four core courses may be taken in any order, it is advisable to begin with GEOG 3080, Introduction to Mapping and Map Analysis, since this course familiarizes students with many key concepts used in the other classes. Of the four core requirements, only the statistics class has prerequisites, including algebra and introductory calculus. Because of the technical nature of the GIS and remote sensing course work, however, some mathematical experience is desirable prior to beginning the program. All core courses are offered on a yearly basis. Any alterations to the program MUST be approved by the GISci Coordinator.

Course Requirements

Core Courses:

- GEOG 4060 - Remote Sensing I: Introduction to Environmental Remote Sensing Summer 2010 Registration: **GEOG 4060**
-OR-
- GEOG 5060 - Remote Sensing I: Introduction to Environmental Remote Sensing Summer 2010 Registration: **GEOG 5060**
(May also take as GEOL 4060 or 5060)
- GEOG 4080 - Introduction to GIS Summer 2010 Registration: **GEOG 4080**
-OR-
- GEOG 5080 - Introduction to GIS Summer 2010 Registration: **GEOG 5080**
- GEOL 4770 - Applied Statistics for the Natural Sciences Summer 2010 Registration: **GEOL 4770**
-OR-
- GEOL 5770 - Applied Statistics for the Natural Sciences Summer 2010 Registration: **GEOL 5770**
OR equivalent course approved by the GISci Certificate Coordinator

Lab Requirement (to be taken at the end of the program):

Independent Study in GEOG or GEOL with a geographic technology professor (Moreno, Thomas, Wyckoff, or instructor approved by GISci coordinator). The independent project must also demonstrate a proficiency in GIS in the student's area of interest (1 credit hour) **or** take CVEN 5386. GIS Laboratory (3 credit hours). See below for course numbers/descriptions.

- GEOG 4840 - Independent Study: GEOG Summer 2010 Registration: **GEOG 4840**
- GEOL 4840 - Independent Study: GEOL Summer 2010 Registration: **GEOL 4840**
- CVEN 5386 - GIS Laboratory Summer 2010 Registration: **C E 5386**

Elective (choose one from the following):

- GEOG 4070 - Remote Sensing II: Advanced Remote Sensing Summer 2010 Registration: **GEOG 4070**
-OR-
- GEOG 5070 - Remote Sensing II: Advanced Remote Sensing Summer 2010 Registration: **GEOG 5070**
(May also take as GEOL 4070 or 5070)
- GEOG 4081 - Introduction to Cartography and Computer Mapping Summer 2010 Registration: **GEOG 4081**
-OR-
- GEOG 5081 - Introduction to Cartography and Computer Mapping Summer 2010 Registration: **GEOG 5081**

- GEOG 4085 - GIS Applications for the Urban Environment Summer 2010
Registration: **GEOG 4085**
-OR-
- GEOG 5085 - GIS Applications for the Urban Environment Summer 2010
Registration: **GEOG 5085**
- GEOG 4090 - Environmental Modeling with Geographic Information Systems Summer 2010
Registration: **GEOG 4090**
-OR-
- GEOG 5090 - Environmental Modeling with Geographic Information Systems Summer 2010
Registration: **GEOG 5090**
- GEOG 4095 - Deploying GIS Functionality on the Web Summer 2010
Registration: **GEOG 4095**
-OR-
- GEOG 5095 - Deploying GIS Functionality on the Web Summer 2010
Registration: **GEOG 5095**
- GEOG 4235 - GIS Applications in the Health Sciences Summer 2010
Registration: **GEOG 4235**
-OR-
- GEOG 5235 - GIS Applications in the Health Sciences Summer 2010
Registration: **GEOG 5235**
- CVEN 5382 - GIS Spatial Database Development Summer 2010 Registration: **C E 5382**
- CVEN 5385 - GIS Relational Database Systems Summer 2010 Registration: **C E 5385**
OR an elective approved by the GISci Certificate Coordinator.

Non Degree

Environmental Sciences Minor

The environmental sciences minor offers students exposure to the breadth of environmental issues. Students may emphasize the natural/physical sciences, the social sciences and humanities or structure their own mixed emphasis.

Program Requirements

Lecture/Laboratory Courses

Choose two lecture/laboratory courses (see Note 2):

- BIOL 2051 - General Biology I Summer 2010 Registration: **BIOL 2051**
- *and* BIOL 2071 - General Biology Laboratory I Summer 2010 Registration: **BIOL 2071**

- BIOL 2061 - General Biology II Summer 2010 Registration: **BIOL 2061**
- and BIOL 2081 - General Biology Laboratory II Summer 2010 Registration:
BIOL 2081
- CHEM 2031 - General Chemistry I Summer 2010 Registration: **CHEM 2031**
- and CHEM 2038 - General Chemistry Laboratory I Summer 2010 Registration:
CHEM 2038
- CHEM 2061 - General Chemistry II Summer 2010 Registration: **CHEM 2061**
- and CHEM 2068 - General Chemistry Laboratory II Summer 2010 Registration:
CHEM 2068
- ENVS 1042 - Introduction to Environmental Sciences Summer 2010 Registration:
ENVS 1042
- GEOL 1072 - Physical Geology: Surface Processes Summer 2010 Registration:
GEOL 1072
- GEOL 1082 - Physical Geology: Internal Processes Summer 2010 Registration:
GEOL 1082
- PHYS 2010 - College Physics I Summer 2010 Registration: **PHYS 2010**
- and PHYS 2030 - College Physics Lab I Summer 2010 Registration: **PHYS 2030**
- PHYS 2020 - College Physics II Summer 2010 Registration: **PHYS 2020**
- and PHYS 2040 - College Physics Lab II Summer 2010 Registration: **PHYS 2040**

Total: 8-10 Hours

Upper-division Courses

Choose three upper-division courses outside of the student's major discipline from the following list (see Notes 5 and 6):

- ANTH 4010 - Global Health Studies I: The Biocultural Basis of Health Summer 2010 Registration: **ANTH 4010**
- BIOL 3411 - Principles of Ecology Summer 2010 Registration: **BIOL 3411**
- CHEM 4700 - Environmental Chemistry Summer 2010 Registration: **CHEM 4700**
(see note 4)
- ECON 4540 - Environmental Economics Summer 2010 Registration: **ECON 4540**
- ENVS 3082 - Energy and the Environment Summer 2010 Registration: **ENVS 3082**
- OR-
- PHYS 3082 - Energy and the Environment Summer 2010 Registration: **PHYS 3082**
- GEOG 3232 - Weather and Climate Summer 2010 Registration: **GEOG 3232**
- GEOG 3240 - Colorado Climates Summer 2010 Registration: **GEOG 3240**
- GEOG 4020 - Earth Environments and Human Impacts Summer 2010 Registration: **GEOG 4020**

-OR-

- ENVS 5020 - Earth Environments and Human Impacts Summer 2010
Registration: **ENVS 5020**

- GEOG 4060 - Remote Sensing I: Introduction to Environmental Remote Sensing Summer 2010 Registration: **GEOG 4060**

-OR-

- GEOG 5060 - Remote Sensing I: Introduction to Environmental Remote Sensing Summer 2010 Registration: **GEOG 5060**

- GEOG 4080 - Introduction to GIS Summer 2010 Registration: **GEOG 4080**

-OR-

- GEOG 5080 - Introduction to GIS Summer 2010 Registration: **GEOG 5080**

- GEOG 4090 - Environmental Modeling with Geographic Information Systems Summer 2010 Registration: **GEOG 4090**

-OR-

- GEOG 5090 - Environmental Modeling with Geographic Information Systems Summer 2010 Registration: **GEOG 5090**

- GEOG 4220 - Environmental Impact Assessment Summer 2010 Registration: **GEOG 4220**

-OR-

- GEOG 5220 - Environmental Impact Assessment Summer 2010 Registration: **GEOG 5220**

- GEOG 4230 - Hazard Mitigation and Vulnerability Assessment Summer 2010 Registration: **GEOG 4230**

-OR-

- GEOG 5230 - Hazard Mitigation and Vulnerability Assessment Summer 2010 Registration: **GEOG 5230**

- GEOG 4240 - Principles of Geomorphology Summer 2010 Registration: **GEOG 4240**

- GEOG 4265 - Sustainability in Resources Management Summer 2010 Registration: **GEOG 4265**

-OR-

- GEOG 5265 - Sustainability in Resources Management Summer 2010 Registration: **GEOG 5265**

- GEOG 4270 - Glacial Geomorphology Summer 2010 Registration: **GEOG 4270**

- GEOG 4335 - Contemporary Environmental Issues Summer 2010 Registration: **GEOG 4335**

-OR-

- GEOG 5335 - Contemporary Environmental Issues Summer 2010 Registration: **GEOG 5335**

- GEOG 4350 - Environment and Society in the American Past Summer 2010 Registration: **GEOG 4350**

-OR-

- GEOG 5350 - Environment and Society in the American Past Summer 2010 Registration: **GEOG 5350**

- GEOL 4030 - Environmental Geology Summer 2010 Registration: **GEOL 4030**
- HIST 4232 - Historic Preservation Summer 2010 Registration: **HIST 4232**
- HIST 4810 - Special Topics Summer 2010 Registration: **HIST 4810**
- PSCI 4354 - Environmental Politics Summer 2010 Registration: **P SC 4354**

Total: 9 Hours

Minor Total: 17-19 Hours

Notes:

1. All work submitted for an environmental sciences minor must have a grade of C (2.0) or above.
2. The lecture/laboratory sequence can be part of the requirements for the major, but not in the student's major department (i.e., a biology major cannot use the general biology sequence, but could use the general chemistry sequence, which is also required for the biology major).
3. Students must take a minimum of 9 hours of the upper-division courses at the Downtown Campus.
4. If the student plans to go on to the MS in environmental sciences program, he/she should choose courses other than CHEM 4700. This is a core course in the MS in environmental sciences program.
5. Many of the upper-division courses have prerequisites; the student must check the catalog for prerequisite requirements for these courses.
6. The four upper-division elective courses for the environmental sciences minor cannot be from the student's major discipline, even if the particular course is not counted toward the major.

Geography Minor

Students must complete 15 semester hours in geography, including at least 6 semester hours of upper-division courses. Students must achieve a grade of C (2.0) or above on required courses. At least 9 semester hours of upper-division geography courses must be completed at the Downtown Campus.

Geology Minor

At least two of the upper-division requirements must be completed at UC Denver. Transfer students who have earned the equivalent of all these courses elsewhere must complete a minimum of two of the required upper-division courses at UC Denver. No grade below a C (2.0) will be counted toward the minor requirements.

Required Courses

- GEOL 1072 - Physical Geology: Surface Processes *Summer 2010 Registration:* **GEOL 1072**
- GEOL 1082 - Physical Geology: Internal Processes *Summer 2010 Registration:* **GEOL 1082**

Choose at least two of the following courses:

- GEOL 3011 - Mineralogy *Summer 2010 Registration:* **GEOL 3011**
- GEOL 3421 - Sedimentation and Stratigraphy *Summer 2010 Registration:* **GEOL 3421**
- GEOL 4030 - Environmental Geology *Summer 2010 Registration:* **GEOL 4030**

Minor Total: 15-16 Hours

Urban and Regional Planning Minor

The undergraduate planning minor in the Department of Geography and Environmental Sciences provides nongeography undergraduate students the opportunity to pursue studies in the professional field of planning. Geography majors can pursue the urban studies option, so this minor would not be available to these majors.

Geography and urban and regional planning share a common concern for the spatial configuration of the places that we inhabit and enjoy. In recognition of this close association, there is currently an articulation agreement between the Department of Geography and Environmental Sciences and the College of Architecture and Planning that provides students with a mechanism for acceleration through the master of urban and regional planning (MURP) degree program, if accepted into that graduate program. Those students completing the requirements for an undergraduate planning minor may also be eligible to pursue an accelerated MURP degree.

To meet the requirements for this minor, students must complete three core requirements and two electives, totaling 15 semester hours. Although the three core courses may be taken in any order, it is advisable to begin with GEOG 1602, since this course familiarize students with many key concepts used in other classes. All core courses are offered on a yearly basis.

Program Requirements

Required Core

- GEOG 1602 - Introduction to Urban Studies Summer 2010 Registration: GEOG 1602
- GEOG 4640 - Urban Geography: Denver and the U.S. Summer 2010 Registration: GEOG 4640
- GEOG 4840 - Independent Study: GEOG Summer 2010 Registration: GEOG 4840
(Take as topic: Urban Sustainability)

Total: 9 Hours

Electives

Choose two:

- GEOG 4000 - Planning Methods I Summer 2010 Registration: GEOG 4000
-OR-
- URPL 5510 - Planning Methods I Summer 2010 Registration: URP 5510
- GEOG 4060 - Remote Sensing I: Introduction to Environmental Remote Sensing Summer 2010 Registration: GEOG 4060
-OR-
- GEOG 5060 - Remote Sensing I: Introduction to Environmental Remote Sensing Summer 2010 Registration: GEOG 5060
- GEOG 4080 - Introduction to GIS Summer 2010 Registration: GEOG 4080
-OR-
- GEOG 5080 - Introduction to GIS Summer 2010 Registration: GEOG 5080
- GEOG 4085 - GIS Applications for the Urban Environment Summer 2010 Registration: GEOG 4085
-OR-
- GEOG 5085 - GIS Applications for the Urban Environment Summer 2010 Registration: GEOG 5085
- GEOG 4090 - Environmental Modeling with Geographic Information Systems Summer 2010 Registration: GEOG 4090
-OR-
- GEOG 5090 - Environmental Modeling with Geographic Information Systems Summer 2010 Registration: GEOG 5090
- GEOG 4095 - Deploying GIS Functionality on the Web Summer 2010 Registration: GEOG 4095
-OR-
- GEOG 5095 - Deploying GIS Functionality on the Web Summer 2010 Registration: GEOG 5095

- GEOG 4230 - Hazard Mitigation and Vulnerability Assessment Summer 2010
Registration: **GEOG 4230**
-OR-
- GEOG 5230 - Hazard Mitigation and Vulnerability Assessment Summer 2010
Registration: **GEOG 5230**
- GEOG 4235 - GIS Applications in the Health Sciences Summer 2010
Registration: **GEOG 4235**
-OR-
- GEOG 5235 - GIS Applications in the Health Sciences Summer 2010
Registration: **GEOG 5235**
- GEOG 4400 - Regional Economic Development Summer 2010 Registration: **GEOG 4400**
- GEOG 4630 - Transportation Planning I: Transport Network Analysis Summer 2010 Registration: **GEOG 4630**
- GEOG 4990 - Special Topics Summer 2010 Registration: **GEOG 4990**
- URPL 5501 - Planning Issues and Processes Summer 2010 Registration: **URP 5501**

Total: 6 Hours

Minor Total: 15 Hours

Entrance Requirements

All undergraduate students, except geography majors, are eligible for this minor.

Performance Requirements

Students must complete 15 semester hours in geography and/or planning. Because of the professional nature of this minor and the potential for fast-tracking in the MURP program, 12 semester hours of upper-division courses are required. Students must achieve a grade of C (2.0) or higher in required courses. All upper-division courses must be completed at the Downtown Campus and a minimum of 9 semester hours must be completed in CLAS (geography) to satisfy residency requirements.

Master of Science

Environmental Sciences MS

- Graduate School Rules apply to this program

Program Director: John Wyckoff
Associate Program Director: Jon Barbour
Office: North Classroom, 3622
Telephone: 303-556-4520
Fax: 303-556-6197
E-mail: Jon.Barbour@ucdenver.edu
Web site: clas.ucdenver.edu/ges/

Faculty (Concurrently Appointed)

Professors:

Larry Anderson, chemistry
Lloyd Burton, School of Public Affairs
Anne Chin, geography and environmental science
Lynn Johnson, civil engineering
John Lanning, chemistry
Diana Tomback, biology

Associate Professors:

Leo Bruederle, biology
Frederick Chambers, geography and environmental science
Greg Cronin, biology
Brian Page, geography and environmental science
Anu Ramaswami, civil engineering
Timberly Roane, biology
Deborah Thomas, geography and environmental science
John Wyckoff, geography and environmental science

Assistant Professors:

Casey Allen, geography and environmental science
Peter Anthamatten, geography and environmental science
Michael Green, biology
Rafael Moreno, geography and environmental science
Brian Muller, planning and design
Gregory Simon, geography and environmental science
Bryan S. Wee, geography and environmental science

Environmental sciences is a multidisciplinary study of the environment, housed in the Department of Geography and Environmental Sciences. Academic fields involved in environmental sciences include chemistry, biology and ecology, physics, geology, geography, anthropology, engineering, political science, law, economics and the health sciences. Students planning to pursue the MS in environmental sciences must either have earned a bachelor's degree or have taken significant course work in the

natural/physical sciences or engineering and completed several other prerequisites (see the following graduate information). Graduate-level certificates in environmental sciences are also offered. The certificates may be earned stand-alone or as options in the MS in environmental sciences.

Environmental careers encompass a broad range of professions, from those with a strong foundation in the natural/physical sciences or engineering to those based in the social sciences and/or humanities. Students interested in environmental issues and careers should investigate the whole field before deciding which course to follow. At the Downtown Campus, the MS in environmental sciences emphasizes the natural/physical sciences and engineering with the addition of the social sciences and humanities.

The MS in environmental sciences degree is designed to provide training in engineering, natural/physical sciences and socioeconomic analysis. The goals of the program are to (1) enhance the interdisciplinary communication and analytical skills of the student, and (2) provide a multidisciplinary approach for more intensive study of a particular environmental issue. Students will receive instruction in the physical and biological dynamics of various ecosystems, environmental engineering and socioeconomic issues associated with environmental analysis.

Graduates of the environmental sciences program are involved in many different areas, such as reviewing environmental impact statements, monitoring groundwater quality and communicating with the public. Many students have found employment in various agencies (U.S. Environmental Protection Agency, U.S. Geological Survey, Colorado State Department of Public Health and Environment) and private-sector environmental and engineering firms.

Requirements for Admission

The program is for students who either have baccalaureate degrees or significant background in one of the natural/physical sciences or engineering. In addition, minimum undergraduate science and math requirements are:

- one semester of calculus and one semester of upper-division statistics (*if applicant is missing the statistics course, he/she can be admitted but must take ENVS 5600, Applied Statistics, or an approved statistics course as an elective before receiving the MS in environmental sciences degree*)
- two semesters general chemistry with lab
- one semester physics
- two semesters general biology with lab

If only two semesters of the six prerequisite courses are lacking, students may be admitted, but must take them in the first year in the program. Applicants who have fulfilled all prerequisites have a better chance of acceptance. Applicants may be required

to take additional prerequisite courses (necessary for completing particular core or elective courses). The prerequisite courses will not count toward the MS environmental sciences degree. As part of the admission review process, applicants are required to submit a graduate application, a minimum of three letters of recommendation and transcripts from all institutions previously attended. UC Denver has a minimum requirement of a 3.0 undergraduate GPA for applicants to the Graduate School. The program admits new students for the fall semester and the number of students admitted to the program depends, in part, on space availability. **Applicants must submit all materials by the March 1 deadline.**

Financial Aid

There are three types of financial aid available: tuition assistance; research assistantship positions funded by grants to specific program faculty; and the regular package of financial aid (primarily loans) available through the financial aid office on the Downtown Campus. Incoming students will be automatically considered for program-distributed tuition assistance at the time of admission to the program. Continuing students will be regularly apprised of available aid and positions. Students interested in research assistantships should consult individual faculty with whom they wish to work regarding potential assistantship positions. All other aid should be requested through the UC Denver Financial Aid Office, North Classroom, 1030, Campus Box 125, P.O. Box 173364, Denver, CO 80217-3364. Telephone: 303-556-2886.

Internships

Students in the MS in environmental sciences program are strongly encouraged to contact the Experiential Learning Center for internships and paid positions related to environmental sciences. The Experiential Learning Center is located in the Tivoli Student Union, Suite 260. Telephone: 303-556-2250. Many students have had internships in federal agencies, such as the U.S. Environmental Protection Agency and the U.S. Geological Survey.

Program Requirements

The MS in environmental sciences is a 39-hour program that provides students with two alternate plans: Plan I requires a thesis, while Plan II is a nonthesis program. General requirements for the program include: a set of core courses (15 semester hours), the MS in environmental sciences seminar course (ENVS 6002, 3 semester hours), an environmental policy course (3 semester hours), and elective courses (12 semester hours minimum). Students choosing Plan I must also complete 6 hours of thesis, while those choosing Plan II must complete 6 hours of additional elective course work. Students opting for Plan II are encouraged to enroll in 3 hours of independent study (ENVS 6840) as one of their electives.

The degree is offered through the College of Liberal Arts and Sciences with the cooperation of the College of Engineering and Applied Science. In addition, some courses offered by the College of Architecture and Planning, the School of Public Affairs and the Business School are relevant and applicable to the program.

Required Core Courses

Fall

- CVEN 5401 - Introduction to Environmental Engineering Summer 2010
Registration: C E 5401
- ENVS 5030 - Environmental Geology Summer 2010 *Registration: ENVS 5030*
- ENVS 6200 - Risk Assessment Summer 2010 *Registration: ENVS 6200*

Spring

- BIOL 5445 - Applied Environmental Biology Summer 2010 *Registration: BIOL 5445*
- CHEM 5700 - Environmental Chemistry Summer 2010 *Registration: CHEM 5700*

Total: 18 Hours

The core courses are to be taken first upon entry into the program. They are the foundation for other courses in environmental sciences.

Seminar Course

Students are required to register for ENVS 6002, Environmental Sciences Seminar, in the first fall semester they are enrolled in the MS in environmental sciences program. The seminar serves as an introduction to the program and helps students to develop research skills and further their professional development.

- ENVS 6002 - Environmental Sciences Seminar Summer 2010 *Registration: ENVS 6002*

Elective Courses

(See the MS in Environmental Sciences Web site for a complete list of elective courses for the MS in environmental sciences program.)

Students, with the coordinator and/or an advisor, will complete a program plan that will include 12-21 semester hours of elective requirements that will meet their interests. Students may choose to use four of the electives to fulfill one of the following options

offered in environmental sciences: air quality, ecosystems, environmental health, geospatial analysis, hazardous waste and water quality. Students must have the prerequisites for each course and must meet the requirements listed in the notes below. Contact the option advisor for the particular option of interest before starting. Upon graduation, the option will be noted on the student's transcript.

Following are the requirements for each environmental sciences option:

AIR QUALITY OPTION

Option Advisor: Larry Anderson

Telephone: 303-556-2963

E-mail: Larry.Anderson@ucdenver.edu

Required Courses

- CHEM 5710 - Air Pollution Chemistry Summer 2010 Registration: **CHEM 5710**
- ENVS 5730 - Air Quality Modeling and Analysis Summer 2010 Registration:
ENVS 5730

Total: 6 Hours

Electives

Choose two:

- CHEM 5720 - Atmospheric Sampling and Analysis Summer 2010 Registration:
CHEM 5720
- URPL 6686 - Special Topics: Urban and Regional Planning Summer 2010
Registration: **URP 6686**
(when Air Quality Planning and Policy is the topic)

Total: 6 Hours

Option Total: 12 Hours

ECOSYSTEMS OPTION*

Option Advisor: Gregory Cronin

Telephone: 303-556-6036

E-mail: Gregory.Cronin@ucdenver.edu

Required Courses

- BIOL 5415 - Microbial Ecology Summer 2010 Registration: BIOL 5415

Total: 6 Hours

Electives

Choose two:

- BIOL 5050 - Advanced Biology Topics Summer 2010 Registration: BIOL 5050
- BIOL 5154 - Conservation Biology Summer 2010 Registration: BIOL 5154
- ENVS 6220 - Toxicology Summer 2010 Registration: ENVS 6220
(see Note 2)
- GEOG 5060 - Remote Sensing I: Introduction to Environmental Remote Sensing Summer 2010 Registration: GEOG 5060

Total: 6 Hours

Option Total: 12 Hours

* BIOL 5445, Applied Environmental Biology, required as a prerequisite for the ecosystems option.

ENVIRONMENTAL HEALTH OPTION*

Option Advisor: Deborah Thomas

Telephone: 303-556-5292

E-mail: Deborah.Thomas@ucdenver.edu

Required Courses

- ENVS 6220 - Toxicology Summer 2010 Registration: ENVS 6220
(see Note 2) (fall, even years)
- ENVS 6230 - Environmental Epidemiology Summer 2010 Registration: ENVS 6230
(spring, even years)

Total: 6 Hours

Electives

Choose two:

- ANTH 4010 - Global Health Studies I: The Biocultural Basis of Health Summer 2010 Registration: **ANTH 4010**
- ENVS 6210 - Human Health and Environmental Pollution Summer 2010 Registration: **ENVS 6210**
(spring, odd years)
- PUAD 5633 - Seminar in Natural Resource and Environmental Health Law Summer 2010 Registration: **P AD 5633**

Total: 6 Hours

Option Total: 12 Hours

* ENVS 6200, Risk Assessment, required as a prerequisite for the environmental health option.

ENVIRONMENTAL SCIENCE EDUCATION OPTION

Option Advisor: Bryan Wee

Telephone: 303-315-4992

E-mail: bryan.wee@ucdenver.edu

Required Courses

- ELED 5340 - Multicultural Science Education Summer 2010 Registration: **ELED 5340**
-OR-
- ENVS 5340 - Multicultural Science Education Summer 2010 Registration: **ENVS 5340**
-OR-
- SECE 5340 - Multicultural Science Education Summer 2010 Registration: **SECE 5340**
- ENVS 5500 - Topics in Environmental Sciences Summer 2010 Registration: **ENVS 5500**
(Taken as Survey of Field Methods topic)

Total: 6 Hours

Electives:

Choose two:

- ANTH 5170 - Culture and the Environment Summer 2010 Registration: **ANTH 5170**
- BIOL 5154 - Conservation Biology Summer 2010 Registration: **BIOL 5154**
- COMM 5282 - Environmental Communication Summer 2010 Registration: **CMMU 5282**
- GEOG 5335 - Contemporary Environmental Issues Summer 2010 Registration: **GEOG 5335**
- GEOG 5350 - Environment and Society in the American Past Summer 2010 Registration: **GEOG 5350**

Or another elective approved by the option advisor

Total: 6 Hours

Option Total: 12 Hours

GEOSPATIAL ANALYSIS OPTION*

Option Advisor: Rafael Moreno

Telephone: 303-556-3762

E-mail: Rafael.Moreno@ucdenver.edu

Required Courses

- GEOG 5080 - Introduction to GIS Summer 2010 Registration: **GEOG 5080**
- GEOG 5090 - Environmental Modeling with Geographic Information Systems Summer 2010 Registration: **GEOG 5090**

Total: 6 Hours

Electives

Choose two:

- CVEN 5382 - GIS Spatial Database Development Summer 2010 Registration: **C E 5382**
- CVEN 5385 - GIS Relational Database Systems Summer 2010 Registration: **C E 5385**
- CVEN 5386 - GIS Laboratory Summer 2010 Registration: **C E 5386**

Total: 6 Hours

Option Total: 12 Hours

* GEOG 3080, Introduction to Mapping and Map Analysis, is required as a prerequisite of the geospatial analysis option.

For more information, contact the option advisor or Jon Barbour at 303-556-4520, Jon.Barbour@ucdenver.edu.

HAZARDOUS WASTE OPTION*

Option Advisor: Anu Ramaswami

Telephone: 303-556-4734

E-mail: Anu.Ramaswami@ucdenver.edu

Required Courses

- CVEN 5480 - Hazardous Wastes and Site Remediation Summer 2010
Registration: C E 5480

Total: 6 Hours

Electives

Choose two:

- BIOL 5051 - Advanced Topics In Microbiology Summer 2010 *Registration: BIOL 5051*
- CVEN 5402 - Environmental and Water Quality Modeling Summer 2010
Registration: C E 5402
- ENVS 5403 - Unsaturated Zone Hydrology Summer 2010 *Registration: ENVS 5403*

Total: 6 Hours

Option Total: 12 Hours

*C E 5401, Introduction to Environmental Engineering, required as a prerequisite for the hazardous waste option.

WATER QUALITY OPTION*

Option Advisor: John Wyckoff
Telephone: 303-556-2590
E-mail: John.Wyckoff@ucdenver.edu

Required Courses

- BIOL 5416 - Aquatic Ecology Summer 2010 Registration: **BIOL 5416**
- ENVS 5410 - Aquatic Chemistry Summer 2010 Registration: **ENVS 5410**

Total: 6 Hours

Electives

Choose two:

- CVEN 5333 - Applied Hydrology Summer 2010 Registration: **C E 5333**
- CVEN 5393 - Water Resources Development and Management Summer 2010 Registration: **C E 5393**
- ENVS 5403 - Unsaturated Zone Hydrology Summer 2010 Registration: **ENVS 5403**

Total: 6 Hours

Option Total: 12 Hours

*CHEM 5700, Environmental Chemistry, is required as a prerequisite of the water quality option.

Notes:

1. Many of the courses have prerequisites; student must check the catalog for prerequisite requirements for these courses. Some options have a prerequisite course requirement.
2. One course may not be used for more than one option, even if it is listed in several options. Other courses may be offered that will be acceptable as electives with approval of the option advisor and the director of the program.
3. No more than three courses may be from any one discipline (excluding ENVS); i.e., chemistry, biology, civil engineering.

4. Courses used by the student to fulfill a core requirement may not be used to fulfill the options.
5. All work submitted for the environmental sciences options must have a grade of *B* (3.0) or better.
6. All courses for the environmental sciences options must be completed at the Downtown Campus.
7. Courses applied to either a certificate* or an MS degree may later be applied toward the other if all pertinent course work is completed within a five-year time period.

* The above options of the program may be taken to earn a corresponding environmental sciences certificate. However, certificates may be earned without entrance into the MS in environmental sciences program. (See the [Environmental Sciences Graduate Certificate](#) description).

Health and Behavioral Sciences

Director: Richard Miech

Program Assistant: Abby Fitch

Mailing Address: Program in Health and Behavioral Sciences, Campus Box 188, P.O. Box 173364, Denver, CO 80217-3364

Office Location: Administrative Building, 280

Telephone: 303-556-4300

Fax: 303-556-8501

E-mail: Abby.Fitch@ucdenver.edu

Web site: clas.ucdenver.edu/hbsc/

Faculty

Professors:

Stephen Koester, PhD, University of Colorado

Deborah Main, PhD, University of Colorado

Associate Professors:

Sheana Bull, PhD, Georgia State University

Richard Miech, PhD, University of North Carolina

David Tracer, PhD, University of Michigan

Assistant Professors:

Ronica Rooks, PhD, University of Maryland College Park

Sara Yeatman, PhD, University of Texas Austin

Research Faculty:

Susan Dreisbach, PhD, University of Colorado

Sharry Erzinger, DrPH, University of California Berkeley

Jean Scandlyn, PhD, Columbia University

Adjunct Faculty:

John Brett

Lucinda Bryant

Lauren Clark

Mary Coussons-Read

Estevan Flores

Karen Gottlieb

Cornelius Rietmeijer

The mission of the health and behavioral sciences (HBSC) program is to apply social science theory and innovative research methods to critically address emerging issues in health. The program trains students to confront issues affecting the health of communities and populations by focusing on social determinants of health and diseases. These determinants can be more influential on population health than the health care system.

The program's overarching framework integrates social, cultural and biomedical perspectives to understand the underpinnings of health and the conditions essential for its creation and maintenance. Students and faculty conduct interdisciplinary research on topics including emerging diseases, maternal/child health, substance abuse, health disparities and global health. Graduates are innovative researchers, effective educators and leaders directly engaged in the practice of public health.

Undergraduate Program in Community Health Science

The health and behavioral sciences program is committed to the principle that understanding the basic social, cultural and biological dimensions of health is fundamental to a solid liberal arts and sciences undergraduate education. HBSC has developed a minor in community health science that provides undergraduates with the

basic intellectual and methodological tools needed to understand the societal contexts of health, health care and public health. We expect that graduates with a minor in community health science will be successful in their pursuit of graduate degrees in a broad range of fields including the biomedical sciences, social and behavioral sciences, public health, law, medicine, dentistry, pharmacy, business administration and health services research. The program is especially appropriate for students who intend to pursue careers in public health as well as medicine, nursing, health policy and administration. Students seeking the minor should contact CLAS advising and the health and behavioral sciences program with specific questions.

A major is not currently available, but students may complete an individually structured major (ISM) that combines course work in HBS with that of related fields such as anthropology, biology and psychology. Students should consult the Individually Structured Major section in this catalog for a description of ISM programs and with CLAS Advising or the HBSC program regarding specific questions.

REQUIREMENTS FOR THE MINOR

PhD Program in Health and Behavioral Sciences

The doctor of philosophy degree in health and behavioral sciences is rooted in the realization that our ability as a global society to overcome some of the most significant and intractable public health problems today rests on the willingness of biomedical and social science researchers to innovate across traditional disciplinary boundaries. Students are trained in theory from multiple disciplines and in both quantitative and qualitative research methods.

Although a master's degree is not provided by the health and behavioral sciences department, two relevant master's programs currently exist at UC Denver, as described in the PhD program requirements for admission.

A student's particular research focus constitutes a key part of his or her doctoral program. A range of possible foci exists, given the particular student's interest and faculty expertise. Examples of HBSC research foci include:

- *Social determinants of health.* Such research interests include studies on the health-related influences of socioeconomic position, social and economic inequality, discrimination, social networks and support, social capital, work conditions and psychological states including stress.
- *Community health.* This area of research involves community health assessment; program design and evaluation; translation of evidence-based interventions to diverse populations and communities; participatory research and community mobilization; policy analysis and advocacy for health-related problems.
- *Biosocial ecology.* Within this area are studies of the interplay of biological (including physiological, genetic or others of the biomedical health sciences),

social, cultural and environmental characteristics influencing maternal/infant health, exercise performance or susceptibility to disease.

- *Global health* topics include social, cultural and biomedical factors influencing transmission of disease and health disparities on an international (as well as national) scale.

Recent student research exemplifying such foci includes:

- social factors affecting newly emerging diseases in the American Southwest
- factors that contribute to positive perceived health in the older-aged population
- ethnic group differences in weight gain and cardiovascular disease
- the impact of natural hazards and risk management strategies on health among pastoral herders in Mongolia
- adolescent sexual risk behaviors in the context of social networks and cultural norms
- disease incidence patterns and environmental contamination in north Casper, Wyoming

Graduates of the HBSC program acquire skills that situate them for leadership roles in public health. Depending upon a student's concentration, the successful graduate will gain expertise in research design and methods; social, cultural and biobehavioral determinants of health and disease; the structure and organization of health care systems; the contribution of individual, social and cultural factors for deciding health behaviors; and how guided change in health care systems may enhance quality, efficacy and access. The significance of these skills in addressing current complex health issues ensures that graduates will be in demand in a number of employment sectors ranging from community and public health organizations, to academic institutions, to nonprofit research organizations and to private health care settings.

PhD PROGRAM REQUIREMENTS

Programs

Non Degree

Community Health Science Minor

To earn a minor in community health science, a minimum of 18 semester hours are required, of which 12 must be upper-division. Students must achieve no less than a C (2.0) in each course applied toward minor requirements. At least 12 semester hours must be taken from the Downtown Campus faculty. Note that additional HBSC courses are currently being developed to provide additional choices. As they are approved, these courses will appear on the HBS Web site, the online course descriptions and term

schedule planner. (Note: HBS courses, in general, are 3 semester hours under the prefix HBSC.)

Program Requirements

Community Health Science Courses

Choose two:

- HBSC 2001 - Introduction to Community and Population Health Science Summer 2010 Registration: **HBSC 2001**
- HBSC 3021 - Fundamentals of Health Promotion Summer 2010 Registration: **HBSC 3021**
- HBSC 3031 - Health, Human Biology and Behavior Summer 2010 Registration: **HBSC 3031**
- HBSC 3041 - Health, Culture and Society Summer 2010 Registration: **HBSC 3041**

Total: 6 Hours

Methods Courses

Choose at least two:

- GEOG 4235 - GIS Applications in the Health Sciences Summer 2010 Registration: **GEOG 4235**
- HBSC 4021 - Community Health Assessment Summer 2010 Registration: **HBSC 4021**

Total: 6 Hours

Community Health Emphasis Courses

Choose at least two:

- ANTH 4040 - Anthropology of Food and Nutrition Summer 2010 Registration: **ANTH 4040**
- ANTH 4060 - Evolutionary Medicine Summer 2010 Registration: **ANTH 4060**
- ANTH 4090 - Political Economy of Drugs Summer 2010 Registration: **ANTH 4090**
- ANTH 4260 - Human Reproductive Ecology Summer 2010 Registration: **ANTH 4260**
- ANTH 4560 - Human Ecology Summer 2010 Registration: **ANTH 4560**

- COMM 4500 - Health Communication Summer 2010 Registration: CMMU 4500
- COMM 4620 - Health Risk Communication Summer 2010 Registration: CMMU 4620
- GEOG 4020 - Earth Environments and Human Impacts Summer 2010 Registration: GEOG 4020
- GEOG 4230 - Hazard Mitigation and Vulnerability Assessment Summer 2010 Registration: GEOG 4230
- HBSC 3010 - Evolution of Human Sexuality Summer 2010 Registration: HBSC 3010
- HBSC 4010 - Global Health Studies I: The Biocultural Basis of Health Summer 2010 Registration: HBSC 4010
- HBSC 4020 - Global Health Studies II: Comparative Health Systems Summer 2010 Registration: HBSC 4020
- HBSC 4080 - Global Health Practice Summer 2010 Registration: HBSC 4080
- HBSC 4200 - The Global HIV/AIDS Epidemic Summer 2010 Registration: HBSC 4200
- HIST 4345 - Gender, Science, and Medicine: 1600 to the Present Summer 2010 Registration: HIST 4345
- HIST 4346 - Medicine and Society: the Ancients to the Present Summer 2010 Registration: HIST 4346
- HIST 4503 - Topics in History of Science Summer 2010 Registration: HIST 4503
- PSYC 3235 - Human Sexuality Summer 2010 Registration: PSY 3235
- PSYC 3262 - Health Psychology Summer 2010 Registration: PSY 3262

Total: 6 Hours

Total: 18 Hours

Check the department Web site for additional course offerings.

Doctor of Philosophy

Health and Behavioral Sciences PhD

► Graduate School Rules apply to this program

Requirements for Admission

A master's or equivalent graduate degree is required for admission to the PhD program. In addition, we encourage prior graduate training in the areas noted below. Students

applying without prerequisites may be admitted, but will be required to complete appropriate courses before being permitted to complete the core curriculum. The program currently works with two master's-level programs to provide articulated master's-PhD training, as described below.

In addition to the general admission requirements of the Graduate School, the specific admission requirements for the PhD in health and behavioral sciences are as follows:

1. Knowledge from prior course work or vocational experience at the equivalent of college senior or graduate level in each of the following areas.

Social or behavioral sciences (15 semester hours minimum): knowledge of essential facts and concepts concerning the relationship among individuals and society, social organization, individual psychology and the relationship among culture, belief and behavior. This could be satisfied by course work in psychology, sociology and anthropology.

Human biology or physiology (6 semester hours minimum): familiarity with the functioning of the human body in health and disease states, including an understanding of cellular and organ system processes; an appreciation of evolutionary theory and the mechanisms by which evolution operates on both cellular and population levels; and an understanding of the interplay between the evolution of disease and host response. This could be satisfied by course work in human biology, physiology, pathophysiology or biological anthropology.

Statistics (3 semester hours minimum): prior course work and current familiarity with statistics including probability theory, parametric and nonparametric methods and acquaintance with basic multivariate techniques.

Epidemiology (3 semester hours minimum): prior course work at the advanced undergraduate or graduate level with the basic concepts and methods of epidemiology including measures of risk, mortality, distribution of disease, role of bias and confounders and study design.

2. Demonstrated academic excellence as evidenced by an undergraduate GPA of 3.25 (out of a possible 4.0 points) or better, a graduate GPA of 3.5 or better, and scores in the top 30th percentile (averaged) of the GRE. Admission to the program is highly competitive; minimum GPAs and GRE scores for acceptance in any given year may be higher than the minimum levels indicated here.

The applicability of a student's prior course work will be decided by the program executive committee after reviewing the student's transcript and additional materials. If the student does not have the requisite educational background or GPA, the student may be admitted on a conditional or provisional basis and additional course work required in accordance with Graduate School Rules.

Prospective students should not be dissuaded from applying to the program if they do not meet all of the requirements for admission. In some cases, employment experience

may be counted toward meeting a requirement. In other cases, students may be admitted conditionally upon their completion of a list of prerequisite courses that will be established at the time of admission. Students should be sure to address this issue in completing the graduate application by specifying the academic and vocational experience they possess that meets, in part or full, the admission requirements described above.

MASTER'S LEVEL PREPARATION FOR THE DOCTORAL PROGRAM IN HEALTH AND BEHAVIORAL SCIENCES

The program does not currently offer master's-level training in HBSC. Instead, we urge interested applicants to pursue relevant master's degree training in one of the social, behavioral or health sciences disciplines. In addition, we work closely with two master's programs at UC Denver. These are the concentrations in medical anthropology within the [anthropology MA program](#) offered by the anthropology department and the [master of public health](#) offered by the Colorado School of Public Health. Contact the respective programs for more information on these degree options and our program for how their requirements articulate with those for the health and behavioral sciences PhD.

TO APPLY FOR ADMISSION

At the UC Denver Downtown Campus, all graduate applications are now submitted electronically. To begin the application process, go to the [online admissions Web site](#). If you have any difficulties, call the program assistant at 303-556-4300. The program admits students only for the fall semester, which typically begins in mid- to late August. The deadline for the receipt of all application materials is **February 15** for admission the following August.

Applicants should invest considerable thought and effort in preparing their application. For instance, in the essay (Part II, question six) applicants should provide information on: (a) their academic training and any employment related to public health or health care; (b) their experiences with inter- and multidisciplinary perspectives, and (c) how they envision using their doctoral degree to improve the health status of human populations and individuals. Students should also indicate the kinds of research *foci* that interest them the most.

In addition to the required recommendation form, letters of recommendation are required from at least three individuals in a position to judge the applicant's ability to complete the program. Recommenders may be employers, colleagues or professors; however, the applicant should be sure that the letters address the quality of and aptitude for academic work as well as personal characteristics and qualities.

Financial Aid

There are four kinds of financial aid available: graduate student stipends/fellowships; tuition assistance; research assistantship positions funded by grants to specific program faculty; and the regular package of financial aid (primarily loans) available through the financial aid office.

Newly admitted, out-of-state and students demonstrating outstanding scholastic achievement receive priority when assigning departmental sources of funding. Students interested in research assistantships should contact the individual faculty member with whom they wish to work regarding potential assistantship positions.

All other aid should be requested through the UC Denver Financial Aid Office, North Classroom, 1030, Campus Box 125, P.O. Box 173364, Denver, CO 80217-3364. Telephone: 303-556-2886.

Program Requirements

There are three dimensions to the required curriculum:

- a. A core curriculum that focuses on problem-oriented, interdisciplinary approaches to theory and method
- b. Elective course work intended to provide the student with a solid base from which to launch the dissertation research
- c. Dissertation research and writing

The core curriculum is subject to change. What appears below is intended to give students a general idea of the extent, shape and content of the core curriculum. Students should check with the program office for up-to-date information on specific course requirements and scheduling.

The Core Curriculum

The core curriculum should be completed by students by the end of their second year of full-time study. It consists of the following series of courses which, together, constitute 26 semester hours:

I. Health and Behavioral Sciences Colloquium

Each fall, the HBSC program will organize a series of presentations by scholars working in the health and behavioral sciences. The presentations provide students with the most current science and theory in the field. Required of all first- and second-year students, who must take at least two times.

- HBSC 7001 - Colloquium Series in the Health and Behavioral Sciences Summer 2010 Registration: HBSC 7001

Total: 2 Hours

II. Theoretical Perspectives in the Health and Behavioral Sciences

This series is designed to give students a thorough background in how the principles of the social and behavioral sciences have been applied to health issues. Topics include: the interplay between structure and agency in creating and maintaining health; social epidemiology; critical theory and social determinants of health; issues affecting Western biomedicine and public health systems; diffusion of healthy behavioral change among populations; social construction of health and illness; health policy and bioethics; social networks; and stress.

- HBSC 7011 - Theoretical Perspectives in Health and Behavioral Science I Summer 2010 Registration: HBSC 7011
- HBSC 7021 - Theoretical Perspectives in Health and Behavioral Science II Summer 2010 Registration: HBSC 7021
- HBSC 7071 - Social and Behavioral Determinants of Health and Disease Summer 2010 Registration: HBSC 7071

Total: 9 Hours

III. Human Ecology and Environmental Adaptation

This course will emphasize the biological/physiological dimensions of human health and disease.

- HBSC 7031 - Human Ecology and Environmental Adaptation Summer 2010 Registration: HBSC 7031

Total: 3 Hours

IV. Research Design and Methods in the Health and Behavioral Sciences

Two HBSC core research design and methods courses, plus one additional advanced methods course of student's choosing. This series covers the philosophy of science and the structure of scientific inquiry, procedures for hypothesis-testing, quantitative and qualitative methodological strategies commonly employed in the field, epidemiology and program evaluation. Students must further develop specialized methodological skills by completing an independent study (HBSC 6840) or taking one additional course in

advanced epidemiology, advanced biostatistics, health economics, survey research design or qualitative methods and data analysis. This requirement will be tailored specifically to the student's particular interests by his/her advisor.

- HBSC 7041 - Research Design and Methods in the Health and Behavioral Sciences I Summer 2010 Registration: HBSC 7041
 - HBSC 7051 - Qualitative Research Design and Methods Summer 2010 Registration: HBSC 7051
- One elective course in advanced methods: **3 semester hours**

Total: 9 Hours

V. Applications of the Health and Behavioral Sciences

This course offers students the opportunity to focus on individual research interests with guidance from faculty and input from peers.

- HBSC 7111 - Applications of the Health and Behavioral Sciences Summer 2010 Registration: HBSC 7111

Total: 3 Hours

TOTAL CORE: 26 Hours

Elective Courses

Elective course work together constitutes 26 semester hours, of which a minimum of 6 hours can be drawn from the large number of offerings in the health and behavioral sciences at UC Denver. A full listing of elective courses is available in the program office and online on the HBSC Web site. Students will be expected to fulfill the necessary prerequisites for taking these courses, and final authority as to whether a student may enroll in the course will rest with the department in which the course is offered.

TOTAL ELECTIVES: 26 Hours

Doctoral Dissertation Research

The doctoral dissertation research topic is chosen by the student. The student is expected to define a research question in health and behavioral science, identify the research strategy to be used for answering the question, conduct the research required and document the project in the form of a doctoral dissertation. The student will be guided in this process by a doctoral dissertation advisor and the additional members

who comprise the student's doctoral dissertation committee (see below). A minimum of 30 semester hours of dissertation work is required. Students must register for a minimum of 5 dissertation credits each semester of their dissertation work. Students may not take more than a year's leave of absence or fail to enroll for semester hours more than three semesters before they are dropped from the program.

Advisors

Upon admission to the program, each student will be assigned a first-year advisor. The student or the faculty will then choose the faculty advisor who will guide the student through the core and elective course work. The faculty advisor may or may not be the chair of the student's dissertation committee. The student selects his or her chair and three additional committee members who oversee the student's comprehensive examination and dissertation research.

Formal Review

A formal review of each student's first-year progress will be undertaken at the end of the first year of study. A student may not take any additional courses in the program until this review is completed. Students who are deemed not to be making satisfactory progress will be informed in writing as to the nature and final result of the review before the end of June in the first year of study.

The Dissertation Prospectus and the Comprehensive Examination

Before a student advances to candidacy, she/he must complete a dissertation prospectus and defend it successfully in the context of an oral comprehensive examination. The dissertation prospectus is a complete description of the question or hypothesis that the student wishes to research for the dissertation project, the research design and study techniques and an assessment of the proposed project's contribution to the field. It will include a comprehensive review of the relevant literature. If the student chooses to undertake research in a particular ethnic or cultural community, she/he must also demonstrate sufficient understanding of that setting including adequate knowledge of the language. This prospectus must be approved by the student's advisor prior to scheduling the comprehensive examination.

The comprehensive examination will be an oral format based in part on, but not restricted to, the material presented in the dissertation prospectus. This exam *must* take place before the student's advancement to candidacy and will typically occur by the end of the third year of study. A committee comprising the chair and three faculty members

will supervise the completion of the dissertation prospectus. This committee will conduct the oral examination and will recommend to the executive committee by a majority vote whether or not the student should be advanced to candidacy.

The Doctoral Dissertation and Final Exam

After advancement to candidacy, the student in consultation with his or her advisor will appoint a dissertation committee comprising the chair and three faculty members. The chair and composition of the committee will be subject to approval by the program executive committee. The chair and two other members must have been present at the student's comprehensive examination and will be responsible for overseeing the research and writing of the doctoral dissertation. The committee will review drafts of the dissertation and, when the dissertation is completed to its satisfaction, will conduct the final exam, which will be based on the doctoral dissertation and related materials. The final examination will be open to the public.

Dissertation Total: 30 Hours minimum

History

Chair: Marjorie Levine-Clark

Program Assistant: Tabitha Fitzpatrick

Undergraduate Advisor: Myra L. Rich

Graduate Advisor: Pamela Laird

Office: King Center, 562

Telephone: 303-556-4830

Fax: 303-556-6037

Web site: clas.ucdenver.edu/history/

Faculty

Professors:

Pamela W. Laird, PhD, Boston University

Thomas J. Noel, PhD, University of Colorado

Associate Professors:

Michael T. Ducey, PhD, University of Chicago

Gabriel Finkelstein, PhD, Princeton University

Marjorie Levine-Clark, PhD, University of Iowa

Carl E. Pletsch, PhD, University of Chicago
Myra L. Rich, PhD, Yale University
James B. Whiteside, PhD, University of Colorado

Assistant Professors:

Christopher Agee, PhD, University of California, Berkeley
Thomas G. Andrews, PhD, University of Wisconsin
Xiaojia Hou, PhD, Cornell University
Alison M. Shah, PhD, University of Pennsylvania

Senior Instructors:

James E. Fell Jr.
Rebecca Hunt
Richard D. Smith
John G. Whitesides

Instructors:

Marilynn Hitchens
James P. Walsh

Emeritus Professors:

Frederick S. Allen, PhD, Harvard University
Mary S. Conroy, PhD, Indiana University
Mark S. Foster, PhD, University of Southern California
James B. Wolf, PhD, University of California, Los Angeles

The special responsibility of historical studies is understanding the past. History courses integrate many branches of knowledge, cutting across the lines of the social sciences and the humanities, and even the natural sciences. Identifying forces of stability and processes of change, history students develop their research, writing and analytical skills, which serve them well beyond their university years.

Undergraduate

REQUIREMENTS FOR THE MAJOR

REQUIREMENTS FOR THE MINOR

Internships

Students may qualify for internships with the Center for Colorado and the West, Colorado State Historical Society, Historic Denver, Denver Museum of Nature and Science, the Colorado Railroad Museum, the National Park Service and other agencies to earn credit and experience. Students must have a minimum 2.75 cumulative GPA in at least 15 semester hours of University of Colorado course work to take an internship. Three hours of internship can be taken in one semester.

Honors Program

Students with a cumulative GPA of 3.5 or higher in their history classes are encouraged to complete an honors thesis to achieve a degree awarded with Latin honors: *cum laude*, *magna cum laude* or *summa cum laude*. A cumulative GPA of 3.5-3.69 is required for *cum laude*, 3.7-3.89 for *magna cum laude*, and 3.9-4.0 for *summa cum laude*. Students must enroll for HIST 4849, in which they will prepare and submit a research paper for honors review by a faculty committee.

Downtown Campus Historical Studies Journal

Since 1983, Downtown Campus graduate students have published this illustrated journal showcasing the most outstanding original research done each year by history students.

Independent Study

Students may take up to 9 semester hours of courses in independent study or internships (no more than 6 hours per semester), with permission of the concerned instructors and an undergraduate advisor.

Graduate

REQUIREMENTS FOR MA IN HISTORY

PUBLIC HISTORY MA MAJOR PROGRAM

Certificate in Historic Preservation

The history department also offers a certificate in historic preservation in conjunction with the College of Architecture and Planning. History students pursuing the certificate should consult the historic preservation Web site for this program as well as their history advisor to determine appropriate course work.

Programs

Bachelor of Arts

History BA

The bachelor's degree in history provides students with firm grounding for advanced studies in education, librarianship, law, business and public service, as well as graduate work in the humanities and social sciences broadly. History is an all-inclusive discipline, making it an excellent choice for students with a wide variety of career goals.

Students must declare a major by the time they have completed 60 semester hours of course work. For the BA in history, students must complete a minimum of 36 semester hours of history course work. Majors must complete at least 18 upper-division (3000- and 4000-level) hours at the University of Colorado Denver. Not more than 48 hours of history will be counted toward graduation requirements. No grade below a C (2.0) will count toward major requirements to graduate.

Course Requirements

Required History Courses

- HIST 3031 - Theory and Practice of History: An Introduction to the Major
Summer 2010 Registration: HIST 3031
- HIST 4839 - History Seminar *Summer 2010 Registration: HIST 4839*

Students must complete HIST 3031 before enrolling in HIST 4839.

Majors must take a minimum of 15 credit hours in History at the 4000-level, including HIST 4839.

Total: 6 Hours

Distribution Requirement

A minimum of 6 semester hours in each of the following areas: United States, Europe and world (Africa, Asia, Latin America). At least 3 semester hours in each area must be upper-division (3000- and 4000-level).

Total: 18 Hours

Electives

The degree requires a minimum of 12 additional semester hours of electives, which can be satisfied by a combination of additional history courses, history internships, or history honors independent study for eligible students.

Total: 12 Hours

Major Total: 36 Hours

BA in History with Secondary Licensure

Students seeking secondary social studies teacher licensure may pursue a BA in history. This option enables them to complete their history major as well as fulfill requirements for licensure at the undergraduate level.

If you are interested in this option, you should meet with a CLAS advisor as soon as possible. You can complete your degree, including licensure, within a 4-year graduation plan, but only if you declare it early in your college career and meet regularly with your advisors.

To earn the professional teacher licensure, you will complete a major in history and then complete the [teacher licensure requirements](#) through the School of Education & Human Development (SEHD). The licensure process requires that you be admitted into the SOEHD to complete licensure classes. You will be working with your CLAS advisor through the application process.

Get to know your advisor! He/she is your guide through what can be a complex process dictated by the State of Colorado. Call 303-556-8316 for more information.

Non Degree

History Minor

Students interested in a minor in history are required to complete 18 hours of course work. At least 12 semester hours must be completed at UCD. No grade below a C (2.0) will count toward the minor.

Students minoring in history must take at least 9 credit hours of upper division (3000- and 4000-level) courses.

Course Requirements

Required Course

- HIST 3031 - Theory and Practice of History: An Introduction to the Major
Summer 2010 Registration: HIST 3031

Total: 3 Hours

Distribution Requirement

A minimum of 3 semester hours must be taken in each of the following areas: United States, Europe and World.

Total: 9 Hours

Electives

Choose at least 6 hours of elective upper-division history credit.

Total: 6 Hours

Minor Total: 18 Hours

Master of Arts

History MA

► Graduate School Rules apply to this program

The master of arts in history requires 36 semester hours (12 courses). Students applying for admission to the program should have some background in history, though not

necessarily a BA in the subject. The department encourages applications from individuals of any age interested in resuming their education. Graduate students in history develop skills in critical thinking, writing and independent research. Our program prepares students for a wide variety of professions, including teaching, government service, museum and archive management and historic preservation, as well as further degree work in history, law, librarianship and business. The department expects that students graduating with an MA in history will master the following general skills for their degrees:

- The ability to pursue independent historical research projects
- The ability to analyze historiographical arguments
- The ability to analyze primary documents and develop arguments from them
- The ability to create bibliographies using archival, library and Internet resources
- The ability to write in a variety of formats, including historiographical essays, book reviews and research papers

Students will also master knowledge of the basic historical content of both their major and minor fields, and an understanding of the historiographies and historical methods in their major and minor fields.

Admission Requirements

- In addition to the general admission requirements of the Graduate School, the Department of History requires an undergraduate GPA of at least 3.25.
- All applicants to the history program must take the GRE. GRE scores form a part of the department's consideration of students' qualifications.
- Applicants are required to submit a sample of written work, usually a term paper or project of similar length.
- Applicants should address any gaps, weaknesses or special circumstances in their academic records in the statement of purpose portion of the application. In special circumstances, the department may modify its admission standards.

APPLICATION DEADLINES

April 1	Fall admission
October 1	Spring admission

Admission decisions are made by a graduate committee comprising the graduate advisor and faculty representing fields in U.S., European, global and public history.

Graduate School Policies

All history MA students are subject to Graduate School policies related to graduate study, as well as to all relevant university policies. These policies cover such topics as time limits on degree completion, changing degree programs, incomplete grades, and

more. Further information on these policies can be found in the [Graduate School](#) section of this online catalog.

Transfer Credits

With approval from the graduate advisor and the appropriate faculty, students may transfer nine graduate-level credits accrued before enrollment in the UC Denver MA history degree program, provided that they earned a grade of *B+* or better in these courses. Students must submit a syllabus for each course they wish to transfer, and faculty may require students to complete additional assignments to meet the expectations of the department. The department will not accept transfer of courses comparable to HIST 6013. Introduction to the Professional Study of History.

Grade Requirements

A minimum grade of *B-* (2.7) is required in all UC Denver history courses applied toward the degree. Students who earn less than a *B-* in HIST 6013 must retake the class.

Residency Requirements

The history department requires a residency of at least one academic year for the degree.

Graduate Advising

Upon admission, students will sign a check list indicating their understanding and acceptance of the department's expectations. Early in their first semester students should contact the history department graduate advisor to discuss their path through the program and to receive advice regarding the selection of major and minor fields.

Degree Tracking Responsibility

Although faculty will provide reasonable guidance, it is up to students to monitor their own progress through the program in consultation with the graduate advisor and their major advisor; this includes knowledge and understanding of application and graduate deadlines, degree requirements, thesis guidelines, etc.

Choosing Advisors and Fields of Study

All history MA candidates choose a major and minor field. Students will take courses in these fields (see Degree Requirements below) and will be tested in these fields (see Comprehensive Examinations). As soon as possible after consulting with the graduate advisor, students are responsible for contacting two field advisors, one to oversee their progress in the major field, the other to oversee their minor field. All students should have chosen a major field and major advisor by the beginning of their second semester.

Major Fields, Minor Fields and Concentrations

The MA in history seeks to provide students with a balance of breadth and depth in the study of history. Major fields are broad areas of study within which students gain a general picture of historical processes. Concentrations provide focus for developing expertise within the major, either regionally or thematically. Minor fields provide a complementary or comparative area and must be from outside the major field.

Advisors and students together will work out Plans of Study, which indicate the courses students intend to take to meet their requirements, based on their selection of major and minor fields. *Students should make every effort to enroll in courses which best fit their major field, major concentration and minor field.*

Students can choose to major in one of the following four fields:

- European History
- Global History
- Public History
- U.S. History

The department has compiled a core readings list for each of these major fields. Students will draw on the core lists for their comprehensive exams. Core lists contain a number of themes with bibliographies for each theme. In consultation with their major advisor, students choose at least two books from each theme; for some themes, students will read more than two books.

Major Field Concentrations

Students work with advisors to select one of the major field concentrations listed above. Concentrations provide thematic or regional focus to a broad geographical major (e.g. for the global history major, students could concentrate on trade, borders, imperialism, etc. or any of the areas of regional expertise of our faculty). Readings for the major field concentration are in addition to the core reading list.

Minor Fields

Students choose minor fields from the list of major fields or the list of major field concentrations. They choose their minor field list in consultation with the minor field advisor.

Degree Requirements

All history MA students must have a major field and a minor field, and they must complete half of their course work at the 6000 level.

Required Introductory Course

- HIST 6013 - Introduction to the Professional Study of History Summer 2010
Registration: HIST 6013

Total: 3 Hours

Major Field

Core course in Major Field (3 semester hours)

Each major field has a core course covering major approaches and themes. The core course familiarizes students with the field in a broad sense.

Research Seminars (3-6 semester hours)

Research seminars focus on students' development of an original, primary research paper. One 3-semester-hour research seminar is required of all students. A second research seminar is required for students not pursuing an extended research option; the second 3 semester hours can be taken within the major or minor field.

Major electives (9-12 semester hours)

Electives are made up of courses in the major and concentration, including readings courses, which address specific field historiographies, and optional extended research credits. Students who choose to do a thesis may apply 6 thesis semester hours (HIST 6950) toward the major electives requirement.

Total: 18 Hours

Minor Field

Minor Electives

Electives are made up of courses in the minor field, including readings courses, which address specific field historiographies, or research seminars.

Total: 12 Semester Hours

Open Elective

Students may use the open elective to explore a course outside their major or minor or to do extra course work in one of their fields.

Total: 3 Hours

Degree Total: 36 Hours

PUBLIC HISTORY MA MAJOR PROGRAM

INDEPENDENT STUDY AND/OR INTERNSHIP

Candidates may register for up to 6 hours of internships or independent study, only one of which may be at the 6000-level. Students will not be allowed to fulfill the research requirement with an independent study. Any independent study at the 6000-level needs the permission of the graduate advisor. Students interested in pursuing an independent study must find a faculty member willing to oversee their work, and they should expect the workload for an independent study to equal or exceed that required for other courses at the same level.

- HIST 5840 - Independent Study: History Summer 2010 Registration: **HIST 5840**
- HIST 6840 - Independent Study: HIST Summer 2010 Registration: **HIST 6840**
- HIST 6939 - Cooperative Education Summer 2010 Registration: **HIST 6939**

COMPREHENSIVE EXAMINATIONS

All history MA candidates must pass a comprehensive examination in the major and minor fields after the completion of course work and before embarking on a thesis, curriculum project or public history project. The comprehensive exam evaluates students' knowledge of their course work and their reading lists for their major, minor and concentration. The exam consists of a take-home written section, with broad essay questions in both the major and minor fields; this is followed by an oral exam with the student's faculty committee. In answering their exam questions, students are expected to construct arguments and to show mastery of the historiographies, narratives and historical content in their fields. The comprehensive exam is administered and evaluated

by a committee of the major advisor, the minor advisor and an outside reader from the history faculty.

Master's Degree Extended Research Options

The MA program in history offers a set of courses in which students can develop extended research interests. Students must select an advisor and develop a proposal for a specific research agenda in the semester before beginning work on a project.

REQUIRED PUBLIC HISTORY THESIS (HIST 6950) OR PROJECT (HIST 6952)

Students majoring in public history must complete either a thesis (6 semester hours) or a project (3 semester hours).

OPTIONAL THESIS FOR STUDENTS IN U.S., GLOBAL AND EUROPEAN HISTORY (HIST 6950)

Students majoring in U.S., global or European history can choose to write a thesis (6 semester hours in their major field).

OPTIONAL ADVANCED HISTORY CURRICULUM DEVELOPMENT (HIST 6951)

Students who undertake their master's program when they are already teachers can choose to construct curriculum projects relevant to their teaching practice. See the separate section below on "Opportunities for Teachers and Teachers-in-Training."

- HIST 6950 - Master's Thesis *Summer 2010 Registration:* **HIST 6950**
- HIST 6951 - Masters Project: Advanced History Curriculum Development *Summer 2010 Registration:* **HIST 6951**
- HIST 6952 - Master's Project: Public History *Summer 2010 Registration:* **HIST 6952**

Thesis Requirements

Students writing theses are expected to develop an original research agenda resulting in an extended paper. Students work with their major field advisor, who will help guide them through the process of research and writing. Students are expected to take no less than two semesters (enrolled in HIST 6950) to complete their theses. Before registering for HIST 6950, students must have a thesis proposal and initial bibliography approved by

their advisor. The first semester of the thesis course is organized as a seminar in which students meet regularly with a department member and other thesis writers.

A thesis is evaluated by a committee of three, including the major advisor and two other faculty members chosen by the student in consultation with the major advisor. Upon completion of the thesis, the student meets with the committee members, who ask questions about the research and conclusions which the student must defend. In many instances, the committee will require further revisions, sometimes major in scope, before the thesis is accepted and cleared for submission to the Graduate School in fulfillment of degree requirements.

Project Requirements

In lieu of a thesis, public history majors may choose to enroll in one semester of HIST 6952 to complete a public history project. Projects, which are usually conducted in collaboration with a public history organization, can entail creating an exhibit, organizing a museum or archival collection, conducting a preservation survey or similar activities. Students are required to prepare a paper describing the process and results of their project.

Opportunities for Teachers and Teachers-in-Training

Curriculum Projects

Licensed teachers enrolled in the history graduate program may choose to complete a curriculum development project. Students arrange curriculum development projects with a sponsoring faculty member. Generally, students are expected to develop and submit a complete course curriculum plan for each 3-semester-hour project. Projects need to show evidence of familiarity with the relevant historiographies and primary sources. Students may apply the hours from HIST 6951 to either the major field or the minor field, depending on the project subjects. Curriculum plans must meet minimum criteria established by the history department in the document Advanced History Curriculum Development Projects.

- HIST 6951 - Masters Project: Advanced History Curriculum Development
*Summer 2010 Registration: **HIST 6951***
(3 or 6 semester hours in their major field, or 3 semester hours in their major and 3 semester hours in their minor)

Secondary Teacher Licensure

Students interested in becoming secondary history and social studies teachers may choose to earn both the MA in history and secondary teacher licensure.

We strongly encourage students to complete the School of Education & Human Development's teacher licensure program before enrolling in the history MA program; the history graduate program and the teacher licensure program require separate admission. Students complete 36 semester hours in history and 37 semester hours in the teacher licensure program. For the history degree, students take 18 semester hours in their major field, 12 semester hours in their minor field and 6 semester hours in curriculum and methods course work, which apply both to the teacher licensure program and the MA in history:

- HIST 5464 - Problems and Methods in Teaching History and Social Studies I
Summer 2010 Registration: HIST 5464
-and-
- HIST 5465 - Problems and Methods in Teaching History and Social Studies II
Summer 2010 Registration: HIST 5465

Public History, MA in History

The MA program in history offers graduate-level major and minor fields in public history. Public history is a field of study that applies historical methods to the public sphere. This graduate major does not require a concentration, but students can choose to concentrate in museum studies or historic preservation. Public history majors can minor in any subspecialty the department currently offers. Students majoring in U.S., European or global history can also minor in public history.

Admission Requirements—See History MA

Degree Requirements

Required Introductory Course

- HIST 6013 - Introduction to the Professional Study of History *Summer 2010*
Registration: HIST 6013

Total: 3 Hours

Major Courses

- HIST 5234 - Introduction to Public History *Summer 2010 Registration: HIST 5234*

Concentration Requirement (optional)

Students who choose to concentrate in museum studies or historic preservation must take either

- HIST 5231 - History in Museums *Summer 2010 Registration: HIST 5231*
-OR-
- HIST 5232 - Historic Preservation *Summer 2010 Registration: HIST 5232*

Research Seminar (3 hours)

Research seminars focus on students' development of an original, primary research paper.

Major Electives (9-12 hours)

Electives are made up of courses in public history, which focus on methodology and practice and thesis or project credits. These courses include:

- HIST 5133 - Management of Material Culture and Museum Collections *Summer 2010 Registration: HIST 5133*
- HIST 5228 - Western Art and Architecture *Summer 2010 Registration: HIST 5228*
- HIST 5229 - Colorado Historic Places *Summer 2010 Registration: HIST 5229*
- HIST 5240 - National Parks History *Summer 2010 Registration: HIST 5240*
- HIST 5242 - Oral History *Summer 2010 Registration: HIST 5242*
- HIST 5243 - Public History Administration *Summer 2010 Registration: HIST 5243*
- HIST 5244 - Interpretation of History in Museums: Exhibits and Education *Summer 2010 Registration: HIST 5244*
- HIST 5245 - Heritage Tourism *Summer 2010 Registration: HIST 5245*
- HIST 6992 - Seminar: Colorado Studies *Summer 2010 Registration: HIST 6992*

Additionally, special topics courses may be offered in such areas as historic reenactments, monuments and memory and recreating historic house interiors. Students who didn't take HIST 5231 or HIST 5232 as their concentration requirement may use these courses toward their elective requirements.

Total: 18 Hours

Minor Electives

Electives are made up of courses in the minor field, including readings courses, which address specific field historiographies, or research seminars.

Total: 12 Hours

Open Elective

Students may use the open elective to explore a course outside their major or minor or to do extra course work in one of their fields.

Total: 3 Hours

Total: 36 Hours

INDEPENDENT STUDIES AND/OR INTERNSHIPS

Candidates may register for up to 6 hours of internships or independent study, only one of which may be at the 6000-level. Only in exceptional circumstances will students be allowed to satisfy the research seminar requirement via independent study. *Any independent study at the 6000-level needs the permission of the graduate advisor.* Students interested in pursuing an independent study must find a faculty member willing to oversee their work, and they should expect the workload for an independent study to equal or exceed that required for other courses at the same level.

- HIST 5840 - Independent Study: History Summer 2010 Registration: **HIST 5840**
- HIST 6840 - Independent Study: HIST Summer 2010 Registration: **HIST 6840**
- HIST 6939 - Cooperative Education Summer 2010 Registration: **HIST 6939**

COMPREHENSIVE EXAMINATIONS

All history MA candidates must pass a comprehensive examination in the major and minor fields after the completion of course work and before embarking on a thesis, curriculum project or public history project. The comprehensive exam evaluates students' knowledge of their course work and their reading lists for their major, minor and concentration. In answering their exam questions, students are expected to construct arguments and to show mastery of the historiographies, narratives and historical content in their fields. The comprehensive exam is administered and evaluated by a committee of the major advisor, the minor advisor and an outside reader from the history faculty.

Master's Degree Extended Research Options

The MA program in history offers a set of courses in which students can develop extended research interests. Students must select an advisor and develop a proposal for a specific research agenda in the semester before beginning work on a project.

REQUIRED PUBLIC HISTORY THESIS (HIST 6950) OR PROJECT (HIST 6952)

Students majoring in public history must complete either a thesis (6 semester hours) or a

project (3 semester hours).

OPTIONAL ADVANCED HISTORY CURRICULUM DEVELOPMENT (HIST 6951)

Students who undertake their master's program when they are already teachers can choose to construct curriculum projects relevant to their teaching practice. See the separate section below on "Opportunities for Teachers and Teachers-in-Training."

- HIST 6950 - Master's Thesis *Summer 2010 Registration:* **HIST 6950**
- HIST 6951 - Masters Project: Advanced History Curriculum Development *Summer 2010 Registration:* **HIST 6951**
- HIST 6952 - Master's Project: Public History *Summer 2010 Registration:* **HIST 6952**

Thesis Requirements

Students writing theses are expected to develop an original research agenda resulting in an extended paper. Students work with their major field advisor, who will help guide them through the process of research and writing. Students are expected to take no less than two semesters (enrolled in HIST 6950) to complete their theses. Before registering for HIST 6950, students must have a thesis proposal and initial bibliography approved by their advisor. The first semester of the thesis course is organized as a seminar in which students meet regularly with a department member and other thesis writers.

A thesis is evaluated by a committee of three, including the major advisor and two other faculty members chosen by the student in consultation with the major advisor. Upon completion of the thesis, the student meets with the committee members, who ask questions about the research and conclusions which the student must defend. In many instances, the committee will require further revisions, sometimes major in scope, before the thesis is accepted and cleared for submission to the Graduate School in fulfillment of degree requirements.

Project Requirements

In lieu of a thesis, public history majors may choose to enroll in one semester of HIST 6952 to complete a public history project. Projects, which are usually conducted in collaboration with a public history organization, can entail creating an exhibit, organizing a museum or archival collection, conducting a preservation survey, or similar activities. Students are required to prepare a paper describing the process and results of their project.

- HIST 6952 - Master's Project: Public History *Summer 2010 Registration:* **HIST 6952**

Opportunities for Teachers and Teachers-in-Training

Curriculum Projects

Licensed teachers enrolled in the history graduate program may choose to complete a curriculum development project. Students arrange curriculum development projects with a sponsoring faculty member. Generally, students are expected to develop and submit a complete course curriculum plan for each 3-semester-hour project. Projects need to show evidence of familiarity with the relevant historiographies and primary sources. Students may apply the credits from HIST 6951 to either the major field or the minor field, depending on the project subjects. Curriculum plans must meet minimum criteria established by the history department in the document Advanced History Curriculum Development Projects.

- HIST 6951 - Masters Project: Advanced History Curriculum Development
Summer 2010 Registration: HIST 6951
(3 or 6 semester hours in their major field, or 3 semester hours in their major and 3 semester hours in their minor)

Secondary Teacher Licensure

Students interested in becoming secondary history and social studies teachers may choose to earn both the MA in history and secondary teacher licensure.

We strongly encourage students to complete the School of Education & Human Development's teacher licensure program before enrolling in the history MA program; the history graduate program and the teacher licensure program require separate admission. Students complete 36 semester hours in history and 37 semester hours in the teacher licensure program. For the history degree, students take 18 semester hours in their major field, 12 semester hours in their minor field and 6 semester hours in curriculum and methods course work, which apply both to the teacher licensure program and the MA in history:

- HIST 5464 - Problems and Methods in Teaching History and Social Studies I
Summer 2010 Registration: HIST 5464
-and-
- HIST 5465 - Problems and Methods in Teaching History and Social Studies II
Summer 2010 Registration: HIST 5465

Certificate in Historic Preservation

The history department also offers a certificate in historic preservation in conjunction with the College of Architecture and Planning. History students pursuing the certificate should consult the historic preservation Web site for this program as well as their history advisor to determine appropriate course work.

History MA

Humanities, Master of

Director: Myra Bookman

Assistant Director: Margaret Woodhull

Office: Modular #1, MC01 (east of Tivoli Student Union)

Telephone: 303-556-2305

Fax: 303-352-3872

E-mail: masterhs@ucdenver.edu

Web site: clas.ucdenver.edu/ict/index.html

Faculty

Senior Instructors:

Myra Bookman, PhD, University of Colorado

Margaret Woodhull, PhD, University of Texas, Austin

The master of humanities offers graduate interdisciplinary studies designed for recent university graduates or those who have graduated earlier and are now seeking intellectual enrichment, career change or preparation for a PhD or professional school. Some students are teachers or other professionals seeking additional training to expand their expertise. Many enroll in the program for the sheer satisfaction of intellectual enrichment. It is ideal for students whose professional and personal obligations require flexibility and accessibility, whether they are part-time or full-time students. Students are able to pursue their interests across disciplinary boundaries and enroll in courses from a number of departments. Students who pursue the master of humanities will take courses from disciplines traditionally included in the category of liberal arts, such as literature, philosophy, history, communication, fine arts, art history, theatre and music. But they may also include appropriate course work from the social sciences or other areas. Each student's program is supervised by a faculty advisor.

MH REQUIREMENTS

Programs

Master of Humanities

Humanities MH

► Graduate School Rules apply to this program

Requirements for Admission

In addition to the general requirements of the Graduate School governing acceptance to a master's degree program, applicants must submit the following:

- a bachelor's degree
- two official copies of all transcripts, with an overall GPA of at least 3.0 out of 4.0
- a writing sample
- three letters of recommendation (at least two from academic sources)
- appropriate undergraduate training or professional background, or indicators that supply evidence of ability to pursue the MH degree
- a typed statement specifying the goal of advanced study in the humanities expressed in clear, correct and effective English
- standardized test scores are not required, but will be considered if submitted

After meeting all other requirements for admission, applicants may be required to have an interview to discuss their interest in the program and their plans for study. For out-of-state applicants, an appropriate substitute for the interview may be determined by the director.

Provisional admission:

Applicants may be admitted as provisional-status graduate students if their complete record indicates a high probability of success.

Nondegree students:

Potential applicants may take graduate-level courses as nondegree students (unclassified student with a bachelor's degree) if they:

1. Wish to strengthen their record in order to demonstrate that they can successfully complete courses in the program
- or-

2. Wish to start courses in the program prior to completing their application. Up to 12 semester hours taken as a nondegree student may be accepted by the program once a student has been admitted to the program (the 12-hour limit also includes graduate work from another university).

International Students:

International students must also meet UC Denver requirements for international admission. See the [Information for International Students](#) section of this catalog or call 303-315-2230 for further information.

Degree Requirements

The master of humanities offers two general plans of study: Track I (individualized program) and Track II (cultural studies in interdisciplinary cluster areas).

Thirty-six semester hours are required for Track I and 39 semester hours are required for Track II. All courses credited toward the MH degree must be taken at UC Denver over a period not exceeding five years (a maximum of 12 graduate semester hours may be transferred from other institutions). At least a *B* average (3.0) must be maintained. A grade of *B-* or below will not be counted toward the degree. Each student's program is supervised by a faculty advisor. All independent study contracts must be approved in advance by one of the program directors. A total of two independent study courses and two 4000-level undergraduate courses may count toward the degree. The rest must be 5000/6000-level courses offered through various departments. All students must pass an oral comprehensive exam in order to graduate.

TRACK I (Individualized Program) Requirements— Thesis or Project Option

Students in Track I have the opportunity to fashion a course of study based on their individual interests and goals. In consultation with a faculty advisor, students choose two or three academic disciplines as areas of concentration. Students who select a thesis (6 semester hours) will submit a thesis proposal after completing 30 hours of course work. In the case of a project (3 semester hours), students will submit a project proposal after 33 hours.

TRACK I REQUIREMENTS:

Three interdisciplinary seminars

- HUMN 5025 - Methods and Texts of the Humanities *Summer 2010 Registration: HUM 5025*
(Must be taken during the first year of entrance into the program. Offered fall only.)

Mid-Program Seminar, an interdisciplinary seminar with a HUM prefix, which is approved for the student's program by one of the program directors (note that a Mid-Program Seminar **must** have a HUM prefix).

- HUMN 5924 - Directed Research and Reading in Interdisciplinary Humanities *Summer 2010 Registration: HUM 5924*
(A final seminar that provides background reading, theory and research approaches for students to develop a thesis or project. Offered spring only; student must have completed 24 hours of course work and must register for the course via a schedule adjustment form with instructor approval.)

Total: 9 Hours

Electives

Additionally, students must complete a total of 21-24 semester hours comprising a coherent selection of courses from a variety of disciplines. All courses for the self-structured portion of the program must be selected with the approval of one of the MSS program directors.

A total of two independent study courses and two 4000-level undergraduate courses taken when enrolled in the program may count toward the degree. All independent study contracts must be approved by one of the program directors. The remaining course work must be 5000/6000-level courses offered through various departments.

Students completing a project take 24 hours of electives, while thesis students complete 21 hours of electives.

Total: 21-24 Hours

Thesis or Project

A thesis (6 semester hours) or a final project (3 semester hours), which must include a substantial scholarly paper and may include a creative exercise involving at least two disciplines. In order to proceed with a thesis or project, all students must submit a

proposal approved by three faculty members (and approved by one of the program directors in cases where one of the directors is not serving on the committee).

- HUMN 5950 - Master's Thesis *Summer 2010 Registration:* **HUM 5950**
 - HUMN 5960 - Master's Project *Summer 2010 Registration:* **HUM 5960**
- Total: 3-6 Hours**

Oral Exam

An oral exam before a committee of three faculty members in order to graduate.

Track I Total: 36 Hours

TRACK II (Cultural Studies)—Non-thesis or Project Option

This track is somewhat more structured than Track I, but does not require a thesis or a project. In consultation with a faculty advisor, students choose from courses organized into eight interdisciplinary clusters:

- classics
- identity and gender
- meaning and values
- philosophy and theory
- self, society and community
- social and political thought
- technology and culture
- understanding America/understanding the world

TRACK II REQUIREMENTS:

Core cluster courses

Complete 15 semester hours in one of the above clusters.

Total: 15 Hours

Three required interdisciplinary seminars

- HUMN 5025 - Methods and Texts of the Humanities *Summer 2010 Registration:* **HUM 5025**
(Must be taken during the first year of entrance into the program.)

Mid-Program Seminar, an interdisciplinary seminar with a HUM prefix, which is approved for the student's program by one of the program directors (note that a Mid-Program Seminar **must** have a HUM prefix).

- HUMN 5924 - Directed Research and Reading in Interdisciplinary Humanities
Summer 2010 Registration: HUM 5924
(A final seminar that provides background reading, theory and research approaches for students to develop a theme for the oral exam. Offered spring only; student must have completed 24 hours of course work and must register for the course via a schedule adjustment form with instructor approval.)
Total: 9 Hours

Electives

15 additional elective semester hours (students retain considerable flexibility in selecting these hours).

Total: 15 Hours

Comprehensive Exam

A comprehensive oral exam and a brief paper (15-20 pages) presented before a committee of three faculty members in order to graduate.

Track II Total: 39 Hours

Individually Structured Major

Contact: CLAS Advising Office, North Classroom, 4002

Telephone: 303-556-2555

Web site: thunder1.cudenver.edu/clas/ISMmajor.html

The individually structured major (ISM) is an interdisciplinary major based on an individual contract rather than a preset list of courses. The flexibility of designing your own major affords liberal arts students an opportunity to pursue academic interests that cross traditional department or college boundaries. The ISM is attractive to students who have specific educational and career goals not satisfied with a traditional major or to students interested in a K–12 teaching career where breadth more than depth is valued to meet licensure requirements.

Students interested in the individually structured major work with faculty advisors in each discipline to create a program plan or contract to define the individually structured major.

The ISM program plan must have an academic or career theme that ties course work together. Students are encouraged to complete the program plan before the end of the sophomore year.

Upon completion of graduation requirements, students in the individually structured major program will receive a diploma that will read “Bachelor of Arts, Individually Structured.” The University of Colorado transcript will read “Bachelor of Arts, Major: Individually Structured, Area:” (ISM title selected by student and approved as part of the ISM program plan).

REQUIREMENTS FOR THE MAJOR

Honors

Liberal arts students interested in graduating with Latin honors in the individually structured major program should meet with the assistant dean in the CLAS Advising Office to verify they meet eligibility requirements and to modify the program plan for the honors project. Students who successfully complete the ISM honors program will have the appropriate Latin honor designation placed on the University of Colorado diploma and transcript.

To participate in the ISM honors program, CLAS students must meet each of the following eligibility requirements:

- have a declared ISM major with an approved ISM contract
- possess a minimum 3.2 cumulative University of Colorado GPA
- possess a minimum 3.5 GPA on all completed University of Colorado course work in the ISM contract

Eligible ISM students must complete an undergraduate research project and present the results to a faculty honors committee. The level of Latin honors awarded is determined by the faculty honors committee. ISM students are to complete 3 to 6 semester hours of undergraduate independent study over a period of two semesters in one of the disciplines that constitute the ISM contract. The faculty sponsor from the project discipline will serve as the honors committee chair. The independent study research project is to produce a thesis-quality report to be presented orally to a three-member interdisciplinary faculty honors committee representing the disciplines in the ISM contract. Upon completion of the research report and oral presentation to the honors committee, the level of Latin honors will be determined by the following criteria:

cum laude—awarded upon completion of written report and oral presentation

magna cum laude—awarded by honors committee based on successful written report and oral presentation

summa cum laude—awarded by honors committee based on excellence in written report and oral presentation

Programs

Bachelor of Arts

Individually Structured Major BA

Requirements for the Major

The ISM program plan requires course work over two or three disciplines. A discipline is defined as a single department or program such as biology, ethnic studies or math. The ISM program plan must comply with the following policies:

- Between 48 and 54 semester hours are allowed for the program plan.
- A minimum of 16 semester hours must be upper-division credit.
- Each discipline requires a minimum of 15 semester hours, of which at least 3 must be upper-division hours.
- A minimum of 6 semester hours in each discipline must be taken from Downtown Campus faculty.
- A maximum of one discipline may be outside CLAS.
- A third optional discipline may be a mixture of course work, excluding courses from the first and second disciplines.
- An ISM title must be consistent with the academic theme and disciplines in the program plan.

The ISM program plan contract is approved by faculty for each discipline and submitted to the CLAS Advising Office, North Classroom, 4002, for college approval by the associate dean. The ISM program plan must be approved before one-third of the ISM course work is completed. Typically, a maximum of 18-21 hours of previously completed courses is allowed.

Graduation requirements for ISM students include a minimum 2.0 GPA for all ISM course work, a minimum 2.0 GPA in each discipline in the program plan and a minimum of 24 hours of course work taken from Downtown Campus faculty.

Integrated Sciences, Master of

Director: Mary Coussons-Read

Office: North Classroom, 5014

Telephone: 303-556-6665

Fax: 303-556-4861

E-mail: mary.coussons-read@ucdenver.edu

Web site: clas.ucdenver.edu/mis/

Students in this program have the opportunity to take courses from a variety of areas in mathematics, the natural and physical sciences (biology, chemistry, geology, physics) and computer science in a program designed for professional growth in their area of interest. These areas are further explored through a required project or thesis that includes independent research into some particular area of interest.

The length of time it takes to complete the degree is determined by the student's own schedule flexibility; many finish within two years of full-time work. The program requires completion within five years or within six successive summers. Courses are offered during a wide range of times, and many MIS students complete their curriculum while working full time.

Requirements for Admission

To be considered for admission to the program, students:

- must submit an application for graduate admission, an essay specifying why they wish to be admitted to the program and their career goals, and three letters of recommendation
- must have completed at least 40 semester hours in mathematics, computer science, physics, biology, chemistry and/or geology
- may be required to take the GRE if their undergraduate GPA is less than 3.0

Students are admitted for the fall and spring semesters. The deadline for a complete application for fall admission is April 15; for spring admission it is October 15.

DEGREE REQUIREMENTS

Programs

Master of Science

Integrated Sciences MIS

- [Graduate School Rules](#) apply to this program

Degree Requirements

Minimum Hours

Students must complete a minimum of 30 semester hours at the 4000+ level, of which 1-4 must be project hours or 4-6 must be thesis hours. In accordance with Graduate School rules , a minimum of 18 hours must be at the 5000+ level.

Breadth Requirement

Students are required to take classes in a minimum of two (2) areas and maximum of three (3) areas within the disciplines of computer science, math, chemistry, biology, physics or geology. With approval, students may take a maximum of three (3) hours at the 4000+ level in one other school or college. All classes counted toward the degree must be related to the student's stated program goal and be approved as part of a program of study by the program director. The student is responsible for insuring that all prerequisite requirements for the classes they take have been met.

Depth Requirement

The student must designate a primary area (either within a department or as an interdisciplinary concentration including, but not limited to, biophysics, biochemistry and computational biology). The student must take a minimum of nine (9) semester hours in the chosen area of concentration.

Project or Thesis

All students must conduct independent research that results in either a thesis or project, which is presented to their committee in written form and is subject to an oral defense.

Graduate Advisor and Project Committee

All candidates for the master of integrated sciences degree must select a faculty advisor and two other faculty members to serve with the advisor as the candidate's graduate committee. The committee members must be part of the graduate faculty and approved by the program director. The name of the faculty advisor must be submitted to the MIS director no later than two semesters following full admission to the program.

DEGREE TOTAL: 30 HOURS

Integrative Biology

Chair: Leo P. Bruederle

Associate Chair: Timberley M. Roane

Program Assistant: Barbara Schmidt

Administrative Assistant: Jacki Craig

Undergraduate Major Advisor: Kimberly F. Regier

Health Careers Advisors: Charles A. Ferguson, Kent Nofsinger

Graduate Coordinator: Timberley M. Roane

Lab Coordinator: James Salmen

Office: North Classroom, 3014

Telephone: 303-556-8440

Fax: 303-556-4352

Web site: clas.ucdenver.edu/biology/

Faculty

Professors:

Daniel J. Howard, PhD, Yale University

Roderick Nairn, PhD, University of London

Bradley J. Stith, PhD, Washington State University

Diana F. Tomback, PhD, University of California, Santa Barbara

Associate Professors:

Leo P. Bruederle, PhD, Rutgers, the State University of New Jersey

Greg Cronin, PhD, University of North Carolina at Chapel Hill

Charles A. Ferguson, PhD, University of Colorado

Timberley M. Roane, PhD, University of Arizona

Assistant Professors:

Amanda Charlesworth, PhD, University College, London

Michele Engel, PhD, University of California, Los Angeles

Michael J. Greene, PhD, Oregon State University

Laurel Hartley, PhD, Colorado State University

Lisa Johansen, PhD, University of Alabama at Birmingham

Alan Vajda, PhD, University of Colorado

Michael Wunder, PhD., Colorado State University

Senior Instructors:

Aimee Bernard, PhD, University of Rochester

Tod Duncan, PhD, University College, London (U.K.)

Cheri A. Jones, PhD, University of Florida

Kent Nofsinger, MD, University of Kansas School of Medicine

Instructor:

Kimberly F. Regier, MA, University of Colorado

Adjoint Faculty:

Rich Reading, PhD, Yale University

Adjunct Faculty:

Marc L. Goalstone, PhD, University of Denver

Jennifer Ramp Neale, PhD, University of Colorado

Emeritus Faculty:

Gerald Audesirk, PhD, California Institute of Technology

Teresa E. Audesirk, PhD, University of Southern California

Linda K. Dixon, PhD, University of Illinois

Georgia E. Lesh-Laurie, PhD, Case Western Reserve University

Undergraduate

Biology is the study of life. Our program teaches students about the diversity of life, the chemical processes and adaptations shared by species, and the interaction of species with their environment. By studying the different fields of biology, the student gains an appreciation for the characteristics of life and the remarkable evolutionary history leading to the present forms, and to understand the advances in biological technology that are transforming our society. Knowledge of the interrelationships between populations and

their habitats leads to respect, concern and a sense of responsibility for our environment.

The curriculum is designed to provide a firm foundation in biology. As such, graduates are well prepared for graduate study in biology, professional schools in the health careers, a variety of biologically oriented jobs in government and industry, teaching at various educational levels and, as with any liberal arts major, life itself. Students planning on a teaching career should consult the [Teacher Education Program description](#) in the School of Education & Human Development for information on teaching licensure.

REQUIREMENTS FOR MAJOR

Additional Information

Students with transfer credits in biology from other institutions should consult an undergraduate major advisor in the department for transfer credit and/or proper placement. Transfer credit from community college courses will not fulfill the requirements for upper-division semester hours or electives. However, students who have taken both semesters of anatomy and physiology at a community college *may* be given credit for having satisfied the structure/ function requirement for the major. Biology students seeking credit through AP (Advanced Placement), CLEP (College Level Examination Program) and/or IB (International Baccalaureate, Diploma Programme) should refer to the transfer tables (AP , CLEP , IB) in the [Information for Undergraduate Students](#) chapter of this catalog, as well as consult an undergraduate major advisor in the department for proper placement.

Departmental Honors. Departmental honors will be awarded to students based on their GPA in classes taken from Downtown Campus faculty. The following minimum GPA must be met both for all courses taken at UC Denver (overall GPA) and for biology courses alone (biology GPA): *cum laude*, 3.5; *magna cum laude*, 3.7; *summa cum laude*, 3.9.

Biology Research Scholars. The biology faculty encourages students to pursue research as part of their undergraduate education. Students who excel in both course work and research will be recognized as UC Denver biology research scholars. To qualify as biology research scholars, students must fulfill all of the following requirements: (1) achieve a minimum GPA of 3.5 in courses taken from Downtown Campus faculty; (2) participate in a research project consisting of a minimum of 6 semester hours of independent study, taken over at least two semesters; (3) write a paper describing the rationale, methodology and results of their research; and (4) present a seminar or poster based on their research. Students who wish to become involved in research should contact [Michele Engel](#) no later than their junior year.

REQUIREMENTS FOR MINOR

Biotechnology Certificate

To serve the needs of students who wish to obtain recognition for the acquisition of specialized skills in biology and to prepare students for graduate school, health careers and jobs in industry, the Department of Integrative Biology offers a certificate program in biotechnology. Upon completion of the required courses (21 to 22 semester hours), including independent study or internship, the student will be awarded a certificate and receive the biotechnology certificate on their transcript. The certificate may be completed in addition to an undergraduate or graduate degree or as a stand-alone certificate. For complete information, see the [Biotechnology Certificate](#) description.

Graduate

The master's program in biology is designed to prepare graduates for research and teaching positions, employment in business and industry, advanced training as secondary school science teachers and for graduate work at the doctoral level. The MS in biology may be obtained with an emphasis in ecology, genetics, plant systematics, evolutionary biology, neurobiology, microbiology, animal behavior, cell and developmental biology or molecular biology. These emphases are available through two tracks of study: the course work (non-research) M.S. track or the thesis (research) M.S. track.

The Department of Integrative Biology consists of a small highly-qualified and dedicated group of faculty who sponsor thesis projects in their areas of expertise. They have attracted extramural research support from a wide variety of sources, including:

- Environmental Protection Agency
- National Science Foundation
- National Institutes of Health
- U.S. Forest Service
- National Park Service
- private agencies

The department occupies modern, well-equipped laboratories on the Auraria campus in downtown Denver. There are also many opportunities for field research.

BIOLOGY MS REQUIREMENTS

Programs

Bachelor of Science

Biology BS

Biology students must declare their major by the time they have taken 60 semester hours. A minimum of 36 hours of biology must be completed, of which 18 hours are at the upper-division level and taken in residence with UC Denver Downtown Campus biology faculty. Included in the 36 hours are 22 semester hours of biology core courses, required of all majors. At least 14 hours of upper-division biology elective courses beyond the core are required to fulfill the remaining hours, including one 4000-level lecture course. A maximum of 6 semester hours of independent study (BIOL 3840/4840) **or** a combined maximum total of 6 hours of independent study (3 hours) and internship/cooperative education (BIOL 3939) (3 hours) can be counted toward the 14 hours of upper-division electives in biology. The minimum grade in each UC Denver biology course is C- (1.7). However, a GPA of 2.5 in biology courses taken at UC Denver is required to graduate.

To ensure a proper background for the study of biology, majors are required to pass 31-33 hours of course work in ancillary disciplines, including two semesters of general chemistry laboratory, for which the minimum grade is C- (1.7). MATH 1110, with either BIOL 4764 or MATH 4830, may substitute for Calculus I (MATH 1401). All biology courses applied to the undergraduate biology major must be completed within 10 years of graduation. The following biology and ancillary courses are required and must be completed with a letter grade of C- (1.7) or higher:

Requirements for the Major

Biology Core Courses

- BIOL 2051 - General Biology I Summer 2010 Registration: **BIOL 2051**
- BIOL 2071 - General Biology Laboratory I Summer 2010 Registration: **BIOL 2071**
- BIOL 2061 - General Biology II Summer 2010 Registration: **BIOL 2061**
- BIOL 2081 - General Biology Laboratory II Summer 2010 Registration: **BIOL 2081**
- BIOL 3411 - Principles of Ecology Summer 2010 Registration: **BIOL 3411**
-OR-

- BIOL 3412 - Fundamentals of Applied Ecology Summer 2010 Registration: **BIOL 3412**
- BIOL 3611 - General Cell Biology Summer 2010 Registration: **BIOL 3611**
- BIOL 3832 - General Genetics Summer 2010 Registration: **BIOL 3832**

One of the following structure/function courses:

- BIOL 3225 - Human Physiology Summer 2010 Registration: **BIOL 3225**
- BIOL 3244 - Human Anatomy Summer 2010 Registration: **BIOL 3244**
- BIOL 3654 - General Microbiology Summer 2010 Registration: **BIOL 3654**
- BIOL 4335 - Plant Science Summer 2010 Registration: **BIOL 4335**

Total Biology Core: 22 Hours

Biology Electives

*Biology elective courses (3000 or 4000 level) **

Total Electives: 14 Hours

Biology (core and electives) Total: 36 Hours

*** Biochemistry as a Biology Elective**

Students who have taken both semesters of organic chemistry (CHEM 3411 and CHEM 3421) may use either biochemistry (CHEM 3810) or 4 hours of the general biochemistry series (CHEM 4810 and 4820 combined) as one of their required upper-division biology electives.

Ancillary Core Courses

- CHEM 2031 - General Chemistry I Summer 2010 Registration: **CHEM 2031**
- CHEM 2038 - General Chemistry Laboratory I Summer 2010 Registration: **CHEM 2038**
- CHEM 2061 - General Chemistry II Summer 2010 Registration: **CHEM 2061**
- CHEM 2068 - General Chemistry Laboratory II Summer 2010 Registration: **CHEM 2068**
- CHEM 3411 - Organic Chemistry I Summer 2010 Registration: **CHEM 3411**
- CHEM 3421 - Organic Chemistry II Summer 2010 Registration: **CHEM 3421**
- OR-
- CHEM 3810 - Biochemistry Summer 2010 Registration: **CHEM 3810**
- MATH 1401 - Calculus I Summer 2010 Registration: **MATH 1401**

-OR-

- MATH 1110 - College Algebra Summer 2010 Registration: **MATH 1110**
- **with either** BIOL 4764 - Biostatistics Summer 2010 Registration: **BIOL 4764**
- **or** MATH 4830 - Applied Statistics Summer 2010 Registration: **MATH 4830**
- PHYS 2010 - College Physics I Summer 2010 Registration: **PHYS 2010**
- PHYS 2030 - College Physics Lab I Summer 2010 Registration: **PHYS 2030**
- PHYS 2020 - College Physics II Summer 2010 Registration: **PHYS 2020**
- PHYS 2040 - College Physics Lab II Summer 2010 Registration: **PHYS 2040**

Total Ancillary Core: 31-33 Hours

The following courses will **not** count toward the BS in biology:

- BIOL 1136 - Human Biology Summer 2010 Registration: **BIOL 1136**
- BIOL 1550 - Basic Biology: Ecology and the Diversity of Life Summer 2010 Registration: **BIOL 1550**
- BIOL 1560 - Basic Biology: From Cells to Organisms Summer 2010 Registration: **BIOL 1560**

Degree Total: 36 Hours Biology + 31-33 Hours Ancillary

Non Degree

Biology Minor

For a biology minor, students must complete all biology core requirements (22 hours), of which a minimum of 9 hours must be completed in residence on the UC Denver Downtown Campus. The minimum grade in each UC Denver course is C- (1.7); however, a GPA of 2.5 is required in biology courses taken at UC Denver to complete the minor. In addition, students must complete one year of general chemistry including laboratory with a grade of C- (1.7) or higher.

Course Requirements

- BIOL 2051 - General Biology I Summer 2010 Registration: **BIOL 2051**
- BIOL 2071 - General Biology Laboratory I Summer 2010 Registration: **BIOL 2071**
- BIOL 2061 - General Biology II Summer 2010 Registration: **BIOL 2061**
- BIOL 2081 - General Biology Laboratory II Summer 2010 Registration: **BIOL 2081**
- BIOL 3411 - Principles of Ecology Summer 2010 Registration: **BIOL 3411**

-OR-

- BIOL 3412 - Fundamentals of Applied Ecology Summer 2010 Registration: **BIOL 3412**
- BIOL 3611 - General Cell Biology Summer 2010 Registration: **BIOL 3611**
- BIOL 3832 - General Genetics Summer 2010 Registration: **BIOL 3832**

One of the following structure/function courses:

- BIOL 3225 - Human Physiology Summer 2010 Registration: **BIOL 3225**
- BIOL 3244 - Human Anatomy Summer 2010 Registration: **BIOL 3244**
- BIOL 3654 - General Microbiology Summer 2010 Registration: **BIOL 3654**
- BIOL 4335 - Plant Science Summer 2010 Registration: **BIOL 4335**

Ancillary chemistry courses:

- CHEM 2031 - General Chemistry I Summer 2010 Registration: **CHEM 2031**
- CHEM 2038 - General Chemistry Laboratory I Summer 2010 Registration: **CHEM 2038**
- CHEM 2061 - General Chemistry II Summer 2010 Registration: **CHEM 2061**
- CHEM 2068 - General Chemistry Laboratory II Summer 2010 Registration: **CHEM 2068**

Minor Total: 31 Hours

Master of Science

Biology MS

► Graduate School Rules apply to this program.

Associate Chair for Graduate Studies: Timberley Roane

Office: North Classroom, 3411

Telephone: 303-556-6592

E-mail: timberley.roane@ucdenver.edu

Web site: clas.ucdenver.edu/biology/grad.html

Requirements for Admission

Applicants must hold a baccalaureate degree from an accredited college or university, awarded within the preceding nine years. Students whose biology degree was awarded 10 or more years prior to entrance to the UC Denver program will be expected to retake or show competence in the biology core courses. Successful applicants generally have earned an overall GPA of 3.0 or better. Most applicants have an undergraduate major in biology or a related field. Students entering the master's program in biology must have completed the equivalent of a minor in biology. Although a deficit of one course is allowed, this must be completed within the first semester of entering the master's program and will not apply toward the degree.

The general GRE is required of all applicants, with scores above the 50th percentile required on all parts. The online graduate application form is submitted online to UC Denver graduate admissions. The biology supplemental application form is also required and is submitted directly to the biology program (jacki.craig@ucdenver.edu).

Plan I (thesis option) applicants must indicate an area of concentration AND MUST HAVE THE PRIOR APPROVAL OF A FACULTY MEMBER IN BIOLOGY WHO WILL SUPERVISE THEIR THESIS WORK. Prospective thesis students must have a tentative advisor listed on the application form. Plan I applications cannot be considered without this information.

Plan II (course work only) applicants must indicate an area of concentration in addition to the name of a faculty member in biology who has tentatively agreed to serve as your advisor. Applications cannot be considered without this information.

Application deadlines are February 1 for domestic U.S. students and January 15 for international students. Online applications submitted electronically after the deadline dates WILL NOT be considered for that term. Applicants will be given the opportunity to have these applications considered for the next term.

Before submitting an application it is highly recommended that you meet with the associate chair for graduate studies, Dr. Timberley Roane, to make sure this program meets your needs and that you meet the program requirements.

Degree Requirements

All course work taken within the Department of Integrative Biology and applied toward the degree must be 5000 level or above. There is no core of required courses. A course plan is developed by the student and major advisor and is approved by the student's graduate committee. In addition to regular meetings throughout the semester, all students must meet with their faculty advisor at the beginning of each academic year to determine course schedules and upcoming deadlines. A pre-registration agreement is signed by student and advisor, and then filed with the associate chair of graduate

studies in biology to make sure you are satisfying your degree requirements, and that the courses you want to take will be applicable toward your degree.

With the advisor's and/or graduate committee's approval, a maximum of 6 semester hours of course work at the 4000 level taken outside the department may be applied toward the degree. At least 18 semester hours must be taken from faculty in the Department of Integrative Biology at UC Denver. Upon approval of the department, no more than 12 semester hours may be transferred into the program. Two types of degree plans are offered:

Plan I (with thesis)

Students must form a three-person advisory committee consisting of members of the graduate faculty, with at least two from the regular UC Denver faculty. Committee membership must be approved by your graduate advisor. The thesis option requires 30 semester hours, including a minimum of 4 and no more than 6 thesis hours. You may also count a maximum of 6 hours (total) of independent study and/or graduate level internship. Graduate internship or independent study projects must consist primarily of research. In addition, two semesters of the following are required:

- BIOL 6655 - Seminar *Summer 2010 Registration: BIOL 6655*

Plan II (without thesis)

Requires 32 semester hours, including two semesters of:

- BIOL 6655 - Seminar *Summer 2010 Registration: BIOL 6655*

Comprehensive Examination

All students in the MS in biology program are required to complete a series of biology comprehensive exams. The purpose of the exams is to demonstrate mastery of chosen biological concepts in general biology, cell biology, ecology, genetics, and anatomy/physiology. The comprehensive exams include three written exams and an oral exam.

Financial Assistance

Financial aid for graduate students may be available from university and/or state fellowships, research assistantships sponsored by individual faculty members and teaching assistantships. The biology department hires teaching assistants for laboratories and recitations in a number of courses. Teaching is a valuable addition to

your graduate training. Hiring decisions are made by the instructors teaching labs and recitations. Please contact them (early) if you are interested.

Contact the [Office of Financial Aid](#) for information about fellowships, or the associate chair for graduate studies (303-556-6592) for information about research and teaching assistantships.

Interdisciplinary Programs

Most of the individual departments represented in the College of Liberal Arts and Sciences have numerous links with other disciplines; consequently, many faculty members encourage students to take courses in related disciplines. Students will often find opportunities to explore relationships among different disciplines while studying *within* traditional disciplines.

The college also has several established interdisciplinary programs leading to full undergraduate degrees, minors, certificates and graduate degrees. A brief description of each program follows, with a link to its respective program section.

Undergraduate

- The **MINOR IN CHINESE STUDIES** combines studies in language, literature and social sciences for students wishing to explore the interwoven perspectives of Chinese culture.
- The **EDUCATIONAL STUDIES MINOR AND K-12 TEACHER LICENSURE PROGRAMS**, in collaboration with the School of Education & Human Development, enable students to add educational training to their liberal arts and sciences discipline studies.
- The **ENVIRONMENTAL SCIENCES MINOR** allows students to choose courses from the social sciences, physical sciences, engineering, humanities and statistics to create a unique program of study.
- The **ETHNIC STUDIES MINOR** provides students the opportunity, through academic investigation, to develop a greater understanding of the cultural pluralism of the present day United States and to acquire skills needed in professional and social service fields.
- Students in the **COMMUNITY HEALTH SCIENCE MINOR** program focus on the social determinants of health and disease as they prepare for careers in public health and medicine.
- The **INDIVIDUALLY STRUCTURED MAJOR (ISM)** provides liberal arts and sciences students the freedom to create their own interdisciplinary major centered around an academic or career theme.
- The **INTERNATIONAL STUDIES MAJOR** affords students the opportunity to learn about diverse cultures as they acquire the methodological tools to analyze

the world from different academic disciplines. Study abroad experiences are strongly encouraged in this major.

- The **LAW STUDIES MINOR** introduces the study of law in relation to social and political discourse, and provides preparation for students contemplating application to law school.
- The **MINOR IN RELIGIOUS STUDIES** gives students a grounding in religious traditions through such interrelated disciplines as anthropology, literature, philosophy and psychology.
- The **MINOR IN SOCIAL JUSTICE** invites students to consider social justice as a goal of every healthy society and the best guarantee for sustaining peace. Two components of social justice are *civic engagement* and *critical consumption*, around which students create an interdisciplinary course of study.
- Students in the **MINOR IN SUSTAINABILITY** are encouraged to integrate approaches from different disciplines to problems related to sustainability, including sustainable ecology, environmental ethics, sustainable food production, critical consumerism and environmental policymaking.
- The **WOMEN'S AND GENDER STUDIES MINOR** focuses on the ways in which gender and sexuality help us to understand our past and present worlds, combining course work from humanities and social sciences disciplines.

Graduate

- The **MS IN ENVIRONMENTAL SCIENCE** combines environmental courses from the social sciences, physical sciences, engineering, humanities and statistics. A graduate certificate is also available.
- **PhD IN HEALTH AND BEHAVIORAL SCIENCES** students integrate social, cultural and biomedical perspectives to understand the underpinnings of health and the conditions essential for its creation and maintenance.
- Students interested in synthesizing curricula in the arts, communication, history, literature, philosophy and theatre at the graduate level may be interested in the **MASTER OF HUMANITIES (MH)** degree.
- The **MASTER OF INTEGRATED SCIENCES (MIS)** degree enables students to combine course work and independent research within the disciplines of computer science, math, chemistry, biology, physics or geology.
- Students in the **MASTER OF SOCIAL SCIENCE (MSS)** degree program develop their own interdisciplinary curriculum in the social sciences (anthropology, economics, geography, history, political science, psychology and sociology), as well as related disciplines (such as English, philosophy, education, public affairs and architecture).

International Studies

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Faculty

The international studies program is an interdisciplinary major with faculty drawn from several independent academic departments.

Undergraduate Major

In a world where global commerce and politics have emerged as driving forces, the international studies major provides students with global perspectives. This interdisciplinary liberal arts degree is designed to offer a thorough education in international issues in preparation for international careers. This major offers students the opportunity to develop a deeper understanding of complex international issues and the forces shaping our world. Increasingly, government and the private sector seek graduates familiar with differing perspectives and cultures and willing to adapt to the rapidly changing workplace.

The international studies major not only introduces students to diverse cultures, but also gives them the methodological tools to analyze the world from different academic disciplines. The program requires students to take courses from a wide array of departments: anthropology, economics, geography, history, modern languages, political science, religious studies and the Business School. The program is designed to give students both a broad understanding of different methods and approaches to international problems and ensure that students come out of the program with a deeper understanding of one world region.

While the major does not require study abroad or an international internship, we encourage students to pursue such opportunities. The major is committed to supporting students who wish to take advantage of the numerous international education opportunities available through the UC Denver [Office of International Affairs](#).

REQUIREMENTS FOR THE MAJOR

Regional Specialization

Within the courses taken to fulfill the three different thematic concentrations and introductory courses, students must specialize in a single region. Students should consult with the major advisor to confirm which courses fulfill the regional requirement. At least 15 hours of courses must focus on one of the following world regions:

Asia

Europe

Latin America

Middle East or Islamic World

Sub-Saharan Africa

Majors may use any of the courses taken to fulfill the introductory or concentration requirements for the regional specialization. Language courses may be used to fulfill the regional requirement. Wherever possible, students must fulfill their language requirement with a language applicable to the region they study. (No semester hours are required beyond those needed to fulfill the introductory courses and thematic concentrations).

Honors

Students with a cumulative GPA of 3.5 or above in all UC Denver courses may compete for a degree in international studies awarded with Latin praise of *cum laude*, *magna cum laude* or *summa cum laude*. Students with a GPA of 3.5 in their international courses are eligible for the award of *cum laude*, those with 3.7 are eligible for *magna cum laude*, and those with 3.9 or above may be awarded *summa cum laude*. In addition to a high GPA, candidates for honors must submit a research paper prepared under the supervision of a Downtown Campus faculty member for review by an honors examination committee. The committee will consist of three faculty members drawn from departments participating in the program.

Study Abroad

Students are encouraged to participate in a study abroad program in the region they choose as their specialization. Please note that the major advisor must approve the study program in advance, and no more than 18 semester hours from a study abroad program can apply to the major. The courses applied to the major must also be approved by their respective disciplines. Travel-study courses that are University of Colorado resident courses will not count against the residency requirement for the major. Students should contact the Office of International Affairs for more information

concerning study abroad opportunities (located at the Lawrence Street Center, 932, 303-315-2230).

Internships

Students may use up to 6 internship semester hours toward international studies graduation requirements. The internship must have a CLAS faculty sponsor who teaches courses applicable to the international studies degree. The internship must have an international element to count toward the degree. Students should seek the approval of the international studies program director for all internships. Students must fulfill the CLAS requirements to participate in an internship: junior standing and a minimum 2.75 GPA. Students must maintain communication with their faculty advisors on the progress they make during the internship if they expect to receive credit toward the major. For further information regarding internships, students should contact the [Experiential Learning Center](#) in Tivoli 260, 303-556-2250.

Independent Study

Students may apply up to 6 semester hours of independent study toward international studies graduation requirements. All independent studies require students to work closely with a faculty member to carry out a research project. Under the supervision of a faculty member, students must prepare a serious research proposal to guide their project during the semester. Students participating in these courses must have completed at least 18 hours of the international studies major to participate in independent study. Students who participate in independent study must have an overall UC Denver GPA of 2.5. All independent studies are subject to approval of the dean's office.

Programs

Bachelor of Arts

International Studies BA

Program Requirements

The major consists of 48 to 51 semester hours, structured as follows:

- complete 9 semester hours from a list of introductory courses listed below

- choose three thematic concentrations from the following five:
language and culture, international relations and comparative politics, economics and development, international commerce, and regional societies and history. Majors complete 12 hours in each theme (except international commerce, which requires 15). Below is a list of preapproved courses in each concentration. Students wishing to apply courses not on the list may do so with the approval of the program director.
- a capstone seminar (3 semester hours) for students in their last year
- the major is interdisciplinary, and students must take classes in at least three different disciplines (anthropology, economics, geography, history, international commerce/business, modern languages, political science or religious studies). No more than 18 hours in any one discipline will be accepted toward the major.
- students are expected to develop a regional specialization. They must choose courses from the introductory and thematic concentration lists that contribute to an understanding of a world region.
- all international studies majors must demonstrate a proficiency in a language other than English. This may be fulfilled with the fourth semester of a foreign language course sequence. Students must receive a grade of C or better in all language courses; they also have the option of testing out of this requirement.
- majors must complete at least half (24 hours) of the semester hours at the Downtown Campus. A cumulative GPA of 2.5 or better is required, with a minimum grade of C- earned in all major courses to graduate.

Required Courses

Introductory Courses

Choose one course from each of the following three groups:

Choose one:

- ECON 2012 - Principles of Economics: Macroeconomics Summer 2010
*Registration: **ECON 2012***
- GEOG 1102 - World Regional Geography Summer 2010 *Registration: **GEOG 1102***

Choose one:

- INTB 3000 - Global Perspectives Summer 2010 *Registration: **INTB 3000***
- PSCI 3022 - Introduction to Comparative Politics Summer 2010 *Registration: **P SC 3022***

- PSCI 3042 - Introduction to International Relations *Summer 2010 Registration: P SC 3042*

Choose one:

- ANTH 2102 - Culture and the Human Experience *Summer 2010 Registration: ANTH 2102*
- HIST 3451 - Introduction to African History *Summer 2010 Registration: HIST 3451*
- HIST 3460 - Introduction to Latin American History *Summer 2010 Registration: HIST 3460*
- HIST 3470 - Introduction to Asian History *Summer 2010 Registration: HIST 3470*
- HIST 3480 - Introduction to European History *Summer 2010 Registration: HIST 3480*
- HIST 3483 - Introduction to Modern South Asia *Summer 2010 Registration: HIST 3483*
- RLST 2660 - World Religions *Summer 2010 Registration: RLST 2660*

Total: 9 Hours

Thematic Concentrations

Students must take a minimum of four upper-division courses in each of three of the following five concentrations, for a total of 36 semester hours (12 hours in each concentration). Please note that the concentration in international commerce requires five courses rather than four, for a total of 39 semester hours. The list below does not include all the international courses applicable to the major, only the ones frequently taught. It is expected to change as departments develop new courses and hire new faculty in different areas.

Note: Concentrations are interdisciplinary and are not the same as academic departments. Students must take courses in at least three different academic departments and no more than 18 semester hours in any one department.

Language, Culture and Literature

This concentration aims at deepening the student's understanding of the cultural underpinnings and worldviews of different societies.

Modern languages: any upper-division courses in the Department of Modern Languages except Methods of Teaching French/German/Spanish. We have not listed the courses individually because there are so many upper-division courses on world literature and culture available in modern languages.

- ANTH 3121 - Language and Communication Summer 2010 Registration: **ANTH 3121**
- ANTH 4130 - Comparative Religious Systems Summer 2010 Registration: **ANTH 4130**
- OR-
- RLST 4010 - Comparative Religious Systems Summer 2010 Registration: **RLST 4010**
- PHIL 4650 - Differing Concepts of God Summer 2010 Registration: **PHIL 4650**
- OR-
- RLST 4400 - Differing Concepts of God Summer 2010 Registration: **RLST 4400**

International Relations and Comparative Politics

Courses in this concentration stress comparative approaches, diplomacy and conflict resolution. Students will have an understanding of how different societies make decisions and manage international relations. How do other cultures conceive of and practice power?

- ANTH 4180 - The Nature of Power Summer 2010 Registration: **ANTH 4180**
- HIST 3121 - The World at War, 1914-1945 Summer 2010 Registration: **HIST 3121**
- HIST 4032 - Globalization in World History Since 1945 Summer 2010 Registration: **HIST 4032**
- HIST 4220 - U.S. Foreign Policy Since 1912 Summer 2010 Registration: **HIST 4220**
- HIST 4412 - Mexico and the United States: People and Politics on the Border Summer 2010 Registration: **HIST 4412**
- HIST 4471 - The Second World War Summer 2010 Registration: **HIST 4471**
- HIST 4475 - The Vietnam War Summer 2010 Registration: **HIST 4475**
- * PSCI 3022 - Introduction to Comparative Politics Summer 2010 Registration: **P SC 3022**
- * PSCI 3042 - Introduction to International Relations Summer 2010 Registration: **P SC 3042**
- PSCI 4057 - Religion and Politics Summer 2010 Registration: **P SC 4057**
- OR-
- RLST 4500 - Religion and Politics Summer 2010 Registration: **RLST 4500**
- PSCI 4105 - Comparative Politics: Europe Summer 2010 Registration: **P SC 4105**
- PSCI 4146 - Indigenous Politics Summer 2010 Registration: **P SC 4146**
- PSCI 4156 - The Arab-Israeli Peace Process Summer 2010 Registration: **P SC 4156**
- PSCI 4185 - Corruption in the U.S. and Abroad Summer 2010 Registration: **P SC 4185**

- PSCI 4216 - International Politics: Human Rights Summer 2010 Registration: **P SC 4216**
- PSCI 4217 - Human Rights in Theory and Practice Summer 2010 Registration: **P SC 4217**
- PSCI 4225 - Democracy and Democratization Summer 2010 Registration: **P SC 4225**
- PSCI 4226 - The United Nations in World Affairs Summer 2010 Registration: **P SC 4226**
- PSCI 4236 - American Foreign Policy Summer 2010 Registration: **P SC 4236**
- PSCI 4266 - International Law Summer 2010 Registration: **P SC 4266**
- PSCI 4286 - International Relations: War or Peace? Summer 2010 Registration: **P SC 4286**
- PSCI 4726 - Russian and Chinese Foreign Policy Summer 2010 Registration: **P SC 4726**
- PSCI 4736 - The Middle East in World Affairs Summer 2010 Registration: **P SC 4736**
- PSCI 4807 - Revolution and Political Violence Summer 2010 Registration: **P SC 4807**
- PSCI 4995 - Travel Study Topics Summer 2010 Registration: **P SC 4995**

* If not taken to fulfill the introductory major requirements.

Economics, Development and Environment

Students taking this concentration will develop an understanding of economic processes in an international context. The courses offer comparative approaches and cultural perspectives on development and environment.

Note: Students in this concentration must take

ECON 2012 - Principles of Economics: Macroeconomics as one of their three introductory courses.

Required economics course

- ECON 2022 - Principles of Economics: Microeconomics Summer 2010 Registration: **ECON 2022**

Choose three upper division courses from the following:

- ANTH 4010 - Global Health Studies I: The Biocultural Basis of Health Summer 2010 Registration: **ANTH 4010**
- ANTH 4070 - Culture of Development and Globalization Summer 2010 Registration: **ANTH 4070**

- ANTH 4140 - Principles of Economic Anthropology Summer 2010 Registration: **ANTH 4140**
- ANTH 4170 - Culture and the Environment Summer 2010 Registration: **ANTH 4170**
- ANTH 4390 - Laboratory Methods in Archaeology Summer 2010 Registration: **ANTH 4390**
- ECON 4081 - Intermediate Macroeconomic Theory Summer 2010 Registration: **ECON 4081**
- ECON 4230 - Law and Economics Summer 2010 Registration: **ECON 4230**
- ECON 4410 - International Trade Summer 2010 Registration: **ECON 4410**
- ECON 4420 - International Finance Summer 2010 Registration: **ECON 4420**
- ECON 4540 - Environmental Economics Summer 2010 Registration: **ECON 4540**
- ECON 4770 - Economic Development--Theory and Problems Summer 2010 Registration: **ECON 4770**
- GEOG 3300 - Population and Resources in the World Environment Summer 2010 Registration: **GEOG 3300**
- GEOG 3411 - Globalization and Regional Development Summer 2010 Registration: **GEOG 3411**
- GEOG 3420 - Political Ecology Summer 2010 Registration: **GEOG 3420**
- GEOG 3430 - Geography of Tourism Summer 2010 Registration: **GEOG 3430**
- GEOG 4265 - Sustainability in Resources Management Summer 2010 Registration: **GEOG 4265**
- INTB 3000 - Global Perspectives Summer 2010 Registration: **INTB 3000**
- PSCI 4085 - Comparative Public Policy Summer 2010 Registration: **P SC 4085**
- PSCI 4126 - Introduction to International Political Economy Summer 2010 Registration: **P SC 4126**
- PSCI 4235 - Politics and Markets in Latin America Summer 2010 Registration: **P SC 4235**
- PSCI 4248 - Gender, Globalization and Development Summer 2010 Registration: **P SC 4248**
- PSCI 4326 - Advanced International Political Economy: Globalization Summer 2010 Registration: **P SC 4326**
- PSCI 4365 - Global Ecological Crises Summer 2010 Registration: **P SC 4365**
- PSCI 4555 - International Women's Resistance Summer 2010 Registration: **P SC 4555**

International Commerce

The objective of this concentration is to give students an introduction to international business practices.

ECON 2012 and ECON 2022 are prerequisites for most of these courses. Note that the first three courses are prerequisites for MGMT 4400 and MKTG 4200. Students opting for this concentration must take both MGMT 4400 and MKTG 4200. Students must meet

Business School entrance requirements for the international commerce concentration, with a 3.0 GPA overall or in the last 24 hours.

Note: This concentration requires 15 hours, not 12.

- ACCT 2200 - Financial Accounting and Financial Statement Analysis *Summer 2010 Registration: **ACCT 2200***
(MATH 1070 or MATH 1110 prerequisite and sophomore standing).
- * MGMT 3000 - Managing Individuals and Teams *Summer 2010 Registration: **MGMT 3000***
- * MKTG 3000 - Principles of Marketing *Summer 2010 Registration: **MKTG 3000***
- * MGMT 4400 - Environments of International Business *Summer 2010 Registration: **MGMT 4400***
- * MKTG 4200 - International Marketing *Summer 2010 Registration: **MKTG 4200***

* Students must have junior standing to take the 3000-level courses and must be formally admitted to the international studies program to take the 4000-level courses.

Regional Societies and History

Students in this concentration are expected to develop a historical understanding of how nations and political systems develop. To understand why international actors behave in a given way, one needs to understand the historical background of those actors; this concentration will familiarize students with that background.

- ANTH 4220 - Community in Global Context *Summer 2010 Registration: **ANTH 4220***
- ANTH 4250 - Culture Change in the Modern World *Summer 2010 Registration: **ANTH 4250***
- ANTH 4740 - Ethnography of Mexico and Central America *Summer 2010 Registration: **ANTH 4740***
- ANTH 4995 - Travel Study *Summer 2010 Registration: **ANTH 4995***
- GEOG 3120 - Geography of Europe *Summer 2010 Registration: **GEOG 3120***
- GEOG 3130 - Central America and the Caribbean *Summer 2010 Registration: **GEOG 3130***
- GEOG 3140 - Geography of South America *Summer 2010 Registration: **GEOG 3140***
- GEOG 3150 - Middle East *Summer 2010 Registration: **GEOG 3150***
- HIST 3350 - Colonial Latin America *Summer 2010 Registration: **HIST 3350***

- HIST 3500 - African History in Novels and Films Summer 2010 Registration: **HIST 3500**
- HIST 3995 - Travel Study Topics Summer 2010 Registration: **HIST 3995**
- HIST 4024 - Nineteenth Century Europe Summer 2010 Registration: **HIST 4024**
- HIST 4025 - Twentieth Century Europe Summer 2010 Registration: **HIST 4025**
- HIST 4027 - The Enlightenment: Eighteenth Century Intellectual History Summer 2010 Registration: **HIST 4027**
- HIST 4028 - After the Revolutions: Nineteenth Century Intellectual History Summer 2010 Registration: **HIST 4028**
- HIST 4029 - Fin de Siecle: Late Nineteenth and Early Twentieth Century Intellectual History Summer 2010 Registration: **HIST 4029**
- HIST 4046 - Victorians and Victorianism Summer 2010 Registration: **HIST 4046**
- HIST 4051 - Great Britain: 1760-1914 Summer 2010 Registration: **HIST 4051**
- HIST 4062 - Modern France, 1789 to the Present Summer 2010 Registration: **HIST 4062**
- HIST 4071 - Modern Germany Summer 2010 Registration: **HIST 4071**
- HIST 4074 - Post-War Germany Summer 2010 Registration: **HIST 4074**
- HIST 4082 - Reform and Revolution in Russia: The 1860s to 1917 Summer 2010 Registration: **HIST 4082**
- HIST 4083 - Russia Since 1917 Summer 2010 Registration: **HIST 4083**
- HIST 4086 - Eastern Europe Summer 2010 Registration: **HIST 4086**
- HIST 4303 - Sex and Gender in Modern Britain Summer 2010 Registration: **HIST 4303**
- HIST 4411 - Modern Mexico Summer 2010 Registration: **HIST 4411**
- HIST 4414 - Nationalism and State Building in Latin America, 1750-1850 Summer 2010 Registration: **HIST 4414**
- HIST 4415 - Social Revolutions in Latin America Summer 2010 Registration: **HIST 4415**
- HIST 4421 - Modern China Summer 2010 Registration: **HIST 4421**
- HIST 4451 - Southern Africa Summer 2010 Registration: **HIST 4451**
- HIST 4455 - African Struggle for Independence Summer 2010 Registration: **HIST 4455**
- HIST 4460 - The Islamic World's Golden Age Summer 2010 Registration: **HIST 4460**
- HIST 4461 - The Modern Middle East Summer 2010 Registration: **HIST 4461**
- HIST 4621 - Explorers and Exploration Summer 2010 Registration: **HIST 4621**
- PSCI 3125 - Introduction to Latin American Society Summer 2010 Registration: **P SC 3125**
- PSCI 4155 - Political Systems of the Middle East and North Africa Summer 2010 Registration: **P SC 4155**
- PSCI 4165 - Islamic Politics and Culture Summer 2010 Registration: **P SC 4165**
-OR-
- RLST 3100 - Islamic Politics and Culture Summer 2010 Registration: **RLST 3100**

- PSCI 4175 - Politics and Governments of the Pacific Rim Summer 2010
Registration: P SC 4175
- PSCI 4505 - The Post-Soviet World: Origins and Present Condition Summer 2010
Registration: P SC 4505
- PSCI 4554 - Chicano and Latino Politics Summer 2010
Registration: P SC 4554
- PSCI 4615 - Politics and Government of China Summer 2010
Registration: P SC 4615
- RLST 3400 - Asian Philosophies and Religions Summer 2010
Registration: RLST 3400
-OR-
- PHIL 3666 - Asian Philosophies and Religions Summer 2010
Registration: PHIL 3666
- RLST 3500 - Religions of India Summer 2010
Registration: RLST 3500
- RLST 3660 - Chinese Philosophy and Culture Summer 2010
Registration: RLST 3660
-OR-
- PHIL 3981 - Chinese Philosophy and Culture Summer 2010
Registration: PHIL 3981

International Studies Capstone Course

All majors must take a 3-semester-hour seminar focusing on a global issue. Currently the designated capstone courses are:

- HIST 4417 - Commodities and Globalization: Dessert in World History Summer 2010
Registration: HIST 4417
- PSCI 4126 - Introduction to International Political Economy Summer 2010
Registration: P SC 4126

Law Studies

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The law studies minor at UC Denver is an interdisciplinary course of studies intended to help students become intelligent and critical scholars of legal and political discourse. While the minor may be useful for students contemplating law school, it is also intended to appeal to a wider group of students interested in issues relating to law and society and careers in public policy-related fields. The minor is designed to achieve the following three interrelated goals:

- to introduce students to the major areas of law that affect life in the United States and important legal issues that influence current events
- to enable students to become familiar and fluent with a legal vocabulary and legal reasoning
- to better prepare students with the analytical and conceptual tools to be critical citizens in our constitutional democracy

In addition to these goals, students who complete the minor with the intention of attending law school may find themselves more prepared than they otherwise would be for the often mystifying and rigorous first year. To help these students, the program contains an advising component which assists students who are contemplating law school to provide them with a realistic appraisal of law school and of the legal profession. The counselors will aid students with the law school application process.

REQUIREMENTS FOR THE MINOR

Programs

Non Degree

Law Studies Minor

Program Requirements

A total of 18 semester hours must be completed for the law studies minor. The five required courses (15 semester hours) must be taken in residence at UC Denver. A minimum grade of C is required in each course and students must maintain a GPA of 3.0 in courses taken toward the minor. Every course taken for the minor must be upper division, and cannot serve to fulfill requirements of the undergraduate core. Students should check with their major department to determine whether courses counted toward the law studies minor can fulfill major requirements. To apply for this minor, students must complete and submit a major/minor change declaration form to the CLAS Advising Office in North Classroom, 4002.

Required Courses

- COMM 4680 - Mass Communication Law and Policy Summer 2010 Registration: **CMMU 4680**
(offered at least once a year)
- HUMN 3250 - Introduction to Law Studies Summer 2010 Registration: **HUM 3250**
(offered every fall)
- PHIL 4260 - Philosophy of Law Summer 2010 Registration: **PHIL 4260**
(offered every spring)

Choose two:

- COMM 4681 - Communication Issues in Trial Court Practices and Processes Summer 2010 Registration: **CMMU 4681**
(offered every other year)
- COMM 4750 - Legal Reasoning and Writing Summer 2010 Registration: **CMMU 4750**
(offered every other year)
- PSCI 3034 - Race, Gender, Law and Public Policy Summer 2010 Registration: **P SC 3034**
- PSCI 4427 - Law, Politics and Justice Summer 2010 Registration: **P SC 4427**
- PSCI 4494 - Judicial Politics Summer 2010 Registration: **P SC 4494**

Total: 15 Hours

Electives

Choose one:

- BLAW 3000 - Legal and Ethical Environments of Business I Summer 2010 Registration: **BLAW 3000**
- COMM 4140 - Argumentation Summer 2010 Registration: **CMMU 4140**
(taught each summer)
- COMM 4255 - Negotiations and Bargaining Summer 2010 Registration: **CMMU 4255**
- MUSC 3720 - Law and the Music Industry Summer 2010 Registration: **MUS 3720**
- PHIL 4812 - Special Topics in Philosophy Summer 2010 Registration: **PHIL 4812**
- PSCI 3214 - Federal Law and American Indians Summer 2010 Registration: **P SC 3214**
- PSCI 4024 - Legislatures and Legislation Summer 2010 Registration: **P SC 4024**
- PSCI 4477 - Constitutional Law I Summer 2010 Registration: **P SC 4477**

Total: 3 Hours

Minor Total: 18 Hours

The law studies program also recommends a course in informal logic to aid in preparation for the LSAT (e.g., PHIL 2441).

Mathematical and Statistical Sciences

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Associate Chair: Lynn S. Bennethum

Program Assistant: Lindsay Hiatt

Administrative Assistant: Angela Beale

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Faculty

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Leopoldo Franca, PhD, Stanford University

Michael S. Jacobson, PhD, Emory University

Andrew Knyazev, PhD, Institute of Numerical Mathematics, Russian Academy of Sciences

Weldon A. Lodwick, PhD, Oregon State University

J. Richard Lundgren, PhD, Ohio State University

Jan Mandel, PhD (equivalent), Charles University (Czechoslovakia)

Stanley E. Payne, PhD, Florida State University

Associate Professors:

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Stephen Billups, PhD, University of Wisconsin-Madison

Roxanne M. Byrne, PhD, University of Colorado

Anatolii Puhalskii, PhD, Moscow Institute of Physics and Technology
Stephanie A Santorico, PhD, North Carolina State University
Burton Simon, PhD, University of Michigan, Ann Arbor

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Diana White, PhD, University of Nebraska

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Gary Olson, MS, University of Colorado

Research Faculty:

Loren Cobb, PhD, Cornell University

Post-Docs:

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Yongku Kim, PhD, Ohio State University
Ashok Krishnamurthy, PhD, University of Louisville

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Emeritus Faculty:

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Kathryn L. Fraughnaugh, PhD, University of Houston
Harvey J. Greenberg, PhD, Johns Hopkins University
Zenas R. Hartvigson, PhD, Oregon State University
Sylvia Lu, PhD, Pennsylvania State University
Roland Sweet, PhD, Purdue University

The Department of Mathematical and Statistical Sciences offers courses and research opportunities with an emphasis on applied and computational mathematics. Traditional courses such as calculus, linear algebra, probability, statistics and discrete mathematics are offered regularly by the department. In addition, contemporary subjects such as continuous, probabilistic, optimization and discrete modeling; supercomputing; numerical analysis; optimization; and operations research are also well represented by course offerings and faculty interests. In all of its activities, the department embodies the outlook that mathematics is a powerful tool that can be used to solve problems of immediate and practical importance.

The study of mathematics with an emphasis on computers and applications can prepare students for careers in engineering, the sciences, business and management, actuarial science, public health and all computer-dependent disciplines.

Center for Computational Biology

Director: Stephen Billups
Telephone: 303-556-4814
Web site: <http://ccb.cudenver.edu>

The Center for Computational Biology (CCB) is a multidisciplinary center focused on computational biology research and education. A complete description of the CCB is provided at the CCB Web site.

Center for Computational Mathematics

Director: Jan Mandel

Telephone: 303-556-4475

Web site: <http://math.ucdenver.edu/ccm/>

The Center for Computational Mathematics is composed of faculty members who have an interest in computational mathematics, the study of solving mathematical problems with computers. The center resides in the Department of Mathematical and Statistical Sciences and includes faculty members from various other departments. The primary goal of the center is to foster research in computational mathematics and to maintain a strong educational program at all levels. It has extensive ties with industry along the Front Range and with government laboratories throughout the nation. It offers students an excellent opportunity to receive training and experience in this exciting new field. The center operates a supercomputing cluster, Beowulf.

Math Clinic

Web site: <http://math.ucdenver.edu/clinic/>

Each semester, the mathematical and statistical sciences department conducts math clinics that are open to both undergraduate and graduate students. Each clinic is sponsored by a business, government agency or research organization. The clinic sponsor provides a specific project on which students work with the supervision of a faculty member and a sponsor representative. Every clinic results in a final report to the sponsor and provides participating students with an opportunity to apply mathematics to relevant problems. Recent math clinic sponsors include Raytheon, Lockheed Martin, Xenometrix, Budget Truck Rental and United Launch Alliance.

Statistics Consulting Workshop

The Department of Mathematical and Statistical Sciences regularly offers a graduate course in statistics consulting in which students work on problems provided by researchers and clients at the Downtown Campus and in the Denver metropolitan area. Potential clients should contact Loren Cobb at stats@math.ucdenver.edu or 303-556-8571.

Undergraduate Program

Director: Julien Langou
Telephone: 303-556-3919

The Department of Mathematical and Statistical Sciences offers a BS program that provides broad training in mathematics with the option of specializing in one of seven areas of special emphasis, or simply satisfying the requirements without specifying an area. The seven areas of emphasis are: pure mathematics, applied mathematics, computer science, discrete mathematics, probability and statistics, actuarial science and mathematics education. (Required courses for each option are given on the [Requirements for Math Majors](#) page.) Graduates typically teach, work in actuarial firms, develop software, work for engineering companies, perform statistical analysis for private and public organizations or pursue graduate work in mathematics.

Selecting a First Mathematics Course (Mathematics Majors)

The following table is a guide for mathematics majors selecting a first mathematics course:

Previous Mathematics Courses	Recommended First Course
A. one year high school algebra and one year high school geometry	Beginning or intermediate algebra at a community college
B. two years high school algebra and one year high school geometry (i) C average (ii) at least B average	MATH 1110 - College Algebra MATH 1120 - College Trigonometry
C. two years high school algebra and one year high school geometry with trigonometry (i) C average (ii) at least B average	MATH 1130 - Precalculus Mathematics MATH 1401 - Calculus I

Students planning to take MATH 1070, MATH 1110 or MATH 1401 must take a prerequisite exam. For more information, see [Math Prerequisite Exams](#). Students with transfer or advanced placement credit should see an academic advisor in the Department of Mathematical and Statistical Sciences.

The BS in mathematics requires a minimum of 48 semester hours in mathematics with an average of C (2.0) and with a grade of at least C in each course. At least 30 semester hours must be in upper-division courses (3000 level or above), excluding MATH 3040. To graduate, a mathematics major must have a minimum of 30 hours of resident credit

(letter grades received at UC Denver). Furthermore, 21 out of the last 30 hours must be taken at UC Denver. Finally, at least 15 upper-division mathematics credits must be taken at UC Denver.

Students must declare a major in the CLAS Advising Office by the time they have completed 60 semester hours. At this time, they will also be assigned a mathematics advisor in the Department of Mathematical and Statistical Sciences, whom they should consult at least once a semester. All mathematics majors should visit the CLAS Advising Office to have graduation requirements checked.

REQUIREMENTS FOR MATHEMATICS MAJOR

REQUIREMENTS FOR THE MATHEMATICS MINOR

Graduation With Honors

The mathematical and statistical sciences department recognizes students who complete the undergraduate program with distinction. To be eligible for graduation with honors (*cum laude*, *magna cum laude*, *summa cum laude*), a student must graduate with an overall GPA of 3.2 or better; must have a GPA of 3.5 or better in upper-division math courses; and must complete an honors project. Specific details may be obtained from the Department of Mathematical and Statistical Sciences. Students who wish to be considered for graduation with honors should notify a mathematics advisor as early in the program as possible.

Applied Statistics Certificate

Director: Stephanie Santorico

Telephone: 303-556-2547

Web site: <http://math.cudenver.edu/statistics/certificates.shtml>

Applied Statistics Certificate - Undergraduate

Applied Statistics Certificate - Graduate

Graduate Program

Director: Stephanie Santorico

Telephone: 303-556-2547

The Department of Mathematical and Statistical Sciences offers the MS degree in applied mathematics and the PhD degree in applied mathematics. Each of these degree programs conforms to the rules and policies of the Graduate School.

Detailed descriptions of the requirements for the MS and PhD degrees are maintained in the [Math Graduate Handbook](#). The following is an abbreviated summary of these requirements.

Requirements for Admission

To begin graduate work toward the MS or PhD degrees, a student should have at least the following preparation: 30 semester hours of mathematics [*B* (3.0) or better], at least 24 of which are at or above the level of MATH 3000. These courses should include a full year of advanced calculus or introduction to analysis, one semester of linear algebra and one semester of either differential equations, abstract algebra, discrete mathematics or probability. Additionally, students should take the GRE exam.

Students who do not have all the prerequisites may be admitted with prerequisite deficiencies with the understanding that those deficiencies must be removed after admission. Students who have a cumulative undergraduate GPA that is less than 3.0 may be eligible for provisional admission to the master's program (see also the [Graduate School](#) admission requirements).

Application Deadlines

Applications to the MS or PhD program should be submitted by the following target dates to be guaranteed full consideration. International students should submit their applications one month prior to these target dates.

Target Dates for PhD Program	Target Dates for MS Program
Feb 15: fall or summer semester	Apr 1: fall or summer semester
Oct 1: spring semester	Nov 1: spring semester

Applications received after the target dates may still be considered for admission, depending on space availability.

Financial Support

PhD students and exceptionally strong MS students are encouraged to apply for teaching assistantships. A variety of other opportunities for financial support are also available. See the Math Graduate Handbook for details.

REQUIREMENTS FOR THE MS IN APPLIED MATHEMATICS

REQUIREMENTS FOR THE PhD IN APPLIED MATHEMATICS

Programs

Bachelor of Science

Mathematics BS

Degree Requirements

Required Core Courses for All Mathematics Majors

- MATH 1401 - Calculus I Summer 2010 Registration: **MATH 1401**
- MATH 2411 - Calculus II Summer 2010 Registration: **MATH 2411**
- MATH 2421 - Calculus III Summer 2010 Registration: **MATH 2421**
- MATH 3000 - Introduction to Abstract Mathematics Summer 2010 Registration:
MATH 3000
- MATH 3191 - Applied Linear Algebra Summer 2010 Registration: **MATH 3191**
- MATH 3200 - Elementary Differential Equations Summer 2010 Registration:
MATH 3200
- OR-
- MATH 4408 - Applied Graph Theory Summer 2010 Registration: **MATH 4408**
- MATH 3250 - Problem Solving Tools Summer 2010 Registration: **MATH 3250**
- MATH 3800 - Probability and Statistics for Engineers Summer 2010 Registration:
MATH 3800
- OR-
- MATH 4810 - Probability Summer 2010 Registration: **MATH 4810**
- MATH 4779 - Math Clinic Summer 2010 Registration: **MATH 4779**

TOTAL REQUIRED CORE: 30 HOURS

Core Areas

Choose one course from each of the following three areas:

Analysis

Choose one:

- MATH 3200 - Elementary Differential Equations Summer 2010 Registration:
MATH 3200
- MATH 4201 - Topology Summer 2010 Registration: **MATH 4201**
- MATH 4310 - Introduction to Real Analysis I Summer 2010 Registration: **MATH 4310**

- MATH 4450 - Complex Variables Summer 2010 Registration: **MATH 4450**
- MATH 4650 - Numerical Analysis I Summer 2010 Registration: **MATH 4650**
- MATH 4733 - Partial Differential Equations Summer 2010 Registration: **MATH 4733**

Modeling

Choose one:

- MATH 4387 - Regression Analysis, Modeling and Time Series Summer 2010 Registration: **MATH 4387**
- MATH 4791 - Continuous Modeling Summer 2010 Registration: **MATH 4791**
- MATH 4792 - Probabilistic Modeling Summer 2010 Registration: **MATH 4792**
- MATH 4793 - Discrete Math Modeling Summer 2010 Registration: **MATH 4793**
- MATH 4794 - Optimization Modeling Summer 2010 Registration: **MATH 4794**

Discrete Math

Choose one:

- MATH 3140 - Introduction to Modern Algebra Summer 2010 Registration: **MATH 3140**
- MATH 3301 - Introduction to Operations Research I - Deterministic Systems Summer 2010 Registration: **MATH 3301**
- MATH 4408 - Applied Graph Theory Summer 2010 Registration: **MATH 4408**
- MATH 4409 - Applied Combinatorics Summer 2010 Registration: **MATH 4409**

TOTAL CORE AREAS: 9 HOURS

Electives Mathematics Majors Must Complete

Mathematics majors must take three upper-division mathematics courses, excluding MATH 3040, chosen to provide depth and breadth. Depth is obtained by taking a two-semester sequence of upper-division courses, one of which may be a course taken for the core area requirement.

Portfolio, Interview, Survey

In the semester of graduation, students must:

- submit a portfolio consisting of two papers, typically written for previous courses, that demonstrate mathematical and writing proficiency
- participate in an exit interview, which may be scheduled by the department administrative assistant

- complete a senior survey, available from the department administrative assistant

Math Majors Considering Graduate Study

Mathematics majors who are considering graduate study in mathematics should plan to take the following courses as part of their major:

- MATH 4310 - Introduction to Real Analysis I *Summer 2010 Registration: MATH 4310*
-and-
- MATH 4320 - Introduction to Real Analysis II *Summer 2010 Registration: MATH 4320*

Required Courses for Each Option

PURE MATHEMATICS OPTION

All core courses, with MATH 3200 chosen (30 semester hours), plus the following:

- MATH 3140 - Introduction to Modern Algebra *Summer 2010 Registration: MATH 3140*
- MATH 4201 - Topology *Summer 2010 Registration: MATH 4201*
-OR-
- MATH 4110 - Theory of Numbers *Summer 2010 Registration: MATH 4110*
-OR-
- MATH 4409 - Applied Combinatorics *Summer 2010 Registration: MATH 4409*
- MATH 4310 - Introduction to Real Analysis I *Summer 2010 Registration: MATH 4310*
- MATH 4320 - Introduction to Real Analysis II *Summer 2010 Registration: MATH 4320*

Two approved math electives (6 semester hours)

Pure Mathematics Option Total: 50 Hours

APPLIED MATHEMATICS OPTION

All core courses with MATH 3200 and 4810 chosen (30 semester hours), plus the following:

- MATH 3301 - Introduction to Operations Research I - Deterministic Systems *Summer 2010 Registration: MATH 3301*
-OR-
- MATH 3302 - Operations Research II *Summer 2010 Registration: MATH 3302*
-OR-
- MATH 4408 - Applied Graph Theory *Summer 2010 Registration: MATH 4408*

- MATH 4650 - Numerical Analysis I Summer 2010 Registration: MATH 4650
Two modeling courses, chosen from:
- MATH 4387 - Regression Analysis, Modeling and Time Series Summer 2010 Registration: MATH 4387
- MATH 4791 - Continuous Modeling Summer 2010 Registration: MATH 4791
- MATH 4792 - Probabilistic Modeling Summer 2010 Registration: MATH 4792
- MATH 4793 - Discrete Math Modeling Summer 2010 Registration: MATH 4793
- MATH 4794 - Optimization Modeling Summer 2010 Registration: MATH 4794
Two approved math electives: **6 semester hours**
Applied Mathematics Option Total: 48 Hours

COMPUTER SCIENCE OPTION

All core courses with MATH 4408 chosen (30 semester hours), plus the following:

- CSCI 2421 - Data Structures and Program Design Summer 2010 Registration: C SC 2421
- MATH 3140 - Introduction to Modern Algebra Summer 2010 Registration: MATH 3140
- MATH 4650 - Numerical Analysis I Summer 2010 Registration: MATH 4650
- MATH 4660 - Numerical Analysis II Summer 2010 Registration: MATH 4660
-OR-
- MATH 4674 - Parallel Computing and Architectures Summer 2010 Registration: MATH 4674
One modeling course, chosen from:
- MATH 4387 - Regression Analysis, Modeling and Time Series Summer 2010 Registration: MATH 4387
- MATH 4791 - Continuous Modeling Summer 2010 Registration: MATH 4791
- MATH 4792 - Probabilistic Modeling Summer 2010 Registration: MATH 4792
- MATH 4793 - Discrete Math Modeling Summer 2010 Registration: MATH 4793
- MATH 4794 - Optimization Modeling Summer 2010 Registration: MATH 4794
Two approved math electives: **6 semester hours**
One upper division computer science elective approved by advisor: **3 semester hours**
Computer Science Option Total: 54 Hours

DISCRETE MATHEMATICS OPTION

This option allows students and advisors to create a program that differs from the pre-approved option.

Such a program must be approved by the advisor at least one year before graduation.

All core courses, with MATH 4408 chosen (30 semester hours) plus the following:

- MATH 3140 - Introduction to Modern Algebra Summer 2010 Registration: **MATH 3140**
 - MATH 4201 - Topology Summer 2010 Registration: **MATH 4201**
-OR-
 - MATH 4310 - Introduction to Real Analysis I Summer 2010 Registration: **MATH 4310**
 - MATH 4409 - Applied Combinatorics Summer 2010 Registration: **MATH 4409**
 - MATH 4793 - Discrete Math Modeling Summer 2010 Registration: **MATH 4793**
-OR-
 - MATH 4794 - Optimization Modeling Summer 2010 Registration: **MATH 4794**
- Choose one course from the following
- MATH 3210 - Higher Geometry I Summer 2010 Registration: **MATH 3210**
 - MATH 4110 - Theory of Numbers Summer 2010 Registration: **MATH 4110**
 - MATH 4220 - Higher Geometry II Summer 2010 Registration: **MATH 4220**
- One Math elective above MATH 3000, excluding 3040: **3 semester hours**

Discrete Mathematics Option Total: 51-52 Hours

PROBABILITY AND STATISTICS OPTION

All core courses with MATH 3200 and 4810 chosen (30 semester hours), plus the following:

- MATH 4650 - Numerical Analysis I Summer 2010 Registration: **MATH 4650**
 - MATH 4387 - Regression Analysis, Modeling and Time Series Summer 2010 Registration: **MATH 4387**
-OR-
 - MATH 4792 - Probabilistic Modeling Summer 2010 Registration: **MATH 4792**
 - MATH 4820 - Statistics Summer 2010 Registration: **MATH 4820**
- One course from the discrete mathematics area: **3 semester hours**
- Two approved math electives: **6 semester hours**

Probability and Statistics Option Total: 48 Hours

ACTUARIAL SCIENCE OPTION

All core courses with MATH 3200 and 4810 chosen (30 semester hours), plus the following:

- MATH 3301 - Introduction to Operations Research I - Deterministic Systems Summer 2010 Registration: **MATH 3301**
-OR-
- MATH 3302 - Operations Research II Summer 2010 Registration: **MATH 3302**
-OR-

- MATH 4408 - Applied Graph Theory Summer 2010 Registration: **MATH 4408**
- MATH 4387 - Regression Analysis, Modeling and Time Series Summer 2010 Registration: **MATH 4387**
- MATH 4650 - Numerical Analysis I Summer 2010 Registration: **MATH 4650**
- MATH 4820 - Statistics Summer 2010 Registration: **MATH 4820**
One modeling course, chosen from:
- MATH 4792 - Probabilistic Modeling Summer 2010 Registration: **MATH 4792**
-OR-
- MATH 5350 - Mathematical Theory of Interest Summer 2010 Registration: **MATH 5350**
(MATH 5350 strongly recommended)
One MATH elective above 3000: **3 semester hours**
Actuarial Science Option Total: 45 Hours

Suggested minor for actuarial science major option:

Actuaries need a background in business, particularly accounting, economics and finance. You are strongly advised to do a minor in one of these areas. Recommended classes are:

- ACCT 2200 - Financial Accounting and Financial Statement Analysis Summer 2010 Registration: **ACCT 2200**
- ECON 2012 - Principles of Economics: Macroeconomics Summer 2010 Registration: **ECON 2012**
- ECON 2022 - Principles of Economics: Microeconomics Summer 2010 Registration: **ECON 2022**
- FNCE 3000 - Principles of Finance Summer 2010 Registration: **FNCE 3000**

MATHEMATICS EDUCATION OPTION

All core courses with MATH 3800 and 4408 chosen (30 semester hours), plus the following:

- MATH 3140 - Introduction to Modern Algebra Summer 2010 Registration: **MATH 3140**
- MATH 3210 - Higher Geometry I Summer 2010 Registration: **MATH 3210**
- MATH 4010 - History of Mathematics Summer 2010 Registration: **MATH 4010**
- MATH 4201 - Topology Summer 2010 Registration: **MATH 4201**
One modeling course, chosen from:
- MATH 4387 - Regression Analysis, Modeling and Time Series Summer 2010 Registration: **MATH 4387**
- MATH 4791 - Continuous Modeling Summer 2010 Registration: **MATH 4791**
- MATH 4792 - Probabilistic Modeling Summer 2010 Registration: **MATH 4792**
- MATH 4793 - Discrete Math Modeling Summer 2010 Registration: **MATH 4793**
- MATH 4794 - Optimization Modeling Summer 2010 Registration: **MATH 4794**

Approved math elective: **3 semester hours**
Mathematics Education Option Total: 48 Hours

Note:

Certification by the School of Education and Human Development is required for public school teaching. Contact the school for details.

Certificate

Applied Statistics Graduate Certificate

Coordinator: Stephanie Santorico:

Telephone: 303-556-2547

E-mail: Stephanie.Santorico@ucdenver.edu

Web site: http://math.ucdenver.edu/statistics/grad_cert.shtml

Entrance Requirements

Students are expected to have a bachelor's degree and be admitted to the graduate school as either a degree-seeking or nondegree-seeking student. Students are expected to have completed an introductory statistics course (such as MATH 2830 or the equivalent) or an introductory course in probability. At least one semester of calculus and a course containing linear algebra are also recommended.

To apply, see [Graduate Applied Statistics Certificate](#)

Curriculum

There are three parts to the requirements:

Required Courses

Basic methods (choose one):

- MATH 4820 - Statistics Summer 2010 Registration: **MATH 4820**
-OR-
- MATH 4830 - Applied Statistics Summer 2010 Registration: **MATH 4830**
-OR-
- MATH 5320 - Statistics Summer 2010 Registration: **MATH 5320**

Advanced methods (choose two):

- MATH 5387 - Regression Analysis, Modeling and Time Series Summer 2010
Registration: **MATH 5387**
-AND/OR-
- MATH 5394 - Experimental Designs Summer 2010 Registration: **MATH 5394**
-AND/OR-
- MATH 6360 - Exploratory Data Analysis Summer 2010 Registration: **MATH 6360**

Elective (choose one):

- Any statistics course in the math department at the 5000 level or higher
- ECON 5150 - Economic Forecasting Summer 2010 Registration: **ECON 5150**
 - ECON 5813 - Econometrics I Summer 2010 Registration: **ECON 5813**
 - ECON 5823 - Econometrics II Summer 2010 Registration: **ECON 5823**
 - ENVS 5600 - Applied Statistics for the Natural Sciences Summer 2010
Registration: **ENVS 5600**
 - GEOL 5770 - Applied Statistics for the Natural Sciences Summer 2010
Registration: **GEOL 5770**
 - PSYC 5713 - Advanced Statistics Summer 2010 Registration: **PSY 5713**
 - SOCY 5183 - Seminar: Quantitative Data Analysis Summer 2010 Registration:
SOC 5183

Equivalent course pre-approved by the certificate coordinator

Project

An independent data analysis project with a report and presentation to demonstrate proficiency with data analysis techniques and a statistical computing software package. Enroll for one hour of MATH 5840 (Independent Study) or in an equivalent course preapproved by the certificate coordinator.

Certificate Total: 13 Hours

Grade Requirements

Students must maintain a 3.0 GPA in these courses with no credit given for courses with grades below B-.

Residency Requirements

Since a certificate is a University of Colorado Denver certification of a student's specialized knowledge in an advanced subject area, all courses in the certificate program are expected to be taken in residency at the University of Colorado Denver.

Applied Statistics Undergraduate Certificate

Coordinator: Stephanie Santorico:

Telephone: 303-556-2547

E-mail: Stephanie.Santorico@ucdenver.edu

Web site: http://math.ucdenver.edu/statistics/ugrad_cert.shtml

Entrance Requirements

All undergraduate students in good standing (including nondegree-seeking students) will be admitted to the program. For students in the College of Liberal Arts and Sciences, this requires a cumulative grade point average of 2.0. Some mathematical background (including calculus and linear algebra) is recommended.

To apply, see [Undergraduate Applied Statistics Certificate](#)

Curriculum

There are three parts to the requirements:

Required Courses

- [MATH 2830 - Introductory Statistics](#) *Summer 2010 Registration:* **MATH 2830**

Basic Methods (choose one):

- [MATH 4820 - Statistics](#) *Summer 2010 Registration:* **MATH 4820**
- [MATH 4830 - Applied Statistics](#) *Summer 2010 Registration:* **MATH 4830**

Advanced Methods (choose one):

- [MATH 4387 - Regression Analysis, Modeling and Time Series](#) *Summer 2010 Registration:* **MATH 4387**
- [MATH 4394 - Experimental Designs](#) *Summer 2010 Registration:* **MATH 4394**

Elective (choose one):

- [MATH 4101 - Applied Statistics Using SAS and SPSS I](#) *Summer 2010 Registration:* **MATH 4101**
or any statistics course in the math department at the 4000 level or higher

- ECON 4150 - Economic Forecasting Summer 2010 Registration: **ECON 4150**
- ECON 4811 - Introduction to Econometrics Summer 2010 Registration: **ECON 4811**
- GEOG 4770 - Applied Statistics for the Natural Sciences Summer 2010 Registration: **GEOG 4770**
- GEOL 4770 - Applied Statistics for the Natural Sciences Summer 2010 Registration: **GEOL 4770**
- SOCY 5183 - Seminar: Quantitative Data Analysis Summer 2010 Registration: **SOC 5183**

Equivalent course pre-approved by the certificate coordinator

Project

An independent data analysis project with a report and presentation to demonstrate proficiency with data analysis techniques and a statistical computing software package. Enroll for one hour of MATH 4840 (Independent Study) or in an equivalent course pre-approved by the certificate coordinator.

Certificate Total: 13 Hours

Grade Requirements

Students must maintain a 3.0 GPA in these courses with no credit given for courses with grades below B-.

Residency Requirements

Since a certificate is a University of Colorado Denver certification of a student's specialized knowledge in an advanced subject area, all courses in the certificate program are expected to be taken in residency at the University of Colorado Denver.

Non Degree

Mathematics Minor

Program Requirements

- MATH 1401 - Calculus I Summer 2010 Registration: **MATH 1401**
- MATH 2411 - Calculus II Summer 2010 Registration: **MATH 2411**

- MATH 2421 - Calculus III Summer 2010 Registration: **MATH 2421**
Three additional upper-division math courses (3 or more semester hours each, excluding MATH 3040): **9 semester hours**

Minor Total: 21 Hours

Minimum of 21 semester hours with a C average.

Note: At least 6 of the upper-division semester hours must be taken at the Downtown Campus. No grade below a C- will be counted toward the minor requirements.

Master of Science

Applied Mathematics, MS

► Graduate School Rules apply to this program.

Program Requirements

Students must present 30 hours of course work and maintain a 3.0 GPA for the MS degree. At least 24 of these hours must consist of graduate-level (numbered 5000 or higher) mathematics courses. The remaining 6 hours must be either mathematics courses numbered 5000 or above or approved courses outside the department numbered 4000 or above. Up to 12 semester hours may be transferred from other institutions.

A student may devote from 4 to 6 hours (of the 30 required hours) to the writing of a thesis. Following completion of course work, all candidates must make a one-hour oral presentation before a committee consisting of three graduate faculty members.

Students must take either applied analysis or real analysis and applied linear algebra. Additionally, students must fulfill specific course work requirements for one of the following areas of specialization:

- discrete mathematics
- operations research
- applied statistics
- applied probability
- numerical analysis
- mathematics of science and engineering
- mathematical foundations of computer science
- computational biology

All master's degree students are encouraged to participate in the Math Clinic, a unique program in which students have an opportunity to work on real-world problems supplied by local businesses, research firms and government agencies.

For more detailed information about the applied mathematics MS, see the [Math Graduate Handbook](#).

Doctor of Philosophy

Applied Mathematics, PhD

► [Graduate School Rules](#) apply to this program.

Program Requirements

The Department of Mathematical and Statistical Sciences also offers a PhD in applied mathematics. The degree is designed to give candidates a contemporary, comprehensive education in applied mathematics and to provide research opportunities in the special fields of discrete mathematics, optimization, operations research, applied probability, computer science, computational mathematics, applied statistics and the mathematics of science and engineering.

There are six phases of the PhD program. A candidate must fulfill course requirements, pass the preliminary examinations, establish a PhD committee, meet the academic residency requirement, pass the comprehensive examination and write and defend a dissertation.

- Students must complete 42 semester hours of nonthesis course work at the graduate level (up to 30 hours of this course work may be transferred in, including courses taken as part of the MS master's degree). In addition, 30 hours of dissertation credit must be taken. The following courses are required as part of the formal course work: four PhD-level courses (3 hours each), math clinic and three readings courses (1 semester hour each). Students must also satisfy a **breadth requirement** by completing a total of six graduate math courses from among several areas of mathematics, with no more than three of these courses from any one area. A 3.25 GPA must be maintained throughout all course work.
- The preliminary examinations are designed to determine that students who intend to pursue the PhD program are qualified to do so. These four-hour written examinations are in the areas of applied analysis and applied linear algebra. Students must pass these exams within two years of entering the program. Exception: students admitted with prerequisite deficiencies must pass these exams within three years.

- Six semesters of residence are required, as specified in the rules of the Graduate School. All students are strongly advised to spend at least one year doing full-time course work or research with no outside employment.
- Application for candidacy is made after completion of the preliminary examinations and after at least three semesters of residency. The application must be submitted at least two weeks before taking the comprehensive examination. The comprehensive examination is designed to determine mastery of graduate-level mathematics and the ability to embark on dissertation research. It consists of a six-hour written examination and an oral follow-up examination. Students must pass the comprehensive exam within 4 years of admission. Within six months after passing the comprehensive examination, the candidate must present a dissertation proposal to the dissertation committee.
- Each student must write and defend a dissertation containing original contributions and evidence of significant scholarship. The dissertation defense is public and must be given before an examining committee approved by the Graduate School.

For more detailed information about the applied mathematics PhD, see the [Math Graduate Handbook](#).

Modern Languages

Chair: Diane Dansereau

Coordinator: Tim Phillips

Program Assistants: Jaynie Muggli, Julie Blunck

Office: Plaza Building, 118

Mailing Address:

Campus Box 178

P.O. Box 173364

Denver, CO 80217-3364

Telephone: 303-556-4893

Fax: 303-556-6038

Web site: clas.ucdenver.edu/modLang/

Chinese Faculty

Senior Instructor:

Kuan-Yi Rose Chang, PhD, Purdue University

French Faculty

Associate Professor:

Diane Dansereau, PhD, University of Michigan

Senior Instructors:

Linda Alcott, PhD, University of Colorado

Lori Willard, PhD, University of Colorado

Instructor:

Jocelyne Hunsinger, BA, University of Ottawa (Ontario, Canada)

French Advisor:

Diane Dansereau

German Faculty

Associate Professor:

Carsten E. Seecamp, PhD, Johns Hopkins University

Senior Instructor:

Tim Phillips, MA, University of Colorado

German Advisor:

Carsten E. Seecamp

Latin Faculty

Instructor:

Mary De Forest, PhD, University of Colorado

Spanish Faculty

Associate Professors:

Michael Abeyta, PhD, University of California-Davis

Kathleen Bollard, PhD, University of California-Berkeley

Devin Jenkins, PhD, University of New Mexico

Assistant Professors:

Andrés Lema-Hincapié, PhD, Cornell University and PhD, University of Ottawa

Maria Luisa Fernandez Martinez, PhD, University of California, Irvine

Amy Von Canon, PhD, University of Iowa

Instructors:

Conxita Domenech, MA, Universidad Autonoma Barcelona, Spain

Ileana Gross, MA, University of Georgia

Ted Wendelin, MA, University of Southern Mississippi in Morelia, Michoacán, Mexico

Instructor, Attendant Rank:

Danny Martinez, MA, University of Colorado

Undergraduate Advisors (by student's last name):

A—F: Andrés Lema-Hincapié

G—O: Devin Jenkins

P—Z: Amy Von Canon

Graduate Advisor:

Michael Abeyta

Study Abroad Advisor:

Amy Von Canon

Internship Director:

Andrés Lema-Hincapié

General Information

The Department of Modern Languages includes Chinese, French, German, Latin and Spanish. Majors are available in French and Spanish, and minors are available in French, German and Spanish. Certification is available in German. Students must declare a major by the time they have completed 60 semester hours of course work. The department recommends that majors and minors include some study abroad while they are fulfilling their degree requirements at UC Denver. Please see a departmental advisor about study abroad opportunities. Credit earned abroad will normally count toward satisfaction of the major and minor requirements at UC Denver, but to assure full transfer of credit, students must see an advisor in the department before enrolling in programs abroad. Courses taken abroad and designated as upper division in French, German or Spanish are subject to the 48-hour maximum of semester hours from a single discipline in the College of Liberal Arts and Sciences.

Departmental Honors

Students who meet certain criteria and have been invited by the faculty of the appropriate language are encouraged to participate in the Department of Modern Languages honors program. Successful completion of this program by students majoring in French or Spanish leads to graduation with the distinction of *cum laude*, *magna cum laude* or *summa cum laude*. See French and Spanish sections for details.

Relevance to Other Programs

In addition to fulfilling major and minor requirements, courses in the Department of Modern Languages prepare students in the language, literature and civilization of the countries and peoples they are studying. Certain courses may apply to the fulfillment of core curriculum requirements in the College of Liberal Arts and Sciences. Other courses lead to a secondary-school teaching certificate, the master of humanities degree and the master of arts degrees in Spanish and education at the Downtown Campus, and to the master of arts degree in French or Spanish on the Boulder campus. Only courses

numbered 5000 and above apply to the master's degree; students enrolled in a master's program in Boulder should consult with their advisor before enrolling in courses on the Downtown Campus.

Foreign Language Requirement

All students with majors in the College of Liberal Arts and Sciences must demonstrate proficiency in a foreign language at the second semester level. This is accomplished through course work, by examination or by completion of second-year high school credit. Students must receive a grade of C- (1.7) or higher in the final semester of the second-year course in high school or the second-semester college-level course in order to fulfill the foreign language requirement. The prerequisite for the second-semester college course is a grade of C (2.0) or better in the first-semester course. There is no pass/fail option for any course taken for the foreign language requirement.

Students may show their level of proficiency by taking the placement/proficiency exam. The languages tested are French, German and Spanish. For other languages, consult the CLAS Advising Office (North Classroom, 4002). For information on the placement/proficiency exam, check the [Modern Languages Web site](#) or call the Department of Modern Languages, 303-556-4893. The number of times a student may take the exam is limited to once per semester.

For information on fulfilling part of the foreign language requirement through study abroad, see the [Study Abroad Web](#) site or call 303-315-2232, or consult a Modern Languages advisor.

Department of Modern Languages Policy on Student Placement in Lower-Division Courses

A student may not enroll in a lower-division (1000/2000) language course that is below his/her level of language proficiency. Students wishing to enroll in a lower-division language course that does not directly follow their last completed course in the regular sequence must consult with an appropriate faculty member of the Department of Modern Languages prior to enrollment. Students who have achieved some proficiency in a foreign language through other means than academic courses must also consult with an appropriate faculty member of the Department of Modern Languages prior to enrollment. Call 303-556-4893 for further information.

Departmental Advising

Upon declaring a major or minor in modern languages, each student will be assigned to a faculty advisor with whom the student should consult at least once per semester thereafter. It is especially important that modern language majors have their transcripts reviewed by a departmental advisor before enrolling in their final 30 semester hours at UC Denver. Failure to do so may result in delay of graduation. Students presenting four

years of high school foreign language (Level IV) for admission must see a departmental advisor before enrolling in courses for the major or minor. Students with advanced placement credits from high school should see a departmental advisor about course equivalencies. The Department of Modern Languages does not accept CLEP credits.

Before enrolling in their final semester, seniors demonstrate advanced oral and written proficiency in the language that they are studying through an oral proficiency interview and a written outcomes assessment exam. Students must see a departmental advisor to schedule proficiency tests in their language.

Residency Requirement

A minimum of 18 semester hours of course work leading to a UC Denver major in French or Spanish must be taken from modern languages faculty at the Downtown Campus. For a UC Denver minor in French, German or Spanish, 9 semester hours must be taken from modern languages faculty at the Downtown Campus. Courses taken at other institutions while a student is enrolled at UC Denver may be applied to the major or minor only with departmental approval before enrollment in those courses.

French

Undergraduate

REQUIREMENTS FOR THE FRENCH MAJOR

REQUIREMENTS FOR THE FRENCH MINOR

Graduate

At present, UC Denver offers no French courses above 5999. The courses at the 5000 level are applicable to an MA degree through the University of Colorado at Boulder and to the master of humanities program at UC Denver, depending upon degree plan approval by the appropriate graduate advisor.

German

Undergraduate

REQUIREMENTS FOR THE GERMAN MINOR

UNDERGRADUATE CERTIFICATE IN APPLIED GERMAN LANGUAGE SKILLS

Graduate

UC Denver offers no German courses above 5999. Courses at the 5000 level are applicable to an MA degree in German through the University of Colorado at Boulder and to the master of humanities program at UC Denver, depending upon degree plan approval by the appropriate graduate advisor.

Spanish

Undergraduate

REQUIREMENTS FOR THE SPANISH MAJOR

REQUIREMENTS FOR THE SPANISH MINOR

Graduate

REQUIREMENTS FOR THE MA IN SPANISH

Programs

Bachelor of Arts

French BA

The French program offers courses in advanced language, linguistics, literature, civilization, culture and business, all taught exclusively in French. A minor is also offered. All French majors are strongly encouraged to participate in a study abroad program. Please see your French department advisor for information about opportunities to include study abroad as part of your major.

Admission and Grade Requirements

To be admitted to major status in French, students must have an overall GPA of C+ (2.3). The minimum grade acceptable in any French course applied to a French major is C (2.0). The grade point average in all courses applied to a French major at UC Denver must be 2.5. No courses taken on a pass/fail basis may be credited toward a French major. Upon declaring a major in French, each student will be assigned to a faculty advisor with whom the student should consult at least once per semester thereafter. It is especially important that students have their transcripts reviewed by their advisor before enrolling in their final 30 credit hours at UC Denver. Failure to do so may result in delay of graduation. Students presenting four years of high school French (Level IV) for

admission to UC Denver must see a French advisor before enrolling in courses for the major. Students with advanced placement credits from high school must see a French advisor about course equivalencies. The Department of Modern Languages does not accept CLEP credits.

Honors in French

Qualified majors will automatically graduate with regular honors in French. Faculty occasionally nominate students for extra course work leading to higher levels of honors in French. For information, consult the French advisor in the Department of Modern Languages.

Outcomes Assessment

During their final semester in the language, French major students participate in an oral proficiency interview and take a written outcomes assessment exam to measure their level of proficiency and mastery of key concepts.

Residency Requirement

All students majoring in French must complete 30 semester hours of upper-division French courses (courses numbered 3000 and above). A minimum of 18 of those semester hours must be taken from the faculty in French at the Downtown Campus. Courses taken at other institutions while a student is enrolled at UC Denver may be applied to the major only with departmental approval before enrollment in those courses. Students studying French for the professions must also take courses in other areas. Requirements for both tracks are outlined below.

Course Requirements for the Major

Track A: Language, Literature and Culture

Students wishing to improve their linguistic skills as well as their knowledge of Francophone literature and culture may choose this track.

Required Courses

- FREN 3010 - French Phonetics and Pronunciation *Summer 2010 Registration:*
FR 3010
- FREN 3020 - Oral Practice *Summer 2010 Registration:* **FR 3020**
- FREN 3050 - Advanced Grammar and Composition *Summer 2010 Registration:*
FR 3050

- FREN 3060 - Advanced French Language Skills Summer 2010 Registration: **FR 3060**

Total: 12 Hours

Electives

Three courses at the 4000 level: **9 semester hours**

Three electives at 3000 or 4000 level: **9 semester hours**

Note: students must take at least one literature course and at least one culture or civilization course.

Total: 18 Hours

Track A Major Total: 30 Hours

Track B: International Language and Culture for the Professions

This option in the French major offers career possibilities, both in government and private industry, at home and abroad. Languages are useful in business, industry, commerce, civil service, law, library science, media, science, economics, health and social sciences. Students who follow this course of study could also qualify as teachers of general business subjects in bilingual as well as traditional school systems. Students interested in this track should contact the French advisor in the Department of Modern Languages as early as possible in their academic career, but not later than the second semester of the sophomore year.

Prerequisites

(these courses do not count toward the major total of 48 hours)

- ECON 2012 - Principles of Economics: Macroeconomics Summer 2010 Registration: **ECON 2012**
- ECON 2022 - Principles of Economics: Microeconomics Summer 2010 Registration: **ECON 2022**

- MATH 1070 - Algebra for Social Sciences and Business Summer 2010
Registration: **MATH 1070**
-OR-
- MATH 1110 - College Algebra Summer 2010 Registration: **MATH 1110**
(or higher level math course)

Required French Courses

- FREN 1000 - Introduction to Cultures of the French- Speaking World Summer 2010 Registration: **FR 1000**
- FREN 3020 - Oral Practice Summer 2010 Registration: **FR 3020**
- FREN 3050 - Advanced Grammar and Composition Summer 2010 Registration: **FR 3050**
- FREN 3060 - Advanced French Language Skills Summer 2010 Registration: **FR 3060**
- FREN 3112 - Survey of French Literature I Summer 2010 Registration: **FR 3112**
-OR-
- FREN 3122 - Survey of French Literature II Summer 2010 Registration: **FR 3122**
- FREN 3130 - Current Topics of the French-Speaking World Summer 2010
Registration: **FR 3130**
-OR-
- FREN 3140 - Contemporary Francophone Cultures Summer 2010 Registration: **FR 3140**
- FREN 4050 - Advanced French for Business Summer 2010 Registration: **FR 4050**
- FREN 4082 - Introduction to Translation Summer 2010 Registration: **FR 4082**
- FREN 4210 - French Civilization - Twentieth and Twenty-First Centuries Summer 2010 Registration: **FR 4210**

Total: 27 Hours

French Electives

Choose two (at least one at 4000 level) from:

- FREN 3120 - French Cultural Identities: Myths and Realities Summer 2010
Registration: **FR 3120**
- FREN 3130 - Current Topics of the French-Speaking World Summer 2010
Registration: **FR 3130**
- FREN 3140 - Contemporary Francophone Cultures Summer 2010 Registration: **FR 3140**
- FREN 4200 - French Civilization Through the Nineteenth Century Summer 2010
Registration: **FR 4200**

Any 3000- or 4000-level literature course (not already taken from required list)

Total: 6 Hours

Business Courses

(please be aware of prerequisites in business course descriptions)

- ACCT 2200 - Financial Accounting and Financial Statement Analysis *Summer 2010 Registration: **ACCT 2200***
- MGMT 1000 - Introduction to Business *Summer 2010 Registration: **MGMT 1000***
- MGMT 3000 - Managing Individuals and Teams *Summer 2010 Registration: **MGMT 3000***
- MKTG 3000 - Principles of Marketing *Summer 2010 Registration: **MKTG 3000***
One 3000-level course in international business

Total: 15 Hours

Recommended

Official proficiency exam (Paris Chamber of Commerce)

Track B Major Total: 48 Hours

Secondary Foreign Language Teacher Licensure Program

With this option, students complete a major in French along with additional course work required for certification to teach French in the public schools. This program should be chosen early in the students' careers. For information, see the Teacher Education Program section of this catalog or contact the CLAS Advising Office (phone 303-556-2555 or visit North Classroom, 4002) and the French advisor.

Spanish BA

The Spanish program studies the language, linguistics, literature, culture and civilization of Spain, Spanish America and the Spanish-speaking areas of the United States.

Admission and Grade Requirements

To be admitted to major status in Spanish, students must have an overall GPA of C+ (2.3). The minimum grade acceptable in any course applied to a Spanish major or minor is a C (2.0). The GPA in all courses applied to a Spanish major or minor at UC Denver must be 2.5. No courses taken on a pass/fail basis may be credited toward a Spanish major or minor.

Residency Requirement

The BA in Spanish requires 30 semester hours of upper-division course work in Spanish and 6 additional hours in related fields. A minimum of 18 semester hours of Spanish course work for the major, and 9 hours for the minor, must be taken from Spanish faculty at the Downtown Campus. Courses taken at other institutions while a student is enrolled at UC Denver may be applied to the major only with departmental approval before enrollment in those courses.

Proficiency Requirement

Before enrolling in their final semester in the language, Spanish majors must be evaluated by the faculty in oral and written skills. Students must see their Spanish advisor for specific information.

Course Requirements for the Major

Students majoring in Spanish for the BA degree must complete 30 semester hours of upper-division course work, at least 12 of which must be at the 4000 level. All course work applied to the 30-semester hour minimum must be taught in Spanish. In addition, students must complete 6 semester hours in courses in related fields outside the curriculum in Spanish.

Program Requirements

Language, Literature and Culture Track

LITERATURE

- SPAN 3252 - Introduction to the Study of Literature *Summer 2010 Registration:*
SPAN 3252
At least one course on the literature of Spain: **3 semester hours**
At least one course on the literature of Spanish America: **3 semester hours**

Total: 9 Hours

LANGUAGE SKILLS AND THEORY

- SPAN 3060 - Hispanic Phonetics: Theory and Practice Summer 2010
*Registration: **SPAN 3060***
6 additional hours in language skills and theory

Total: 9 Hours

CULTURE AND CIVILIZATION OF SPAIN OR SPANISH AMERICA

Choose two:

- SPAN 3070 - Bilingual Communities: Spanish as a Language of Contact Summer 2010 *Registration: **SPAN 3070***
- SPAN 3212 - Spanish American Culture and Civilization Summer 2010 *Registration: **SPAN 3212***
- SPAN 3221 - Culture and Civilization of Spain I Summer 2010 *Registration: **SPAN 3221***
- SPAN 3222 - Culture and Civilization of Spain II Summer 2010 *Registration: **SPAN 3222***
- SPAN 4230 - Modern Culture of Spain through Film and Narrative Summer 2010 *Registration: **SPAN 4230***

Total: 6 Hours

RELATED FIELDS

Choose 2 courses from the following fields of study (see Modern Languages departmental web site for a list of pre-approved courses):

Latin American studies (from fields such as history, geography, political science, art history)
Hispanic American studies
Linguistics (in the fields of anthropology or English)
Comparative literature
Upper-division courses in another foreign language

Total: 6 Hours

MAJOR TOTAL: 30 Hours

International Language and Culture for the Professions Track

This option in the Spanish major offers career possibilities, both in government and private industry, at home and abroad. Languages are useful in business, industry, commerce, civil service, law, library science, media, science, economics, health and social sciences. Students who follow this course of study could also qualify as teachers of general business subjects in bilingual as well as traditional school systems. (However, students who wish to be certified to teach Spanish in the public schools should consult the department for information concerning the undergraduate language licensure program.)

International Spanish for the professions is a controlled-enrollment major that takes two years to complete. Interested students should contact the Spanish advisor in the Department of Modern Languages to declare the major. This should be done as early as possible in the student's academic career, but not later than the second semester of the sophomore year.

PREREQUISITES

(These courses do not count toward the major total of 45 semester hours)

- ECON 2012 - Principles of Economics: Macroeconomics Summer 2010
Registration: **ECON 2012**
- ECON 2022 - Principles of Economics: Microeconomics Summer 2010
Registration: **ECON 2022**
- MATH 1070 - Algebra for Social Sciences and Business Summer 2010
Registration: **MATH 1070**
-OR-
- MATH 1110 - College Algebra Summer 2010 Registration: **MATH 1110**
(or higher level math course)
- SPAN 2110 - Second Year Spanish I Summer 2010 Registration: **SPAN 2110**
-OR-
- SPAN 2120 - Second Year Spanish II Summer 2010 Registration: **SPAN 2120**

REQUIRED SPANISH COURSES

- SPAN 3082 - Introduction to Translation I Summer 2010 Registration: **SPAN 3082**
- SPAN 3252 - Introduction to the Study of Literature Summer 2010 Registration: **SPAN 3252**
- SPAN 3700 - Spanish for International Business I Summer 2010 Registration: **SPAN 3700**

- SPAN 3710 - Spanish for International Business II Summer 2010 Registration:
SPAN 3710

Total: 12 Hours

Two of the following language skills and theory courses:

- SPAN 3010 - Advanced Conversation and Composition I Summer 2010 Registration: **SPAN 3010**
- SPAN 3020 - Advanced Conversation and Composition II Summer 2010 Registration: **SPAN 3020**
- SPAN 3060 - Hispanic Phonetics: Theory and Practice Summer 2010 Registration: **SPAN 3060**
- SPAN 3310 - Spanish Writing and Grammar I Summer 2010 Registration: **SPAN 3310**

Total: 6 Hours

Two of the following culture courses:

- SPAN 3070 - Bilingual Communities: Spanish as a Language of Contact Summer 2010 Registration: **SPAN 3070**
- SPAN 3212 - Spanish American Culture and Civilization Summer 2010 Registration: **SPAN 3212**
- SPAN 3222 - Culture and Civilization of Spain II Summer 2010 Registration: **SPAN 3222**

Total: 6 Hours

Electives

Two SPAN electives, to be taken at the 4000 level.

Total: 6 Hours

SPANISH TOTAL: 30 Hours

BUSINESS COURSES

(please be aware of prerequisites in business course descriptions)

- ACCT 2200 - Financial Accounting and Financial Statement Analysis Summer 2010 Registration: **ACCT 2200**
- MGMT 1000 - Introduction to Business Summer 2010 Registration: **MGMT 1000**

- MGMT 3000 - Managing Individuals and Teams Summer 2010 Registration:
MGMT 3000
- MGMT 4400 - Environments of International Business Summer 2010
Registration: **MGMT 4400**
- MKTG 3000 - Principles of Marketing Summer 2010 Registration: **MKTG 3000**

Business Total: 15 Hours

SPANISH BUSINESS OPTION TOTAL: 45 Hours

RECOMMENDED:

- Language study abroad / international travel or field study
- Internship in target language
- Official proficiency exam

Undergraduate Licensure Program in Spanish

With this option, students complete a major in Spanish along with additional course work required for certification to teach Spanish in the public schools. This program should be chosen early in the students' careers. For information, see the Teacher Education Program section of this catalog or contact the CLAS Advising Office (phone 303-556-2555 or visit North Classroom, 4002) and the Spanish advisor.

Honors in Spanish

Students who complete all the requirements for the Spanish major (as outlined above) and meet the following criteria are encouraged to talk with the Spanish faculty about participation in the honors program. Successful completion of this program by students majoring in Spanish leads to graduation with the distinction of *cum laude*, *magna cum laude* or *summa cum laude*.

Cum laude

Overall GPA of 3.5 or better and Spanish GPA of 3.8 or better

Magna cum laude or summa cum laude

1. Overall GPA of 3.5 or better and Spanish GPA of 3.8 or better
—and—
2. **6 semester hours of Spanish 4840, Independent Study**, spread over two semesters. The candidate must present the independent study topic for approval by the faculty honors committee by the end of the semester preceding the independent study. At the end of the independent study project, and at least one

- month before the end of the second semester, the candidate shall submit a **written thesis** to the faculty honors committee.
3. The designation of *magna* or *summa* will be the decision of the faculty honors committee.

Certificate

Applied German Language Skills Undergraduate Certificate

Certificate Description

The undergraduate certificate in applied German language skills is designed for students of any discipline who wish to acquire and demonstrate to potential employers that they possess a fluid working knowledge of the German language and understanding of the cultures in which German is spoken. The completion of the requirements for this certificate can also serve as a means for nondegree-seeking professionals to develop a working competency in the German language and culture for use in such areas as international business, education, genealogy, transatlantic travel, academic research, translation and many other fields.

Admission

All currently enrolled students at UC Denver (undergraduate or graduate) in good standing (including nondegree-seeking students) are eligible for admission into the program. Any student who already possesses an undergraduate degree is also qualified for admission into the program, but must apply to the university as a nondegree-seeking student. Students working toward a baccalaureate degree who are currently enrolled in a college-level institution other than UC Denver are also eligible for certification.

Course Requirements

Twenty-four (24) semester hours of course work with UC Denver faculty (15 of which must be upper division), distributed as follows:

German Language Skills (15 credit hours): Students must complete a minimum of 15 semester credit hours of upper-division German language skills courses. These courses are defined as those areas of study in which grammar, vocabulary, pronunciation and/or communicative abilities in German are the primary focus of instruction. Up to six credit hours of upper-division German skills courses may be applied as transfer credit from outside, college-level institutions.

Alternately, students may apply up to nine credit hours of officially recognized study abroad credit toward this requirement.

German Culture (9 credit hours): Students must complete a minimum of nine semester credit hours of German culture courses where the primary focus of instruction addresses any facet of Austrian, German and/or Swiss culture. These courses may be completed at any level (lower or upper division as well as graduate) and in any combination of disciplines, provided that the student supplies evidence that a significant portion of each course is devoted to Austrian, German and/or Swiss culture. This includes but is not limited to history, philosophy, political science, literature (in German or in translation) and other German cultural topics. Up to three credit hours of culture courses may be applied as transfer credit from outside, college-level institutions. Alternately, students may apply up to six credit hours of officially recognized, documented university-level course work (or the equivalent) in a German-speaking country.

Proficiency Exam: Successful completion of an internationally recognized German language proficiency exam. At any point prior to the awarding of the certificate, students must submit documentation that they have passed an internationally recognized German language skills examination. Such proficiency exams (some of which are administered locally in Denver and Boulder) include but are not limited to the TestDaF (Test Deutsch als Fremdsprache), Zertifikat Deutsch (ZD), Zertifikat Deutsch für den Beruf (ZDfB) or Prüfung Wirtschaftsdeutsch (PWD). Students must receive approval from German faculty at UC Denver to ensure that their exam scores are valid and applicable toward certification.

Students must obtain approval from UC Denver German faculty for all of the above and maintain a minimum 3.0 GPA in all course work applied to the certificate.

Transfer Credit

A significant portion of the certificate program is based on language proficiency. Consequently, students who have developed language skills through course work at institutions outside of UC Denver, including study abroad, may apply a limited number of previously earned semester hours toward the program. Please make an appointment with an advisor in the department to discuss details. All transfer credits must be approved by UC Denver German faculty.

Application of Course Work

The course work applied toward certification is meant as a proficiency requirement and not as a total semester hour amount. As a result, students who are working toward a degree may apply course work in German certification as credit toward other programs such as a minor, general education requirements or their major. Students are

encouraged to inform their major advisor that they are working toward certification in German for help in coordinating their overall academic curriculum.

Further Information

Students are encouraged to hold a personal conference with a departmental advisor before applying to the certificate program. Phone 303-556-4893 for contact information.

Non Degree

French Minor

Students minoring in French must complete 15 semester hours of upper-division French courses (courses numbered 3000 and above). The minor in French must include at least one language skills class, chosen from the following:

Required Courses

Choose one:

- FREN 3010 - French Phonetics and Pronunciation *Summer 2010 Registration: FR 3010*
- FREN 3020 - Oral Practice *Summer 2010 Registration: FR 3020*
- FREN 3050 - Advanced Grammar and Composition *Summer 2010 Registration: FR 3050*
- FREN 3060 - Advanced French Language Skills *Summer 2010 Registration: FR 3060*

Total: 3 Hours

Electives

In addition, students minoring in French must complete four additional upper-division French courses

Total: 12 Hours

Minor Total: 15 Hours

German Minor

The German program provides a variety of courses for students interested in German language, linguistics, literature, history, philosophy, music and art.

Admission and Grade Requirements

To be admitted to minor status in German, students must have an overall GPA of C+ (2.3). The minimum grade acceptable in any course applied to a German minor is a C (2.0). The GPA in all courses applied to a German minor at UC Denver must be 2.5. No courses taken on a pass/fail basis may be credited toward a German minor.

Residency Requirement

The German minor requires 15 semester hours of upper-division course work. A minimum of 6 semester hours must be taken from German faculty at the Downtown Campus. Courses taken at other institutions while a student is enrolled at UC Denver may be applied to the minor only with departmental approval before enrollment in those courses.

Students who have completed course work through an approved exchange program must also complete a residency requirement of a minimum of 6 credits of upper-division German courses. This residency requirement must include at least 3 semester hours of language skills courses at the Downtown Campus.

Course Requirements for the Minor

Students minoring in German must complete 15 hours of upper division German courses (courses numbered 3000 and above). The minor in German must include at least one language skills course:

Required Courses

Choose one:

- GRMN 3050 - Phonetics and Pronunciation of German Summer 2010
Registration: GER 3050
- GRMN 3060 - Advanced German Language Skills I Summer 2010 *Registration: GER 3060*
- GRMN 3070 - Advanced German Language Skills II Summer 2010 *Registration: GER 3070*
- GRMN 3080 - Advanced German Language Skills III Summer 2010 *Registration: GER 3080*

- GRMN 3090 - Advanced German Language Skills IV Summer 2010 Registration:
GER 3090

Total: 3 Hours

Electives

In addition, students minoring in German must complete four additional German courses.

Total: 12 Hours

Minor Total: 15 Hours

Students taking a German course taught in English must complete a portion of the course work (e.g., papers and exams) in German for the course to count toward the minor.

Spanish Minor

Students minoring in Spanish for the BA degree must complete 15 semester hours of upper-division Spanish courses (courses numbered 3000 and higher). All course work must be taught in Spanish.

The minor in Spanish must include at least one culture and civilization class, chosen from the following:

Required Courses

Choose one:

- SPAN 3070 - Bilingual Communities: Spanish as a Language of Contact Summer 2010 Registration: **SPAN 3070**
- SPAN 3212 - Spanish American Culture and Civilization Summer 2010 Registration: **SPAN 3212**
- SPAN 3221 - Culture and Civilization of Spain I Summer 2010 Registration: **SPAN 3221**

- SPAN 3222 - Culture and Civilization of Spain II *Summer 2010 Registration:*
SPAN 3222
- SPAN 3230 - Ibero-American Cultures through Film *Summer 2010 Registration:*
SPAN 3230
- SPAN 4230 - Modern Culture of Spain through Film and Narrative *Summer 2010 Registration:* **SPAN 4230**

Total: 3 Hours

Electives

In addition, students minoring in Spanish must complete four additional upper-division Spanish courses.

Total: 12 Hours

Minor Total: 15 Hours

Master of Arts

Spanish MA

- Graduate School Rules apply to this program

The UC Denver modern languages faculty offers a Spanish master's degree program that is an alternative to the exclusively literary studies that traditionally lead to doctoral programs. By integrating language, literature and cultural studies with ancillary work in other disciplines, the degree provides a broader expertise that will lead to or enhance careers in teaching, government, social services, business and international trade. Students will tailor the program to their specific interests and needs by developing a topical focus and including courses from outside the Department of Modern Languages, through which they may develop a secondary emphasis that can be incorporated in a thesis project.

Requirements for Admission

In addition to the general admission requirements of the Graduate School, the Spanish MA program requires:

- an undergraduate GPA of at least 2.5, with a GPA of at least 3.0 in Spanish courses
- a bachelor's degree in Spanish is not required, although all candidates must demonstrate Spanish oral and written proficiency at the advanced level, as defined by the American Council on the Teaching of Foreign Languages
- two copies of all college transcripts
- three letters of recommendation
- a statement of the applicant's purpose in pursuing the degree, in Spanish; any gaps, weaknesses or special circumstances affecting an applicant's academic record should be addressed in the statement of purpose portion of the application
- a TOEFL score higher than 550 for students whose previous academic degree was completed in a non-English-speaking country

In special circumstances, the department may modify its admission standards.

Program Requirements

Candidates in Spanish must satisfy the general requirements of the Graduate School as outlined in this catalog and will be required to complete 33 hours of course work distributed with respect to one of the following two options:

Thesis option (course work + thesis):

- SPAN 5000 - Introduction to Graduate Studies in Spanish Summer 2010
Registration: **SPAN 5000**

Literature/culture and linguistics, including at least 6 hours in literature/culture and 6 hours in linguistics: **15 semester hours**

Courses outside the Department of Modern Languages, as approved by advisor: **6 semester hours**

Elective, as approved by advisor: **3 semester hours**

Thesis preparation and writing: **6 semester hours**

Thesis Option Total: 33 Hours

Nonthesis option (course work):

- SPAN 5000 - Introduction to Graduate Studies in Spanish Summer 2010
Registration: **SPAN 5000**

Literature/culture and linguistics, including at least 6 hours in literature/culture and 6 hours in linguistics: **18 semester hours**

Courses outside the Department of Modern Languages, as approved by advisor: **6 semester hours**

Electives as approved by advisor (may include another course outside the Department of Modern Languages): **6 semester hours**

Nonthesis Option Total: 33 Hours

Notes:

1. No more than one undergraduate course (3 semester hours) may be applied toward the MA degree and then only in an ancillary field outside the Department of Modern Languages.
2. Students choosing the nonthesis option may elect to take three courses (9 semester hours) outside the department.

Financial Aid

The department offers a limited number of teaching assistantships for graduate students on a semester-by-semester basis. Appointment is competitive and is typically based on a student's academic credentials. Contact the department for details. For information on grants, federal work-study programs, scholarships and loans, contact the Office of Financial Aid (303-556-2886).

For further information concerning the master's degree in Spanish at UC Denver, direct inquiries to the graduate advisor.

Philosophy

Chair: Candice Shelby

Program Assistant: Agnes Romero

Office: Plaza Building, M108

Telephone: 303-556-4868

Fax: 303-556-8100

Web site: clas.ucdenver.edu/philosophy/

Faculty

Associate Professors:

David Hildebrand, PhD, University of Texas at Austin
Robert Metcalf, PhD, Pennsylvania State University
Candice Shelby, PhD, Rice University
Mark Tanzer, PhD, Stony Brook University

Assistant Professors:

Chad M. Kautzer, PhD, Stony Brook University
Gabriel Zamosc-Regueros, PhD, University of Michigan

Senior Instructors:

Myra Bookman, PhD, University of Colorado
Sharon Coggan, PhD, Syracuse University
Daryl Mehring, PhD, University of Colorado
Samuel F. Walker, PhD, University of Colorado

Instructor:

Brian Lisle, PhD, University of Illinois at Chicago

Honoraria:

Barbara Goodrich, William Simpson, Maria L. Talero

The philosophy program is recommended to students whose goal is a liberal arts education in the finest sense. Philosophy is concerned with the transmission and evaluation of basic beliefs and values. It is not an easy field of study, but for more than 25 centuries philosophy has been judged most rewarding by those who seek self-development, intellectual sophistication and the happiness of a reflective life.

Philosophy is an excellent undergraduate preparation for almost any professional field.

Undergraduate

REQUIREMENTS FOR THE MAJOR

REQUIREMENTS FOR THE MINOR

HONORS PROGRAM

Requirements for honors are the following:

A. Course Performance

1. <i>Cum laude</i>	3.4 GPA within the major	3.3 overall GPA
2. <i>Magna cum laude</i>	3.6 GPA within the major	3.5 overall GPA
3. <i>Summa cum laude</i>	3.8 GPA within the major	3.7 overall GPA

B. Thesis

Majors desiring to graduate with honors in philosophy must enroll in PHIL 4950 for a minimum of 3 hours and a maximum of 6 hours (note that these hours are in addition to the 36 hours required for the philosophy major) and complete research that culminates in a thesis and oral examination. Majors must work with two faculty members during the project. Written proposals must be submitted and approved by the faculty committee prior to the beginning of the project. If the completed thesis and oral exam are deemed worthy of honors, the student will be awarded the honors consistent with his or her GPA. However, to receive highest honors (*summa cum laude*), the faculty committee must designate the performance for both the written thesis and the oral defense as worthy of graduation with highest honors. If the faculty committee makes no such designation, students will graduate *magna cum laude*.

MINOR IN ETHICS

CERTIFICATE IN ETHICS

Graduate

Graduate-level courses offered at the Downtown Campus may be applied to University of Colorado-Boulder graduate degrees in philosophy or toward the Master of Humanities and Master of Social Science degree programs at UC Denver. Contact these programs for degree requirements and applicability limitations of UC Denver course work.

Programs

Bachelor of Arts

Philosophy BA

Students must declare a major by the time they have completed 60 semester hours of course work. A total of 36 semester hours must be completed for the philosophy major, at least 18 of which must be taken at the Downtown Campus. A minimum grade of C (2.0) is required in each course. For those students who qualify for and fulfill the requirements for graduation with honors, a total of at least 39 hours is required.

A total of 18 upper-division semester hours are required for the major, and no more than 6 hours below the 3000 level may be counted toward the major. Courses taken at other institutions must be approved by an advisor in the Department of Philosophy to be applied toward the major.

Unless otherwise noted, registration for 4000-level courses in philosophy require a minimum grade of C (2.0) in every prior philosophy course and completion of at least PHIL 3002 or PHIL 3022 or permission of instructor.

Program Requirements

Required Courses

- PHIL 3002 - Ancient Greek Philosophy Summer 2010 Registration: **PHIL 3002**
- PHIL 3022 - Modern Philosophy Summer 2010 Registration: **PHIL 3022**
(It is recommended, but not required, that PHIL 3002 be taken before PHIL 3022)
- PHIL 3440 - Introduction to Symbolic Logic Summer 2010 Registration: **PHIL 3440**
- PHIL 4760 - Kant Summer 2010 Registration: **PHIL 4760**

Total: 12 Hours

Additional distribution requirements

(All are upper-division courses)

One course in social/political philosophy

One course in ethics

One course in Continental philosophy

One course in EITHER American or analytic philosophy

One course with specific focus in the history of philosophy (may be fulfilled by a course in a single figure)

Total: 15 Hours

Electives

Choose three:

One upper-division elective (may include courses from previous lists that are not counted toward those requirements)

Two electives at any level

Total: 9 Hours

Major Total: 36 Hours

Course work required for graduation with honors:

3-6 semester hours taken over two semesters of:

- PHIL 4950 - Honors Thesis *Summer 2010 Registration: PHIL 4950*

Certificate

Ethics Undergraduate Certificate

The certificate in ethics is designed for students currently enrolled in a degree program as well as nondegree students.

A total of 15 semester hours is required for an ethics certificate. Students are required to write a capstone paper in an area of ethics directly related to their career and/or field of study (PHIL 3840).

Certificate Requirements

- PHIL 1020 - Introduction to Ethics and Society: The Person and the Community *Summer 2010 Registration: PHIL 1020*

Choose four:

- PHIL 3002 - Ancient Greek Philosophy *Summer 2010 Registration: PHIL 3002*
- PHIL 3150 - History of Ethics *Summer 2010 Registration: PHIL 3150*
- PHIL 3200 - Social and Political Philosophy *Summer 2010 Registration: PHIL 3200*
- PHIL 3250 - Business Ethics *Summer 2010 Registration: PHIL 3250*

- PHIL 3500 - Ideology and Culture: Racism and Sexism Summer 2010
Registration: PHIL 3500
- PHIL 3840 - Independent Study Summer 2010 *Registration: PHIL 3840*
- PHIL 4150 - Twentieth Century Ethics Summer 2010 *Registration: PHIL 4150*
- PHIL 4242 - Bioethics Summer 2010 *Registration: PHIL 4242*

Certificate Total: 15 Hours

Non Degree

Ethics Minor

A total of 15 semester hours is required for an ethics minor, with a minimum grade of C (2.0) in each course.

Required Courses

- PHIL 1020 - Introduction to Ethics and Society: The Person and the Community Summer 2010 *Registration: PHIL 1020*

Choose four:

- PHIL 3150 - History of Ethics Summer 2010 *Registration: PHIL 3150*
- PHIL 3200 - Social and Political Philosophy Summer 2010 *Registration: PHIL 3200*
- PHIL 3250 - Business Ethics Summer 2010 *Registration: PHIL 3250*
- PHIL 3500 - Ideology and Culture: Racism and Sexism Summer 2010
Registration: PHIL 3500
- PHIL 3939 - Internship/Cooperative Education Summer 2010 *Registration: PHIL 3939*
- PHIL 4150 - Twentieth Century Ethics Summer 2010 *Registration: PHIL 4150*
- PHIL 4242 - Bioethics Summer 2010 *Registration: PHIL 4242*

Minor Total: 15 Hours

For those students who major in philosophy and minor in ethics, no course can satisfy the requirements for both. For example, if a student takes PHIL 4150, Twentieth Century Ethics, it cannot satisfy the requirement in the major for a course in 19th or 20th century philosophy.

Philosophy Minor

A total of 15 semester hours is required for the minor in philosophy, with a minimum grade of C (2.0) in each course.

Program Requirements

Required Courses:

- PHIL 1012 - Introduction to Philosophy: Relationship of the Individual to the World Summer 2010 Registration: **PHIL 1012**
- PHIL 3002 - Ancient Greek Philosophy Summer 2010 Registration: **PHIL 3002**
- PHIL 3022 - Modern Philosophy Summer 2010 Registration: **PHIL 3022**
(It is recommended but not required that PHIL 3002 be taken before PHIL 3022.)

Total: 9 Hours

Electives

Choose two additional philosophy courses, one of which must be at the upper-division level.

Total: 6 Hours

Minor Total: 15 Hours

Religious studies courses cannot be used to fulfill the requirements for the minor.

Physics

Chair: Mary Coussons-Read, Interim Chair

Program Assistant: Dawn Arge

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Web site: clas.ucdenver.edu/physics/

Faculty

Professors:

Martin E. Huber, PhD, Stanford University

Martin M. Maltempo, PhD, Columbia University

Alberto C. Sadun, PhD, Massachusetts Institute of Technology

Associate Professor:

Randall P. Tagg, PhD, Massachusetts Institute of Technology

Assistant Professors:

John M. Carlson, PhD, University of Michigan

Emily A. Gibson, PhD, University of Colorado

Emeritus Professors:

Willard R. Chappell, PhD, University of Colorado

Clyde S. Zaidins, PhD, California Institute of Technology

Undergraduate

Physics, as the most fundamental of the sciences, is the base on which many other disciplines rest. Therefore, knowledge of the fundamentals of physics is often required in other programs, and a physics degree is an outstanding platform for employment and advanced study in many technical disciplines. The department offers both a course of study fulfilling the bachelor of science degree and a wide range of service courses for students majoring in disciplines other than physics. Students intending to major in physics should have a high school background that includes trigonometry, advanced algebra, chemistry and physics, as well as a good preparation in the arts and humanities. Students have an option during their freshman year to overcome some deficiencies in these areas.

The Department of Physics offers various programs of study, or tracks, tailored to the specific career goals of its majors. Students should consult with a departmental advisor

prior to choosing a track. *Track 1—Pure and Applied Physics* is intended for students preparing for graduate school, teaching careers, or careers in industry or government labs. *Track 2—Biophysics and Medical Physics* is seen as a bridge to an advanced degree in the health sciences for those interested in medical research, admission to medical school, preparation for work in a hospital or clinical situation, or industrial jobs in biomedical instrumentation. For any track, students preparing for employment in an interdisciplinary area (such as environmental, geophysical or energy study) can choose to add an appropriate minor or arrange a specific major program on an individual basis.

Students interested in teaching physics in high school are encouraged to consider the CLAS educational studies minor in addition to their physics major. Students in other disciplines have the option of choosing a minor in physics or in astrophysics. The department now also offers an online certificate in the scientific foundations of technical innovation, both at undergraduate and graduate levels. This 12-semester-hour program is intended to foster careers in the practical application of physics and the potential commercialization of new technologies.

To enhance the employment and postgraduate study options of physics majors, the department is committed to providing students with opportunities for experimental, computational and theoretical research. On-campus opportunities are available through the faculty research programs, or the department will assist interested physics majors in locating off-campus opportunities at a government or industrial laboratory. Questions regarding physics courses or the physics curriculum should be directed to a departmental advisor. Appointments should be made through the physics office.

REQUIREMENTS FOR MAJOR

Departmental Honors

Qualified students are encouraged to participate in the physics honors program. For these students, a senior thesis is required. This work will be conducted under the supervision of a faculty advisor. The topic and scope of this work will be chosen by the student in consultation with the thesis advisor. The student has the option of registering for up to 3 semester hours of independent study for the thesis project; regardless of registered semester hours, the student should commit the effort equivalent to a 3-semester-hour laboratory course toward completion of the thesis. The levels of passing scores are satisfactory, meritorious and excellent.

Within this framework, three levels of honors are awarded by the Downtown Campus:

1. *Cum laude*: The student must have a cumulative GPA of 3.25 both in physics and overall at UC Denver. The student's senior thesis and presentation must be judged to be meritorious by the committee.

2. *Magna cum laude*: The student must have a cumulative GPA of 3.50 both in physics and overall at UC Denver. The student's senior thesis and presentation must be judged to be meritorious by the committee.
3. *Summa cum laude*: The student must have a cumulative GPA of 3.75 both in physics and overall at UC Denver. The student's senior thesis and presentation must be judged to be excellent by the committee.

Physics Minors

MINOR IN PHYSICS

MINOR IN ASTROPHYSICS

Certificate

Scientific Foundations of Technical Innovation

Programs

Bachelor of Science

Physics BS

Program Requirements

Students must declare their intention to major in physics by the time they have completed 60 semester hours and complete between 47 and 51 semester hours (depending on the track chosen) in physics and related topics. Additionally, all tracks require 16 semester hours in math ancillary courses. No grade below a C (2.0) can be used to meet the requirements for the major. At least 12 semester hours of the requirements for the major must be completed at the Downtown Campus.

A senior thesis, usually from participation in research, is *required* for all students wishing to graduate with departmental honors. All other students are encouraged to do research leading to a project report or senior thesis.

Required Courses Common to All Tracks

Required Physics Courses

- PHYS 2311 - General Physics I: Calculus-Based Summer 2010 Registration: **PHYS 2311**
- PHYS 2331 - General Physics II: Calculus-Based Summer 2010 Registration: **PHYS 2331**
- PHYS 2371 - Topic-Driven Physics Lab Summer 2010 Registration: **PHYS 2371**
- PHYS 2711 - Vibrations and Waves Summer 2010 Registration: **PHYS 2711**
- PHYS 2811 - Modern Physics I Summer 2010 Registration: **PHYS 2811**
- PHYS 3120 - Methods of Mathematical Physics Summer 2010 Registration: **PHYS 3120**
- PHYS 3711 - Junior Laboratory I Summer 2010 Registration: **PHYS 3711**
- PHYS 3811 - Quantum Mechanics Summer 2010 Registration: **PHYS 3811**

Note: The department will accept the following combination of independent study and introductory lab courses in lieu of PHYS 2371. However, PHYS 2371 is strongly recommended because it provides explicit preparation for upper division lab courses.

- PHYS 1840 - Independent Study: PHYS Summer 2010 Registration: **PHYS 1840**
- PHYS 2321 - General Physics Lab I Summer 2010 Registration: **PHYS 2321**
- PHYS 2341 - General Physics Lab II Summer 2010 Registration: **PHYS 2341**

Total physics courses required for all tracks: 26 Hours

Required Ancillary Courses

- MATH 1401 - Calculus I Summer 2010 Registration: **MATH 1401**
- MATH 2411 - Calculus II Summer 2010 Registration: **MATH 2411**
- MATH 2421 - Calculus III Summer 2010 Registration: **MATH 2421**
- MATH 3195 - Linear Algebra and Differential Equations Summer 2010 Registration: **MATH 3195**

Note: The department will accept the following combination of math courses in place of MATH 3195:

- MATH 3191 - Applied Linear Algebra Summer 2010 Registration: **MATH 3191**
- MATH 3200 - Elementary Differential Equations Summer 2010 Registration: **MATH 3200**

Total ancillary math courses required for all tracks: 16 Hours

Total required semester hours for all physics major tracks: 42 Hours

Pure and Applied Physics (Track 1)

Take in addition to the courses common to all tracks:

- PHYS 3211 - Analytical Mechanics Summer 2010 Registration: PHYS 3211
- PHYS 3411 - Thermal Physics Summer 2010 Registration: PHYS 3411
- PHYS 3721 - Junior Laboratory II Summer 2010 Registration: PHYS 3721
- * PHYS 4331 - Principles of Electricity and Magnetism Summer 2010 Registration: PHYS 4331
- PHYS 4711 - Senior Laboratory I Summer 2010 Registration: PHYS 4711
(or a course in computational physics approved by advisor)

* *Note:* Students who must *retake* PHYS 4331 may fulfill this requirement by obtaining a C or better in

- PHYS 4351 - Bioelectromagnetism Summer 2010 Registration: PHYS 4351

Elective Physics Courses

Six semester hours of physics-related electives at 3000-level or above approved by advisor, including up to 3 hours of independent study

Total Track 1 Specific Courses: 21 Hours

Biophysics and Medical Physics (Track 2)

Take in addition to the courses common to all tracks:

- PHYS 3251 - Biophysics of the Body Summer 2010 Registration: PHYS 3251
 - PHYS 3411 - Thermal Physics Summer 2010 Registration: PHYS 3411
 - PHYS 4351 - Bioelectromagnetism Summer 2010 Registration: PHYS 4351
(recommended option)
- OR-
- PHYS 4331 - Principles of Electricity and Magnetism Summer 2010 Registration: PHYS 4331

Biophysics electives (8-9 hours)

Biophysics electives at the 3000-level or above approved by advisor (including up to 3 semester hours independent study and/or two courses, PHYS 3151 and PHYS 3161, listed below)

-OR-

The following four courses (an option primarily for pre-med physics majors):

- * BIOL 2051 - General Biology I Summer 2010 Registration: BIOL 2051

- * BIOL 2061 - General Biology II Summer 2010 Registration: **BIOL 2061**
- PHYS 3151 - Biophysics Outlook I Summer 2010 Registration: **PHYS 3151**
- PHYS 3161 - Biophysics Outlook II Summer 2010 Registration: **PHYS 3161**
- PHYS 3721 - Junior Laboratory II Summer 2010 Registration: **PHYS 3721**
- -OR-
- The following two courses (an option primarily for pre-med physics majors):
- * BIOL 2071 - General Biology Laboratory I Summer 2010 Registration: **BIOL 2071**
- * BIOL 2081 - General Biology Laboratory II Summer 2010 Registration: **BIOL 2081**

Numerical modeling or probability and statistics course approved by advisor: **3 semester hours**

Total Track 2 Specific Courses: 25 Hours

Major Total: 63-67 Hours

Pre-Med Students

Note: courses above marked * are generally required for medical school admissions. In addition, the following are generally required for medical school admissions but NOT for the biophysics and medical physics track:

- * CHEM 2031 - General Chemistry I Summer 2010 Registration: **CHEM 2031**
- * CHEM 2038 - General Chemistry Laboratory I Summer 2010 Registration: **CHEM 2038**
- * CHEM 2061 - General Chemistry II Summer 2010 Registration: **CHEM 2061**
- * CHEM 2068 - General Chemistry Laboratory II Summer 2010 Registration: **CHEM 2068**
- * CHEM 3411 - Organic Chemistry I Summer 2010 Registration: **CHEM 3411**
- * CHEM 3418 - Organic Chemistry Laboratory I Summer 2010 Registration: **CHEM 3418**
- * CHEM 3421 - Organic Chemistry II Summer 2010 Registration: **CHEM 3421**
- * CHEM 3428 - Organic Chemistry Laboratory II Summer 2010 Registration: **CHEM 3428**

Total additional pre-med (but not required for Track 2): 19 hours

Certificate

Scientific Foundations of Technical Innovation Certificate

The goal of this certificate is to give students and working professionals an opportunity to broaden their technical knowledge while contributing to regional economic development. Two real-world projects—one for a client and one for the student's own pursuits—are combined with a series of six short courses to provide both context and substance for gaining knowledge needed to create technical prototypes. The model is based on the method by which most physical science graduate students learn technical domains on a “just-in-time” basis. It is also a method by which many corporations quickly bring new project team members up to speed on project knowledge. Entry into the certificate program requires prior completion of two semesters of calculus-based physics and two semesters of calculus **or** permission of the certificate advisor.

Undergraduate required courses

- PHYS 4850 - Physics for Design and Innovation I *Summer 2010 Registration:*
PHYS 4850
- PHYS 4852 - Physics for Design and Innovation II *Summer 2010 Registration:*
PHYS 4852

Total: 12 Hours

Graduate required courses

Graduate versions of the courses (5000-level) require an undergraduate degree and additional work on technical analysis or connection to professional practice.

- PHYS 5850 - Physics for Design and Innovation I *Summer 2010 Registration:*
PHYS 5850

- PHYS 5852 - Physics for Design and Innovation II Summer 2010 Registration: **PHYS 5852**

Total: 12 Hours

Non Degree

Astrophysics Minor

Astrophysics is an important and well-represented subdiscipline of physics. It includes the study of the solar system, galactic and extra-galactic astrophysics, as well as cosmology. A minor in this field combines a theoretical approach with observational analysis. There is also opportunity to do research in this field.

While the Department of Physics offers minors in both physics and astrophysics, it is not possible to receive minors in both fields. Physics majors may elect to receive only the astrophysics minor from the department.

The astrophysics minor requires a total of 17 semester hours, in which no grade below a C (2.0) may be used to meet the requirements for the minor. At least 6 semester hours taken for the minor must be completed at the Downtown Campus. Requirements for the minor in astrophysics may be used to fulfill the requirements of the major in physics. However, a student majoring in physics who wants to minor in astrophysics needs to take 15 semester hours in astrophysics that do not overlap with the major.

Program Requirements

Required Physics Courses:

- PHYS 1052 - General Astronomy I Summer 2010 Registration: **PHYS 1052**

Either of the following two sequences:

- PHYS 2010 - College Physics I Summer 2010 Registration: **PHYS 2010**
- PHYS 2020 - College Physics II Summer 2010 Registration: **PHYS 2020**
- PHYS 2030 - College Physics Lab I Summer 2010 Registration: **PHYS 2030**
- PHYS 2040 - College Physics Lab II Summer 2010 Registration: **PHYS 2040**

Sequence Total: 10 Hours

-OR-

- PHYS 2311 - General Physics I: Calculus-Based Summer 2010 Registration: **PHYS 2311**
 - PHYS 2321 - General Physics Lab I Summer 2010 Registration: **PHYS 2321**
 - PHYS 2331 - General Physics II: Calculus-Based Summer 2010 Registration: **PHYS 2331**
 - PHYS 2341 - General Physics Lab II Summer 2010 Registration: **PHYS 2341**
- Sequence Total: 10 Hours**

Elective Physics Courses

Choose one:

- GEOL 1302 - Introduction to Astrogeology Summer 2010 Registration: **GEOL 1302**
- PHYS 3040 - Modern Cosmology Summer 2010 Registration: **PHYS 3040**
- PHYS 3050 - General Astronomy II Summer 2010 Registration: **PHYS 3050**
- PHYS 3060 - Astronomical Image Processing Lab Summer 2010 Registration: **PHYS 3060**
- * PHYS 3840 - Independent Study: PHYS Summer 2010 Registration: **PHYS 3840**
- PHYS 3939 - Internship/Cooperative Education Summer 2010 Registration: **PHYS 3939**
- * PHYS 4840 - Independent Study: PHYS Summer 2010 Registration: **PHYS 4840**
- * PHYS 4920 - Advanced Undergraduate Seminar Summer 2010 Registration: **PHYS 4920**
- * PHYS 4931 - Internship in Applied Physics Summer 2010 Registration: **PHYS 4931**
- * PHYS 4980 - Advanced Physics Topics Summer 2010 Registration: **PHYS 4980**

Total: 3 Hours

Minor Total: 17 Hours

*Topics in these classes vary. See departmental advisor for approval.

Physics Minor

A total of 16 semester hours is required for a minor in physics. No grade below a C can be used to meet the requirements for the minor. At least 6 semester hours of the requirements for the minor must be completed at the Downtown Campus.

Program Requirements

Required Physics Courses

Either of the following two sequences:

- PHYS 2010 - College Physics I Summer 2010 Registration: **PHYS 2010**
 - PHYS 2020 - College Physics II Summer 2010 Registration: **PHYS 2020**
 - PHYS 2030 - College Physics Lab I Summer 2010 Registration: **PHYS 2030**
 - PHYS 2040 - College Physics Lab II Summer 2010 Registration: **PHYS 2040**
- Sequence Total: 10 Hours**
- OR-
- PHYS 2311 - General Physics I: Calculus-Based Summer 2010 Registration: **PHYS 2311**
 - PHYS 2321 - General Physics Lab I Summer 2010 Registration: **PHYS 2321**
 - PHYS 2331 - General Physics II: Calculus-Based Summer 2010 Registration: **PHYS 2331**
 - PHYS 2341 - General Physics Lab II Summer 2010 Registration: **PHYS 2341**
- Sequence Total: 10 Hours**

Elective Physics Courses

At least 3 of the 6 semester hours must be at the 3000 level or above.

Total: 6 Hours

Minor Total: 16 Hours

Political Science

Chair: Jana Everett

Program Assistant: Cory Gruebele

Undergraduate Advisor: Lucy McGuffey

Graduate Advisor: Thorsten Spehn

Pre-law Advisor: Glenn Morris

Office: King Center, 502

Telephone: 303-556-3556

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Web site: clas.ucdenver.edu/polisci/

Faculty

Professors:

Mike Cummings, PhD, Stanford University

Jana Everett, PhD, University of Michigan

Associate Professors:

Glenn T. Morris, JD, Harvard University School of Law

Tony Robinson, PhD, University of California, Berkeley

Stephen C. Thomas, PhD, Stanford University

Assistant Professors:

Michael J. Berry, PhD, University of Colorado

Christoph Stefes, PhD, University of Denver

Adjoint Faculty:

Kathryn Cheever, PhD, University of Colorado

Senior Instructors:

Karen Breslin, JD, University of Denver

Amin Kazak, PhD, University of Denver

Lucy McGuffey, PhD, University of Denver

Thorsten Sphen, PhD, University of Denver

Instructor:

Harvey Bishop, MA, University of Colorado

Adjunct Faculty:

Loring Abeyta, PhD, University of Denver
Charles Norton, JD, University of Chicago
Thad Tecza, PhD, University of Colorado

Emeritus Faculty:

Joel Edelstein, PhD, University of California, Riverside

Political science is the study of people, power and the public good. Looking at a variety of societies, institutions and interpersonal situations, the discipline asks who has power, where this power comes from, how it is used, how it promotes or impairs the public good and how the public good is defined. Political science draws from other fields, such as psychology, philosophy, economics, sociology and world literature. Finally, it explores the relationship between idealism and realism, between theory and practice, between political thought and personal action.

Opportunities for students with a BA in political science include careers in business, teaching, journalism, community organizing and government service. A political science degree also serves as good preparation for professional training in law and public administration. The students' internship experiences increase their job opportunities. Students with an MA in political science may find careers in such areas as business, government research and administration and teaching at the community-college level.

Please visit the [political science department Web site](#) for detailed information on programs, faculty, students, courses and syllabi, community involvement and service learning, internships and photographs.

Undergraduate

REQUIREMENTS FOR THE MAJOR

REQUIREMENTS FOR THE MINOR

Departmental Honors

Requirements for honors in political science are an overall GPA (in all courses, not just political science courses) of 3.65 or better and the preparation and defense of an honors paper. Honors graduates with an overall GPA of 3.75 to 3.84 may graduate with high honors, and those with GPAs of 3.85 and higher may graduate with highest honors. Level of honors granted depends upon both the GPA and the quality of the honors paper.

Graduate

REQUIREMENTS FOR THE MA DEGREE

Fourth World Center for the Study of Indigenous Law and Politics

Executive Director: Glenn T. Morris

Telephone: 303-556-6243

Web site: <http://carbon.cudenver.edu/public/fwc/>

This center provides a research clearinghouse to students and faculty on the Downtown Campus on legal and political issues that affect indigenous peoples (the Fourth World). In addition to supporting a modest library of rare books and periodicals on indigenous issues, the center also stocks video and audio resources on subjects of indigenous politics and a substantial news file archive on current developments in the Fourth World. The center has produced curricular materials, including the *Fourth World Bulletin*, for use in international relations and area-studies courses.

Center for NEW DIRECTIONS in Politics and Public Policy

Director: Kathryn Cheever

Telephone: 303-556-5950

Web site: clas.ucdenver.edu/newdirections/index.htm

This center provides academic programs, courses and research focused in the areas of politics and public policy with the purpose of developing the leadership capacities necessary to address changing public priorities for the 21st century within neighborhoods, communities, governmental jurisdictions and nonprofit entities.

The center offers both undergraduate and graduate degrees in political science with emphases in public policy and administration.

Programs

Bachelor of Arts

Political Science BA

Undergraduate students must declare their intention to major in political science by the time they have completed 60 semester hours, and must complete a minimum of 36

semester hours in political science, of which at least 21 must be upper-division courses. Fifteen of the 36 hours must be taken from Downtown Campus faculty. Courses are distributed among the primary fields as listed in this section, i.e., American politics, comparative politics, international relations, political theory and public policy and administration. To count for the major, all course work must be completed with a grade of C (2.0) or better. Two cognate courses (which don't count toward the 36 hours) from the list below must also be completed.

Traditional Option

Required Core

- PSCI 1001 - Introduction to Political Science: The Quest for Freedom and Justice *Summer 2010 Registration: P SC 1001*
- PSCI 1101 - American Political System *Summer 2010 Registration: P SC 1101*
- PSCI 3011 - Research Methods *Summer 2010 Registration: P SC 3011*
- OR-
- PSCI 4011 - GIS in Political Science *Summer 2010 Registration: P SC 4011*

Total: 9 Hours

Choose two:

- PSCI 4207 - Theories of Social and Political Change *Summer 2010 Registration: P SC 4207*
- PSCI 4407 - Early Political Thought *Summer 2010 Registration: P SC 4407*
- PSCI 4417 - Modern Political Thought *Summer 2010 Registration: P SC 4417*
- PSCI 4427 - Law, Politics and Justice *Summer 2010 Registration: P SC 4427*
- PSCI 4437 - Coercion and the State *Summer 2010 Registration: P SC 4437*
- PSCI 4457 - American Political Thought *Summer 2010 Registration: P SC 4457*

Total: 6 Hours

One 4000-level course in each of three fields:

American politics, comparative politics, and international relations

Total: 9 Hours

Experiential-Learning Requirement *

Choose one:

- PSCI 3914 - The Urban Citizen Summer 2010 Registration: **P SC 3914**
- PSCI 3939 - Internship/Cooperative Education Summer 2010 Registration: **P SC 3939**
- PSCI 4217 - Human Rights in Theory and Practice Summer 2010 Registration: **P SC 4217**
- PSCI 4934 - CU at the Capitol Summer 2010 Registration: **P SC 4934**
Experiential learning project in any P SC class: **3 semester hours**

* Students with significant volunteer experience in the community or for whom the experiential-learning requirement poses a hardship may petition the chair to waive the requirement (36 hours still required).

Total: 3 Hours

Electives

Three political science elective courses

Total: 9 Hours

Political Science Total: 36 Hours

Required Cognate Courses

In addition to the 36 hours above, choose two of the following cognate courses:

- ECON 2012 - Principles of Economics: Macroeconomics Summer 2010 Registration: **ECON 2012**
- ECON 2022 - Principles of Economics: Microeconomics Summer 2010 Registration: **ECON 2022**
- HIST 1016 - World History to 1500 Summer 2010 Registration: **HIST 1016**
- HIST 1026 - World History Since 1500 Summer 2010 Registration: **HIST 1026**
- HIST 1211 - Western Civilization I Summer 2010 Registration: **HIST 1211**
- HIST 1212 - Western Civilization II Summer 2010 Registration: **HIST 1212**
- HIST 1361 - U.S. History to 1876 Summer 2010 Registration: **HIST 1361**
- HIST 1362 - U.S. History Since 1876 Summer 2010 Registration: **HIST 1362**

Total: 6 Hours

Major Total: 42 Hours

Public Policy Option

This option was designed for students who specifically desire to pursue careers in public policy and/or public administration in the public or nonprofit sectors. Grounded in basic political science theory and familiarity with American, comparative and international politics, this BA track emphasizes the specifically political aspects of public policy processes and settings. Cases will emphasize key policy issues confronting U.S. local, state and national decision makers and citizens. A focus on politics and the policy-making process will prepare students conceptually and methodologically to move beyond partisan politics to address how leaders can best mobilize resources to achieve constituent goals consistent with the public interest.

Required Core

- PSCI 1001 - Introduction to Political Science: The Quest for Freedom and Justice Summer 2010 Registration: **P SC 1001**
- PSCI 1101 - American Political System Summer 2010 Registration: **P SC 1101**
- PSCI 3011 - Research Methods Summer 2010 Registration: **P SC 3011**

Total: 9 Hours

One 4000-level course in each of the following three fields:

American Politics

- PSCI 4002 - Topics in Political Science Summer 2010 Registration: **P SC 4002**
- PSCI 4014 - Media and Politics Summer 2010 Registration: **P SC 4014**
- PSCI 4024 - Legislatures and Legislation Summer 2010 Registration: **P SC 4024**
- PSCI 4025 - Local Governance and Globalization Summer 2010 Registration: **P SC 4025**
- PSCI 4044 - The Presidency Summer 2010 Registration: **P SC 4044**
- PSCI 4094 - Seminar: American Politics Summer 2010 Registration: **P SC 4094**
- PSCI 4124 - Denver Politics Summer 2010 Registration: **P SC 4124**
- PSCI 4324 - Politics, Public Policy and Leadership Summer 2010 Registration: **P SC 4324**
- PSCI 4354 - Environmental Politics Summer 2010 Registration: **P SC 4354**

- PSCI 4374 - Public Priorities for the 21st Century Summer 2010 Registration: **P SC 4374**
- PSCI 4477 - Constitutional Law I Summer 2010 Registration: **P SC 4477**
- PSCI 4487 - Constitutional Law II Summer 2010 Registration: **P SC 4487**
- PSCI 4545 - Immigration Politics Summer 2010 Registration: **P SC 4545**

Comparative Politics and International Relations

- PSCI 4085 - Comparative Public Policy Summer 2010 Registration: **P SC 4085**
- PSCI 4124 - Denver Politics Summer 2010 Registration: **P SC 4124**
- PSCI 4185 - Corruption in the U.S. and Abroad Summer 2010 Registration: **P SC 4185**
- PSCI 4226 - The United Nations in World Affairs Summer 2010 Registration: **P SC 4226**
- PSCI 4236 - American Foreign Policy Summer 2010 Registration: **P SC 4236**
- PSCI 4266 - International Law Summer 2010 Registration: **P SC 4266**
- PSCI 4326 - Advanced International Political Economy: Globalization Summer 2010 Registration: **P SC 4326**
- PSCI 4645 - Comparative Political Leadership Summer 2010 Registration: **P SC 4645**

Public Policy and Administration

- PSCI 4009 - Politics of the Budgetary Process Summer 2010 Registration: **P SC 4009**
- PSCI 4024 - Legislatures and Legislation Summer 2010 Registration: **P SC 4024**
- PSCI 4084 - Local Government and Administration Summer 2010 Registration: **P SC 4084**
- PSCI 4274 - Conflict Resolution and Public Consent Building Summer 2010 Registration: **P SC 4274**
- PSCI 4414 - Organizational Change Agents Summer 2010 Registration: **P SC 4414**
- PSCI 4644 - Ethical Responsibilities of Leaders Summer 2010 Registration: **P SC 4644**

Total: 9 Hours

Elective courses

Choose any two additional courses from the list above, plus choose one other upper or lower division PSCI course.

Total: 9 Hours

Two political theory courses

- PSCI 4427 - Law, Politics and Justice *Summer 2010 Registration: P SC 4427*
- PSCI 4437 - Coercion and the State *Summer 2010 Registration: P SC 4437*

Total: 6 Hours

Experiential-Learning Requirement *

Choose one:

- PSCI 3939 - Internship/Cooperative Education *Summer 2010 Registration: P SC 3939*
- PSCI 4934 - CU at the Capitol *Summer 2010 Registration: P SC 4934*

* Students with significant volunteer experience in the community or for whom the experiential-learning requirement poses a hardship may petition the chair to waive the requirement (36 hours still required).

Total: 3 Hours

Two cognate courses

- ECON 2012 - Principles of Economics: Macroeconomics *Summer 2010 Registration: ECON 2012*
- ECON 2022 - Principles of Economics: Microeconomics *Summer 2010 Registration: ECON 2022*

Total: 6 Hours

Public Policy Option Total: 42 Hours

Non Degree

Political Science Minor

A student can earn an undergraduate minor in political science by completing 15 semester hours distributed as shown below. At least 9 of the 15 hours must be taken from Downtown Campus faculty.

Course Requirements

One lower-division course

- PSCI 1001 - Introduction to Political Science: The Quest for Freedom and Justice
Summer 2010 Registration: P SC 1001
- OR-
- PSCI 1101 - American Political System *Summer 2010 Registration: P SC 1101*

Four 4000-level courses

Choose one 4000-level course in each of four fields: political theory, American politics, comparative politics and international relations.

Minor Total: 15 Hours

Master of Arts

New Directions, Political Science MA

Director: Kathryn Cheever

Telephone: 303-556-5950

E-mail: kathryn.cheever@ucdenver.edu

An alternative track of the political science MA program (Plan II) is offered off-campus through the Center for New Directions in Politics and Public Policy at Chaparral in Douglas County and on the Fort Lewis College campus in Durango. This politics and public policy track presents courses in an intensive weekend format. The emphasis on politics and the policy-making process relates to the ability of leaders to mobilize resources and achieve constituent goals consistent with the public interest. In this context, politics entails communication, and effective politics requires communication. In short, this emphasis on political awareness seeks to help participants utilize the political process as the “art of making what appears to be impossible, possible.”

Degree Requirements

Students must complete a total of 33 graduate credit hours to complete the MA degree. All classes are offered in a weekend format which consists of two or three weekend sessions for a given course spread out over a two month period. In most cases, a student will complete all of the weekend sessions of one course before starting the weekend sessions for the next course.

Core Courses

- PSCI 5014 - Seminar: American Politics Summer 2010 Registration: **P SC 5014**
- PSCI 5085 - Comparative Public Policy Summer 2010 Registration: **P SC 5085**
- PSCI 5324 - Politics, Public Policy and Leadership Summer 2010 Registration: **P SC 5324**
- PSCI 5457 - Seminar: American Political Thought Summer 2010 Registration: **P SC 5457**
- PSCI 5468 - Research Methods in Political Science Summer 2010 Registration: **P SC 5468**

Total: 15 Hours

Electives

In addition to the required core courses, students must take 15 credit hours of political science electives.

[NOTE: Previously earned graduate credit may be submitted for approval to satisfy up to nine hours of the supportive elective requirement. The elective courses offered may change from time to time based on needs, interests and other factors.]

Below are examples of electives taken by New Directions students:

- PSCI 5007 - Beyond Political Correctness Summer 2010 Registration: **P SC 5007**
- PSCI 5009 - Politics of the Budgetary Process Summer 2010 Registration: **P SC 5009**
- PSCI 5024 - State Politics: Focus on Colorado Summer 2010 Registration: **P SC 5024**
- PSCI 5084 - Local Government and Administration Summer 2010 Registration: **P SC 5084**
- PSCI 5274 - Conflict Resolution and Public Consent Building Summer 2010 Registration: **P SC 5274**
- PSCI 5354 - Seminar: Environmental Politics and Policy Summer 2010 Registration: **P SC 5354**
- PSCI 5374 - Public Priorities for the 21st Century Summer 2010 Registration: **P SC 5374**

- PSCI 5414 - Organizational Change Agents *Summer 2010 Registration: P SC 5414*
- PSCI 5644 - Ethical Responsibilities of Leaders *Summer 2010 Registration: P SC 5644*

Total: 15 Hours

Project Requirement

All students are required to complete a 3-credit master's project under the direction of a faculty advisor. Registration is done using the Special Processing form, rather than online.

- PSCI 5960 - Master's Project *Summer 2010 Registration: P SC 5960*

Total: 3 Hours

Major Total: 33 Hours

Common Course Outcomes

In addition to clearly stated subject outcomes, all courses will have a common set of outcomes related to the following areas which are considered critical in developing leadership capacities necessary to address the changing public priorities for the 21st century:

- Creativity and innovation
- Changing public priorities
- Political and social diversity
- Ethical accountability
- Deductive and inductive reasoning
- Applied use of appropriate technology
- Strategic planning and decision making
- Resolution of conflicts and public consent building
- Individual, organizational and cultural communication effectiveness

Course Format

All courses will be offered in a weekend format that consists of two or three weekend sessions for a given course spread out over a two-month period. Three-weekend classes are held from 9:00 am to 4:00 pm on both Saturday and Sunday of each weekend session. Two-weekend classes meet from 5:00 until 9:00 p.m. on Friday

evening and from 8:30 a.m. until 4:30 p.m. on Saturday and Sunday. In most cases, a student will complete all of the two or three weekend sessions of one course before starting the weekend sessions for the next course. There is typically a 2-3 week break between semesters.

Location

All of the courses for the Denver-based programs are currently offered at the University Center at Chaparral, 20 miles south of downtown Denver. The University Center is located next to the Chaparral High School, just north of Lincoln Avenue at Chambers Road in Douglas County (15653 Brookstone Drive).

Courses for the Durango-based program are currently offered on the campus of Fort Lewis College.

Political Science MA

- [Graduate School Rules](#) apply to this program

The political science department offers a master of arts (MA) degree in political science with an emphasis on building academic and practical skills in key areas of the discipline. Research and teaching in the department centers on the major fields of American politics, comparative politics, international relations, political theory and public policy; however, the department also offers more specialized training in human rights, legal studies, gender politics, race and ethnic politics, European studies, indigenous politics and urban politics. Students pursuing the MA have the option of completing the traditional track or an alternative track centered on the study on politics, public policy and leadership. Students completing the program have gone on to PhD programs across the country and work in a variety of areas, including; state and local elected office, government service, directors of community-based organizations and nongovernmental organizations, legislative analysts, UN affiliates, lobbyists, teachers, media analysis and political consulting.

Requirements for Admission

Students applying for admission to the MA program in political science should present at least 18 semester hours of previous academic work in political science, at least 9 hours of which should be at the upper-division or graduate level. The department may make exceptions to these requirements in unusual cases (for instance, if course work in related fields such as psychology, economics and history compensates for the deficiencies in political science). Applicants should present an undergraduate GPA of at least 3.0 to be considered; however, the department typically admits students with a GPA of 3.2 or higher. In their applications, students must submit transcripts and letters of recommendation (from academic sources) as specified by the Graduate School. In addition, applicants must submit a statement of academic objectives and an academic writing sample. Standardized test scores are not required of applicants, but will be considered if submitted.

In order to take graduate courses in political science, students must either be admitted to the MA program or secure permission as a nondegree student. Nondegree students may take up to 12 semester hours of graduate course work; however, they must first secure permission from the department graduate advisor to enroll in all graduate course work.

Degree Requirements

In addition to the requirements for admission and details of the program spelled out here, graduate students in political science must also abide by department rules and procedures specified in the Graduate Student Handbook. Failure to meet these policies may result in a student being dropped from the program.

Under the MA program in political science, two degree plans are available:

- Plan I requires the completion of nine graduate courses (27 semester hours) and a 6-credit thesis
- Plan II requires the completion of ten graduate courses (30 semester hours) and a 3-credit project.

Course work in both plans completed under the traditional track offered on the Downtown Campus must include:

P SC 5000. The State of the Discipline

Additionally, at least one graduate seminar is required in each of the following areas: American politics, comparative politics or international relations, political theory and research methods.

Students will complete between 12 and 15 elective semester hours, depending on whether they are working under Plan I or II, which may be fulfilled through graduate course work in political science, related disciplines, independent study or internships. Ultimately, the total combination of independent study, graduate course work in related disciplines and internship cannot exceed 9 semester hours. With either plan, students are required to complete a minimum of 16 semester hours with the political science

department at the University of Colorado Denver, and maintain a minimum *B* (3.0) overall GPA or better. Students who are on probation must meet regularly with the graduate advisor and must secure approval from the advisor for all course work while on probation.

Plan II is available both under the traditional MA track offered on the Denver campus, as well as through an alternative track offered off-campus through the Center for New Directions in Politics and Public Policy. For details about this off-campus track in politics and public policy, see [New Directions, MA in Political Science](#) .

Psychology

Chair: Peter S. Kaplan

Program Assistant: Gay Freebern

BA Undergraduate Advisor: Mitchell Handelsman

BS Undergraduate Advisor: Richard Allen

Director, Clinical Health Psychology Ph.D. Program: Evelinn Borrayo

Director of Clinical Training: Abbie Beacham

Director, Clinical Psychology M.A. Program: Allison Bashe

Office: North Classroom, 5002

Telephone: 303-556-8565

Fax: 303-556-3520

Web site: clas.ucdenver.edu/psychology/index.html

Faculty

Professors:

Mary Coussons-Read, PhD, University of North Carolina

James Grigsby, PhD, University of Colorado

Mitchell M. Handelsman, PhD, University of Kansas

Peter S. Kaplan, PhD, Indiana University

Associate Professors:

David Albeck, PhD, University of Colorado

Richard Allen, PhD, University of North Carolina at Chapel Hill

Joy L. Berrenberg, PhD, University of Colorado
Evelinn Borrayo, PhD, University of North Texas
Michael Zinser, PhD, University of Wisconsin, Madison

Assistant Professors:

Elizabeth Sandin Allen, PhD, University of North Carolina at Chapel Hill
Abbie Beacham, PhD, University of Louisville
Sondra Bland, PhD, University of Texas
Kristin Kilbourn, PhD, University of Miami

Research Assistant Professor:

Jennifer H. Adams, PhD, University of Houston

Senior Instructors:

Allison Bashe, PhD, Stony Brook University
Matthew Bealor, PhD, University of Colorado
Joan Bihun, PhD, Wayne State University
Kevin Everhart, PhD, University of South Carolina

Emeritus Professors:

Rick M. Gardner, PhD, University of Nevada
Gary S. Stern, PhD, University of Massachusetts

Psychology is the scientific study of behavior, consisting of the following major areas of study: experimental psychology, biopsychology, animal behavior, developmental psychology, social psychology, cognitive psychology, personality, industrial/organizational psychology and abnormal psychology. The requirements for the major are designed to introduce the student to the spectrum of psychology, including an early exposure to research methods and statistics.

The psychology major prepares students for employment and for graduate study in psychology and related fields. The psychology department also offers an MA in psychology with a clinical emphasis and a PhD in clinical health psychology.

Undergraduate

REQUIREMENTS FOR THE MAJOR: BA

REQUIREMENTS FOR THE MAJOR: BS

Honors

There are two ways in which a student graduating with a Bachelor of Arts or Bachelor of Science degree in Psychology can graduate with honors. First, the College of Liberal Arts and Sciences (CLAS) awards the honor of graduating “with distinction” primarily based on the student having a high overall grade point average. See the CLAS general information section on Undergraduate Policies and Procedures, Academic Honors , in the current catalog for further information.

The second form of honors, “Latin honors,” is awarded by individual departments within CLAS, including psychology. The UCD Department of Psychology has approved a very rigorous set of requirements for Latin honors. Successful completion of an honors project is at least a year-long, multi-faceted process in which the student makes a contribution to our knowledge in psychology. A student who satisfies these requirements will have truly earned a noteworthy academic achievement of which they rightfully should be proud.

Students interested in research are encouraged to pursue opportunities as early in their academic career as possible. These early research experiences can be useful in helping formulate research ideas and hypotheses that can form the basis of an honors thesis project. Listed below are the policies and requirements for completing an honors project.

An honors thesis can take one of the following forms:

1. An original empirical study designed and carried out by the student. The experimental design must be substantially complex to warrant honors. Honors students may collect their own data for this project or may use archival data for the purposes of answering their own original question. A research question is considered to be substantially complex enough if the analyzed data would be of high enough quality to be presented at a local research meeting.
2. A substantive, integrative library review in an area approved by the honors committee, culminating in a high quality review article which includes proposed research directions designed by the student to gather knowledge lacking in the current scientific literature.
3. A substantive, integrative critical analysis of a major theoretical issue in the field of psychology approved by the honors committee and culminating in a high quality theoretical paper.

Eligibility

To be eligible to graduate with honors in psychology, a UCD psychology major must meet the following requirements:

- Student must have an overall GPA of 3.5 or higher at the start of the project (75 credit hours completed toward the degree)
- The student must have a psychology GPA of 3.5 or higher in psychology courses taken at UCD

Students interested in earning honors should consult with the psychology faculty during their junior year. More information about honors projects can be found on the [psychology department Web site](#).

REQUIREMENTS FOR THE MINOR

Graduate

The psychology department offers a master of arts (MA) degree in psychology with an emphasis in clinical psychology and a doctor of philosophy (PhD) degree in clinical health psychology. In general, our programs train students within the context of the scientist-practitioner model. That is, we value an integrated approach to both the science and practice of clinical psychology. Our training emphasizes the contribution of research to the understanding, treatment and prevention of human problems, and the application of knowledge that is grounded in scientific evidence.

REQUIREMENTS FOR THE MA IN PSYCHOLOGY, CLINICAL EMPHASIS

REQUIREMENTS FOR THE PhD IN CLINICAL HEALTH PSYCHOLOGY

Programs

Bachelor of Arts

Psychology BA

Students should consult with the advisor when they declare a psychology major, which must be done once they have completed 60 semester hours of course work. Psychology BA major requirements include at least 37 and not more than 48 semester hours in psychology. Of these, at least 15 hours must be in upper-division courses completed at the Downtown Campus. No grade below C (2.0) will be accepted toward the major requirements. Note that a prior college-level algebra course is strongly recommended for PSYC 2090.

PSYC 3939, Internship/Cooperative Education, does NOT count toward the 37-hour minimum or the 15-hour upper-division requirement, but it does count as elective psychology credit.

Program Requirements

Required Courses

- PSYC 1000 - Introduction to Psychology I Summer 2010 Registration: **PSY 1000**
- PSYC 1005 - Introduction to Psychology II Summer 2010 Registration: **PSY 1005**
- PSYC 2090 - Statistics and Research Methods Summer 2010 Registration: **PSY 2090**
- PSYC 2220 - Biological Basis of Behavior Summer 2010 Registration: **PSY 2220**

Total: 13 Hours

Choose three, including one or both PSYC 3222 and PSYC 4144:

- PSYC 3104 - Behavioral Genetics Summer 2010 Registration: **PSY 3104**
- PSYC 3222 - Principles of Learning and Behavior Summer 2010 Registration: **PSY 3222**
- PSYC 3254 - Introduction to Animal Behavior Summer 2010 Registration: **PSY 3254**
- PSYC 3262 - Health Psychology Summer 2010 Registration: **PSY 3262**
- PSYC 3263 - Hormones and Behavior Summer 2010 Registration: **PSY 3263**
- PSYC 3265 - Drugs, Brain and Behavior Summer 2010 Registration: **PSY 3265**
- PSYC 3724 - Developmental Psychobiology Summer 2010 Registration: **PSY 3724**
- PSYC 3810 - Neuropsychology Summer 2010 Registration: **PSY 3810**
- PSYC 3822 - Aging, Brain and Behavior Summer 2010 Registration: **PSY 3822**
- PSYC 4054 - Behavioral Neuroscience Summer 2010 Registration: **PSY 4054**
- PSYC 4144 - Human Cognition Summer 2010 Registration: **PSY 4144**
- PSYC 4164 - Psychology of Perception Summer 2010 Registration: **PSY 4164**

Total: 9 Hours

Choose four, including at least two or all three of PSYC 3205, PSYC 3305, and PSYC 4415:

- PSYC 3090 - Research Methods in Experimental Psychology Summer 2010 Registration: **PSY 3090**
- PSYC 3135 - Organizational Psychology Summer 2010 Registration: **PSY 3135**

- PSYC 3205 - Human Development I: Child Psychology Summer 2010
Registration: **PSY 3205**
- PSYC 3215 - Human Development II: Adolescence and Adulthood Summer 2010
Registration: **PSY 3215**
- PSYC 3235 - Human Sexuality Summer 2010 Registration: **PSY 3235**
- PSYC 3305 - Abnormal Psychology Summer 2010 Registration: **PSY 3305**
- PSYC 3405 - Family Psychology Summer 2010 Registration: **PSY 3405**
- PSYC 3505 - Psychology and the Law Summer 2010 Registration: **PSY 3505**
- PSYC 3610 - Psychological Trauma Summer 2010 Registration: **PSY 3610**
- PSYC 3611 - Psychology of Women Summer 2010 Registration: **PSY 3611**
- PSYC 3612 - Domestic Abuse Summer 2010 Registration: **PSY 3612**
- PSYC 4415 - Experimental Social Psychology Summer 2010 Registration: **PSY 4415**
- PSYC 4455 - Theories of Personality Summer 2010 Registration: **PSY 4455**
- PSYC 4485 - Psychology of Cultural Diversity Summer 2010 Registration: **PSY 4485**
- PSYC 4500 - Psychotherapy Summer 2010 Registration: **PSY 4500**
- PSYC 4645 - Industrial Psychology Summer 2010 Registration: **PSY 4645**
- PSYC 4730 - Clinical Psychology: Ethics and Issues Summer 2010 Registration: **PSY 4730**

Total: 12-13 Hours

One integrative course:

- PSYC 4511 - History of Psychology Summer 2010 Registration: **PSY 4511**

Total: 3 Hours

BA Major Total: 37-38 Hours

PSYCHOLOGY BS REQUIREMENTS

Bachelor of Science

Psychology BS

Students must declare a major by the time they have completed 60 semester hours of course work. To be admitted to the BS major, students must have sophomore standing and have received grades of *B* or better in General Biology I and II for majors with

laboratory, or the equivalent. Students must take at least 48 hours and a maximum of 56 semester hours in psychology, biology and chemistry that will count toward graduation. A minimum of 15 upper-division semester hours must be taken from Downtown Campus faculty. No grade below C is acceptable toward the major requirements; i.e., psychology, biology or chemistry courses in which a student earns a C- or below will not count toward the major.

Psychology Requirements

Required Psychology Courses

- PSYC 1000 - Introduction to Psychology I Summer 2010 Registration: **PSY 1000**
- PSYC 1005 - Introduction to Psychology II Summer 2010 Registration: **PSY 1005**
- PSYC 2090 - Statistics and Research Methods Summer 2010 Registration: **PSY 2090**
- PSYC 2220 - Biological Basis of Behavior Summer 2010 Registration: **PSY 2220**
- PSYC 4054 - Behavioral Neuroscience Summer 2010 Registration: **PSY 4054**

Total: 16 Hours

Choose two:

- PSYC 3090 - Research Methods in Experimental Psychology Summer 2010 Registration: **PSY 3090**
- PSYC 3104 - Behavioral Genetics Summer 2010 Registration: **PSY 3104**
- PSYC 3222 - Principles of Learning and Behavior Summer 2010 Registration: **PSY 3222**
- PSYC 3254 - Introduction to Animal Behavior Summer 2010 Registration: **PSY 3254**
- PSYC 3263 - Hormones and Behavior Summer 2010 Registration: **PSY 3263**
- PSYC 3265 - Drugs, Brain and Behavior Summer 2010 Registration: **PSY 3265**
- PSYC 3724 - Developmental Psychobiology Summer 2010 Registration: **PSY 3724**
- PSYC 3810 - Neuropsychology Summer 2010 Registration: **PSY 3810**
- PSYC 3822 - Aging, Brain and Behavior Summer 2010 Registration: **PSY 3822**
- PSYC 4164 - Psychology of Perception Summer 2010 Registration: **PSY 4164**

Total: 6-7 Hours

Experiential Learning Requirement

Students must complete at least one of the following (all require consultation with BS advisor AND permission of instructor):

- PSYC 3939 - Internship/Cooperative Education Summer 2010 Registration: PSY 3939 (2.75 GPA required)
- PSYC 4840 - Independent Study: PSYC Summer 2010 Registration: PSY 4840
Honors Project in Psychology (3.5 GPA required): **3 Semester Hours**

Total: 3 Hours

Physical and Biological Science Requirements

Required Courses

- BIOL 2051 - General Biology I Summer 2010 Registration: BIOL 2051
- BIOL 2061 - General Biology II Summer 2010 Registration: BIOL 2061
- BIOL 2071 - General Biology Laboratory I Summer 2010 Registration: BIOL 2071
- BIOL 2081 - General Biology Laboratory II Summer 2010 Registration: BIOL 2081
- CHEM 2031 - General Chemistry I Summer 2010 Registration: CHEM 2031
- CHEM 2038 - General Chemistry Laboratory I Summer 2010 Registration: CHEM 2038
- CHEM 2061 - General Chemistry II Summer 2010 Registration: CHEM 2061
- CHEM 2068 - General Chemistry Laboratory II Summer 2010 Registration: CHEM 2068

Total: 17 Hours

Choose two:

- BIOL 3225 - Human Physiology Summer 2010 Registration: BIOL 3225
- BIOL 3244 - Human Anatomy Summer 2010 Registration: BIOL 3244
- BIOL 3611 - General Cell Biology Summer 2010 Registration: BIOL 3611
- BIOL 3654 - General Microbiology Summer 2010 Registration: BIOL 3654
- BIOL 3832 - General Genetics Summer 2010 Registration: BIOL 3832
- BIOL 4134 - Human Genetics Summer 2010 Registration: BIOL 4134
- BIOL 4165 - Neurobiology Summer 2010 Registration: BIOL 4165
- BIOL 4621 - Immunology Summer 2010 Registration: BIOL 4621
- CHEM 4810 - General Biochemistry I Summer 2010 Registration: CHEM 4810

Total: 6-8 Hours

BS Major Total: 48-51 Hours

Additional elective courses in psychology, biology and chemistry may be taken up to the maximum of 56 hours.

PSYCHOLOGY BA REQUIREMENTS

Non Degree

Psychology Minor

Program Requirements

A minor in psychology requires the completion of 15 semester hours with a grade of C (2.0) or better, including the following courses:

- PSYC 1000 - Introduction to Psychology I Summer 2010 Registration: **PSY 1000**
- PSYC 1005 - Introduction to Psychology II Summer 2010 Registration: **PSY 1005**
- PSYC 3205 - Human Development I: Child Psychology Summer 2010
Registration: **PSY 3205**
-OR-
- PSYC 3305 - Abnormal Psychology Summer 2010 Registration: **PSY 3305**
-OR-
- PSYC 4415 - Experimental Social Psychology Summer 2010 Registration: **PSY 4415**
- PSYC 3222 - Principles of Learning and Behavior Summer 2010 Registration: **PSY 3222**
-OR-
- PSYC 4144 - Human Cognition Summer 2010 Registration: **PSY 4144**
- PSYC 4511 - History of Psychology Summer 2010 Registration: **PSY 4511**

At least 6 upper-division semester hours must be taken from UC Denver Downtown Campus faculty. Further information about the department may be obtained from department advisors or by calling 303-556-8565.

Master of Arts

Psychology MA

- Graduate School Rules apply to this program

Objectives and Requirements

The two major objectives of the MA program are to prepare graduates for doctoral-level study in both PhD and PsyD programs and to train graduates to provide direct service, under supervision, in mental health agencies. Assessment training includes theory, diagnostic interviewing, intelligence testing and some personality testing with both children and adults. We introduce students to the theory and application of major models of psychotherapy and to psychopathology theory and research. We also emphasize the ethical principles that permeate clinical psychology and the application of these principles to problems in mental health practice, teaching and research. Finally, students become well versed in statistical methods. Students take the required courses during their first year in the program. During the second year, they choose to specialize by opting for a research-based thesis and/or an applied internship at a mental health agency. Students also demonstrate competency by defending a thesis or an internship competency project. Students can complete the program in slightly less than two years, and have up to five years to complete the program according to Graduate School Rules.

Admissions

The application deadline is February 1 for the following fall. You are responsible for making sure all materials are in on time. We do not consider late applications. International students should be sure to submit all materials at least two weeks before this deadline (by January 15) so that they arrive at our department on time. Below is condensed information; see the [psychology department website](#) for complete information.

Admission Requirements:

- BA or BS from an accredited college or university, with a minimum GPA of 3.5 based on all college course work. However, successful applicants over the past several years have typically held GPAs above 3.5, with an average GPA of 3.7.
- Undergraduate courses in: introductory psychology, psychological statistics and abnormal psychology. Additional courses in psychology are highly desirable; our admissions committee will also look favorably upon courses in the biological and physical sciences.
- Two official transcripts from each college and university attended.
- Graduate Record Exam (GRE) General Test (verbal, quantitative, analytical writing) is required for all applicants. The subject test in psychology is not required, but is strongly recommended for applicants who do not hold an undergraduate degree in psychology. Successful applicants in recent years have typically had GRE verbal plus quantitative scores above 1100. Take both exams

- at least six weeks before the February 1 deadline so that the scores arrive on time.
- Three letters of recommendation, at least two of which must be academic references, accompanied by the Request for Recommendation form. Recommendations and supplemental application materials are sent directly to the department. Each recommendation should be in a sealed envelope, signed along the back by the recommender.
 - Application Forms I and II, with answers to Part II as informative as possible.
 - Application fee of \$50 (\$75 for International Students). Specify "PSY M.A. CLN" on the memo line in the lower left corner of your check.

Financial Information

The University of Colorado Denver administers various forms of financial aid for graduate students: fellowships, scholarships and a number of awards from outside agencies. See the Office of Financial Aid for further information. Additionally, the psychology department offers teaching assistantships each year in such courses as introductory psychology, statistics, research methods and human development. Although we do not guarantee TA positions, we generally have been able to offer positions to most of our interested students.

Contingent upon the availability of grant money, faculty may also offer part-time research assistantships to qualified students. The typical RA position involves data collection and analysis, library research, etc. Some computer and statistical skills are usually required. RA positions are less available than TA positions, and they may arise on very short notice.

In-state tuition waivers and additional stipend monies may be available for doctoral students.

Please note: Neither teaching nor research assistantships confer in-state tuition status or include tuition waivers.

Degree Requirements

A total of 31 (for thesis students) or 33 (for internship students) semester hours are required for graduation: 25 for required courses and either six thesis hours or eight internship hours. Students must maintain a 3.0 grade point average.

Demonstration of competence

Upon completion of the 25 hours of course work (nine courses), students must demonstrate competence in several core areas (e.g., statistics and methods, ethics,

assessment, psychotherapy, psychopathology) by completing a thesis or an internship competency project (ICP).

Internship or Thesis

Students have the option of completing a master's thesis and/or pursuing an internship. The thesis involves a research project that makes a significant contribution to the field. Topics pursued by students in our master's program have included body image in eating disorders, HIV infection and childhood abuse, humor as a moderator between social conflict and psychological distress, and ethical issues regarding informed consent for psychotherapy.

Students who are particularly interested in going on to PhD programs should strongly consider the thesis option, since most PhD programs prefer individuals who have prior research experience. Applicants who are interested in the thesis option and whose research interests/experience overlap with those of a faculty member should contact that faculty member directly.

Alternatively, students may begin work on an 800-hour internship following successful completion of their courses. Students select internships (subject to program approval) based on personal interests. The greater Denver area offers a rich variety of internship possibilities, and our students have worked at a variety of agencies, including community mental health centers, inpatient and residential treatment facilities, social services, hospitals, probation and diversion programs and university counseling centers.

At minimum, students must complete either an 800-hour internship or a thesis. Students also have the option to complete both or to do a thesis and a 400-hour internship.

Doctor of Philosophy

Clinical Health Psychology PhD

► [Graduate School Rules](#) apply to this program

Objectives of the Program

A primary focus of clinical health psychology is the development of effective disease prevention interventions for populations at high risk for medical problems. A second focus of clinical health psychology is the development of strategies to help individuals who are already ill to manage their disease, increase their ability to collaborate with medical professionals and improve their coping skills. Students in this program will be trained to work within the community to use psychological tools and techniques to

promote health, prevent and treat illness and improve the health care system. In addition to course work, students acquire expertise in research by completing a second-year project and doctoral dissertation, and demonstrate competence in clinical assessment and intervention through several applied practicum experiences, a clinical competency project and a pre-doctoral internship. Students can complete the program in five years and have up to eight years to complete the program according to Graduate School Rules.

Admissions

The application deadline is December 15 for the following fall. You are responsible for making sure all materials are in on time. We do not consider late applications. International students should be sure to submit all materials at least two weeks before this deadline (by December 1) so that they arrive at our department on time. Below is condensed information; see the department website for complete information.

Admission Requirements:

- BA or BS from an accredited college or university, with a minimum GPA of 3.5 based on all college course work.
- Undergraduate courses in: introductory psychology, psychological statistics, research methods and abnormal psychology. Additional courses in psychology are highly desirable; our admissions committee will also look favorably upon courses in the biological and physical sciences.
- Two official transcripts from each college and university attended.
- Graduate Record Exam (GRE): The GRE General Test (verbal, quantitative, analytical writing) AND the Psychology Subject Test are required. General test: minimum score of 1100 for the combined verbal and quantitative sections is required. 600 is the minimum required score for the psychology subject test. Take both exams at least six weeks before the December 15 deadline so that the scores arrive on time.
- Three letters of recommendation, at least two of which must be academic references, accompanied by the Request for Recommendation form. Recommendations and supplemental application materials are sent directly to the department. Each recommendation should be in a sealed envelope, signed along the back by the recommender.
- Application Forms I and II, with answers to Part II as informative as possible.
- Application fee of \$50 (\$75 for International Students). Specify "CHP PhD" on the memo line in the lower left corner of your check.

Financial Information

The University of Colorado Denver administers various forms of financial aid for graduate students: fellowships, scholarships and a number of awards from outside

agencies. See the [Office of Financial Aid](#) for further information. Additionally, the psychology department offers teaching assistantships each year in such courses as introductory psychology, statistics, research methods and human development. Although we do not guarantee TA positions, we generally have been able to offer positions to most of our interested students.

Contingent upon the availability of grant money, faculty may also offer part-time research assistantships to qualified students. The typical RA position involves data collection and analysis, library research, etc. Some computer and statistical skills are usually required. RA positions are less available than TA positions, and they may arise on very short notice.

In-state tuition waivers and additional stipend monies may be available for doctoral students.

Please note: Neither teaching nor research assistantships confer in-state tuition status or include tuition waivers.

Degree Requirements

Course Work:

Approximately 69 credits of course work are required for graduation. Typically, students will take 4 courses each semester of their first year, 3 courses each semester of their second and third years, 2 courses in the first semester of their fourth year and at least 1 course in the second semester of their fourth year in the program. Students must maintain a 3.0 grade point average, and no grade below a *B-* will count toward the requirements.

In addition to the minimum required 69 credits of course work, students must also register for a minimum of 12 clinical practicum hours and 30 dissertation hours. Students must also register for 3 credits of pre-doctoral internship each of the three semesters of their internship year, for a total of 120 credits. Students can complete the program in five years and have up to eight years to complete the program according to [Graduate School Rules](#).

Second Year Project:

All students must complete a second year research project. This thesis involves a research project that makes a significant contribution to the field. Although the question must be the student's own original question, use of archival data and pilot studies are encouraged for this project.

Clinical Practica:

A minimum of 500 face-to-face intervention and assessment hours and 1200 total practicum hours [face-to-face intervention and assessment hours, plus supervision, plus support hours as defined by the Association of Psychology Postdoctoral and Internship Centers (APPIC)] will be required in preparation for applications to pre-doctoral

internships. A minimum of 50% of required practica will be conducted in medical settings. Beyond the minimum requirements, students select practica based on personal interests. All field placements must be approved by the Director of Clinical Training (DCT) in advance.

Demonstration of competence:

Upon completion of the first two years of course work (42 credits), in the third year of training, students must demonstrate competence in several core areas (e.g., statistical methods, ethics, assessment, psychotherapy, psychopathology) by completing a clinical competency project (CCP). The primary goal of this project is to encourage integration of empirical research and applied clinical work. Following completion of the written portion of the exam, students must orally defend the project to a committee of three faculty members.

Dissertation:

Students must complete a dissertation that involves original empirical work and is distinct from other research projects and publications. The dissertation proposal must be completed and defended prior to making application for the pre-doctoral internship. Students must have a dissertation committee composed of four members. When the dissertation is completed to the satisfaction of the primary advisor, the student must orally defend the dissertation to the committee.

Internship:

Students must complete a 12-month, full-time pre-doctoral clinical internship, preferably at an APA-accredited site. This internship is required of all clinical psychologists and is the capstone of clinical training in the doctoral program.

Religious Studies

Director: Sharon L. Coggan

Office: Plaza Building, M108K

Telephone: 303-556-4715

Web site: clas.ucdenver.edu/religiousStudies/

Faculty (concurrently appointed)

Associate Professors:

Nancy Ciccone (English)

Colleen Donnelly (English)

Robert Metcalf (Philosophy)

Instructors:

Edward Casteel (Sociology)

Sharon Coggan (Philosophy/Religious Studies)
Amin Kazak (Political Science)
Lucy McGuffey (Political Science)
Daryl Mehring (Philosophy)

Lecturers:

Shelby Balik (History)
Celeste Rossmiller (Religious Studies)
Richard Smith (History)
Constance Wise (Religious Studies)

An undergraduate minor is offered in religious studies, a discipline that overlaps with many other fields of study: anthropology, literature, philosophy, psychology and others. Religion has played a vital role in history and continues to do so in contemporary life. The degree of interaction between a religious tradition and its host society is profound. Knowledge of its religion(s) is essential for a genuine understanding of each culture. Students will study the nature of the belief systems of the world's great religious traditions. Specific courses will offer the possibility of focusing one's studies in the areas of ancient myth and shamanic traditions, Judaic and Christian studies, Islam, Asian religions, psychology of religion, philosophy of religion, anthropology and sociology of religion, religion and literature and biblical studies.

REQUIREMENTS FOR THE MINOR

Programs

Non Degree

Religious Studies Minor

Eighteen semester hours, at least 9 of which must be upper division and at least 9 semester hours taken with Downtown Campus faculty. A minimum cumulative GPA of 2.0 for all UC Denver courses taken in the minor is required, with no individual course grade lower than a C (2.0).

Program Requirements

Required Courses

- RLST 1610 - Introduction to Religious Studies *Summer 2010 Registration:* **RLST 1610**

One course in Western religions chosen from approved list:

- * RLST 2660 - World Religions Summer 2010 Registration: **RLST 2660**
- RLST 3000 - Judaism, Christianity and Islam: Affinity and Difference Summer 2010 Registration: **RLST 3000**
- RLST 3060 - History of Early Christianity Summer 2010 Registration: **RLST 3060**
- RLST 2700 - The Bible as Literature Summer 2010 Registration: **RLST 2700**
-OR-
- ENGL 2520 - The Bible as Literature Summer 2010 Registration: **ENGL 2520**
- RLST 3740 - Biblical Traditions: Old Testament Summer 2010 Registration: **RLST 3740**
- RLST 3760 - Biblical Studies: New Testament Summer 2010 Registration: **RLST 3760**
- RLST 3770 - Archaeological Discoveries Relating to the Bible Summer 2010 Registration: **RLST 3770**
- RLST 4070 - Western Religious Thought Summer 2010 Registration: **RLST 4070**
-OR-
- PHIL 4710 - Western Religious Thought Summer 2010 Registration: **PHIL 4710**
- RLST 4400 - Differing Concepts of God Summer 2010 Registration: **RLST 4400**
-OR-
- PHIL 4650 - Differing Concepts of God Summer 2010 Registration: **PHIL 4650**
- * RLST 4440 - Concepts of the Soul Summer 2010 Registration: **RLST 4440**
-OR-
- * PHIL 4470 - Concepts of the Soul Summer 2010 Registration: **PHIL 4470**
- * RLST 4460 - Death and Concepts of Afterlife Summer 2010 Registration: **RLST 4460**

* Fulfills requirement for either Eastern or Western religion, but not both simultaneously

One course in Eastern religions chosen from approved list:

- * RLST 2660 - World Religions Summer 2010 Registration: **RLST 2660**
- RLST 3400 - Asian Philosophies and Religions Summer 2010 Registration: **RLST 3400**
-OR-
- PHIL 3666 - Asian Philosophies and Religions Summer 2010 Registration: **PHIL 3666**
- RLST 3500 - Religions of India Summer 2010 Registration: **RLST 3500**
- RLST 3660 - Chinese Philosophy and Culture Summer 2010 Registration: **RLST 3660**

- OR-
- PHIL 3981 - Chinese Philosophy and Culture Summer 2010 Registration: **PHIL 3981**
- RLST 4080 - Eastern Religious Thought Summer 2010 Registration: **RLST 4080**
- OR-
- PHIL 4720 - Eastern Religious Thought Summer 2010 Registration: **PHIL 4720**
- RLST 4160 - Mysticism Summer 2010 Registration: **RLST 4160**
- * RLST 4440 - Concepts of the Soul Summer 2010 Registration: **RLST 4440**
- OR-
- * PHIL 4470 - Concepts of the Soul Summer 2010 Registration: **PHIL 4470**
- * RLST 4460 - Death and Concepts of Afterlife Summer 2010 Registration: **RLST 4460**

* Fulfills requirement for either Eastern or Western religion, but not both simultaneously

Elective courses (9 hours):

The remaining 9 hours to equal the required 18 hours will count as electives, to be chosen from the full list of courses (below).

Other courses, such as certain special topics, art history courses featuring religious themes and others may count toward the minor at the discretion of the course instructor and the director.

- RLST 1610 - Introduction to Religious Studies Summer 2010 Registration: **RLST 1610**
- * RLST 2660 - World Religions Summer 2010 Registration: **RLST 2660**
- RLST 2680 - The American Indian Experience Summer 2010 Registration: **RLST 2680**
- OR-
- ETST 2606 - The American Indian Experience Summer 2010 Registration: **ETST 2606**
- RLST 2700 - The Bible as Literature Summer 2010 Registration: **RLST 2700**
- OR-
- ENGL 2520 - The Bible as Literature Summer 2010 Registration: **ENGL 2520**
- RLST 3000 - Judaism, Christianity and Islam: Affinity and Difference Summer 2010 Registration: **RLST 3000**
- RLST 3060 - History of Early Christianity Summer 2010 Registration: **RLST 3060**
- RLST 3080 - Reformation Europe Summer 2010 Registration: **RLST 3080**
- OR-
- HIST 4022 - Reformation Europe Summer 2010 Registration: **HIST 4022**
- RLST 3100 - Islamic Politics and Culture Summer 2010 Registration: **RLST 3100**
- OR-

- PSCI 4165 - Islamic Politics and Culture Summer 2010 Registration: **P SC 4165**
- RLST 3300 - Shamanic Traditions Summer 2010 Registration: **RLST 3300**
- RLST 3400 - Asian Philosophies and Religions Summer 2010 Registration:
RLST 3400
- OR-
- PHIL 3666 - Asian Philosophies and Religions Summer 2010 Registration: **PHIL 3666**
- RLST 3500 - Religions of India Summer 2010 Registration: **RLST 3500**
- RLST 3660 - Chinese Philosophy and Culture Summer 2010 Registration: **RLST 3660**
- OR-
- PHIL 3981 - Chinese Philosophy and Culture Summer 2010 Registration: **PHIL 3981**
- RLST 3720 - Religious Narratives Summer 2010 Registration: **RLST 3720**
- OR-
- ENGL 3520 - Religious Narratives Summer 2010 Registration: **ENGL 3520**
- RLST 3740 - Biblical Traditions: Old Testament Summer 2010 Registration:
RLST 3740
- RLST 3760 - Biblical Studies: New Testament Summer 2010 Registration: **RLST 3760**
- RLST 3770 - Archaeological Discoveries Relating to the Bible Summer 2010 Registration: **RLST 3770**
- RLST 4000 - Religion and Cultural Diversity Summer 2010 Registration: **RLST 4000**
- RLST 4010 - Comparative Religious Systems Summer 2010 Registration: **RLST 4010**
- OR-
- ANTH 4130 - Comparative Religious Systems Summer 2010 Registration: **ANTH 4130**
- RLST 4020 - Sociology of Religion Summer 2010 Registration: **RLST 4020**
- OR-
- SOCY 4610 - Sociology of Religion Summer 2010 Registration: **SOC 4610**
- RLST 4040 - Psychology of Religion Summer 2010 Registration: **RLST 4040**
- RLST 4060 - Philosophy of Religion Summer 2010 Registration: **RLST 4060**
- OR-
- PHIL 4600 - Philosophy of Religion Summer 2010 Registration: **PHIL 4600**
- RLST 4070 - Western Religious Thought Summer 2010 Registration: **RLST 4070**
- OR-
- PHIL 4710 - Western Religious Thought Summer 2010 Registration: **PHIL 4710**
- RLST 4080 - Eastern Religious Thought Summer 2010 Registration: **RLST 4080**
- OR-
- PHIL 4720 - Eastern Religious Thought Summer 2010 Registration: **PHIL 4720**
- RLST 4100 - Special Topics in Religion Summer 2010 Registration: **RLST 4100**
- RLST 4160 - Mysticism Summer 2010 Registration: **RLST 4160**

- RLST 4260 - Kosmos: Theories of the Universe Summer 2010 Registration:
RLST 4260
-OR-
- PHIL 3420 - Kosmos: Theories of the Universe Summer 2010 Registration: **PHIL 3420**
- RLST 4280 - Current Perspectives on the Evolution of Consciousness and Culture Summer 2010 Registration: **RLST 4280**
-OR-
- GEOL 3100 - Current Perspectives on the Evolution of Consciousness and Culture Summer 2010 Registration: **GEOL 3100**
-OR-
- PHIL 3100 - Current Perspectives on the Evolution of Consciousness and Culture Summer 2010 Registration: **PHIL 3100**
- RLST 4300 - Myth and Symbol Summer 2010 Registration: **RLST 4300**
- RLST 4320 - Spirituality in the Modern World Summer 2010 Registration: **RLST 4320**
- RLST 4340 - The Hero's Journey Summer 2010 Registration: **RLST 4340**
-OR-
- ENGL 3530 - The Hero's Journey Summer 2010 Registration: **ENGL 3530**
- RLST 4360 - Freudian and Jungian Perspectives in Dream Analysis Summer 2010 Registration: **RLST 4360**
- RLST 4400 - Differing Concepts of God Summer 2010 Registration: **RLST 4400**
-OR-
- PHIL 4650 - Differing Concepts of God Summer 2010 Registration: **PHIL 4650**
- RLST 4420 - Goddess Traditions Summer 2010 Registration: **RLST 4420**
-OR-
- WGST 4420 - Goddess Traditions Summer 2010 Registration: **WGST 4420**
- * RLST 4440 - Concepts of the Soul Summer 2010 Registration: **RLST 4440**
-OR-
- * PHIL 4470 - Concepts of the Soul Summer 2010 Registration: **PHIL 4470**
- * RLST 4460 - Death and Concepts of Afterlife Summer 2010 Registration:
RLST 4460
- RLST 4480 - Perspectives on Good and Evil Summer 2010 Registration: **RLST 4480**
-OR-
- PHIL 4480 - Perspectives on Good and Evil Summer 2010 Registration: **PHIL 4480**
- RLST 4500 - Religion and Politics Summer 2010 Registration: **RLST 4500**
-OR-
- PSCI 4057 - Religion and Politics Summer 2010 Registration: **P SC 4057**
- RLST 4730 - Whores and Saints: Medieval Women Summer 2010 Registration:
RLST 4730
-OR-

- ENGL 4510 - Whores and Saints: Medieval Women Summer 2010 Registration:
ENGL 4510
-OR-
- WGST 4510 - Whores and Saints: Medieval Women Summer 2010 Registration:
WGST 4510
- RLST 4840 - Independent Study: RLST Summer 2010 Registration: **RLST 4840**

Minor Total: 18 Hours

Social Justice

Director: David Hildebrand, Philosophy

Office: Plaza M108H

Telephone: 303-556-8100

E-mail: david.hildebrand@ucdenver.edu

Web site: clas.ucdenver.edu/socialJustice/

Faculty

(concurrently appointed)

Professors:

Jana Everett (Political Science)

Donna Langston (Ethnic Studies)

Associate Professors:

Nancy Ciccone (English)

Candan Duran-Aydintug (Sociology)

David Hildebrand (Philosophy)

Omar Swartz (Communication)

Barbara Walkosz (Communication)

Catherine Wiley (English)

Assistant Professors:

Christopher Agee (History)

Chad Kautzer (Philosophy)

Instructors:

Harvey Bishop (Political Science)

Lucy McGuffey (Political Science)

Undergraduate Minor

Twenty-first century students need global perspectives on citizenship that are informed by and can contribute to processes of civic engagement locally and in all parts of the world. This minor encourages students to recognize how social justice, critical consumption of goods and ideas and civic engagement intersect. It reinforces the many ways that our students are already engaged as citizens, and it helps solidify their power to effect real change.

STUDENT LEARNING GOALS

As minors in social justice, students will hone skills in critical thinking, oral and written discourse and problem solving so that they can reflect on their own moral values and civic responsibilities. They will also critically assess how they are defined and influenced by various sources such as media and institutions that describe and prescribe our and others' cultures and learn to understand others' beliefs and values despite differences. Finally, social justice minors will engage in dialogue to resolve conflicts and design solutions by working in a collaborative manner to create change.

REQUIREMENTS FOR THE MINOR

Programs

Non Degree

Social Justice Minor

Requirements for the Minor

The minor consists of 18 semester hours, structured as follows:

- A required introductory class (with either a social science or humanities focus); see below.
- An experiential learning component of 3 semester hours.

- Upper-division course work to be determined by individual students in consultation with the social justice minor director. At least two disciplines must be represented.
- A 3-semester-hour capstone seminar that will provide opportunity for further reflection on the experiential learning projects and student group projects.

Required course

Choose one:

- SJUS 2010 - Social Justice: Theories, Narratives, and Technologies Summer 2010 Registration: **SJUS 2010**
- OR-
- SJUS 2000 - Democratic Participation and Social Justice Summer 2010 Registration: **SJUS 2000**

Total: 3 Hours

Internship

A 3-semester-hour internship in any discipline of the social sciences or humanities, involving community work and including a reflective component and public dissemination or report.

Total: 3 Hours

Upper-Division Courses

Choose three (below is a sample list of upper-division courses, but other courses may be considered):

- ANTH 3142 - Cultural Diversity in the Modern World Summer 2010 Registration: **ANTH 3142**
- ANTH 4070 - Culture of Development and Globalization Summer 2010 Registration: **ANTH 4070**
- COMM 4022 - Critical Analysis of Communication Summer 2010 Registration: **CMMU 4022**
- COMM 4200 - Persuasion Summer 2010 Registration: **CMMU 4200**
- COMM 4260 - Communication and Conflict Summer 2010 Registration: **CMMU 4260**
- ENGL 3795 - Race and Ethnicity in American Literature Summer 2010 Registration: **ENGL 3795**

- ENGL 4280 - Proposal and Grant Writing Summer 2010 Registration: **ENGL 4280**
- ENGL 4701 - Multimedia in the Community Summer 2010 Registration: **ENGL 4701**
- ETST 3108 - Chicano/a and Latino/a History Summer 2010 Registration: **ETST 3108**
- ETST 3274 - Power, Poverty, Culture Summer 2010 Registration: **ETST 3274**
- ETST 3396 - History of the American Indian Summer 2010 Registration: **ETST 3396**
- ETST 3704 - Culture, Racism and Alienation Summer 2010 Registration: **ETST 3704**
- GEOG 3411 - Globalization and Regional Development Summer 2010 Registration: **GEOG 3411**
- GEOG 4335 - Contemporary Environmental Issues Summer 2010 Registration: **GEOG 4335**
- GEOG 4640 - Urban Geography: Denver and the U.S. Summer 2010 Registration: **GEOG 4640**
- HBSC 3041 - Health, Culture and Society Summer 2010 Registration: **HBSC 3041**
- HBSC 4021 - Community Health Assessment Summer 2010 Registration: **HBSC 4021**
- HIST 3345 - Immigration and Ethnicity in American History Summer 2010 Registration: **HIST 3345**
- HIST 4217 - Consumer Culture Summer 2010 Registration: **HIST 4217**
- HIST 4219 - Depression, Affluence and Anxiety: U.S. History, 1929 to the Present Summer 2010 Registration: **HIST 4219**
- PHIL 3200 - Social and Political Philosophy Summer 2010 Registration: **PHIL 3200**
- PHIL 3280 - War and Morality Summer 2010 Registration: **PHIL 3280**
- PHIL 3500 - Ideology and Culture: Racism and Sexism Summer 2010 Registration: **PHIL 3500**
- PHIL 4920 - Philosophy of Media and Technology Summer 2010 Registration: **PHIL 4920**
- OR-
- PHIL 5920 - Philosophy of Media and Technology Summer 2010 Registration: **PHIL 5920**
- PSCI 3034 - Race, Gender, Law and Public Policy Summer 2010 Registration: **P SC 3034**
- PSCI 4025 - Local Governance and Globalization Summer 2010 Registration: **P SC 4025**
- PSCI 4207 - Theories of Social and Political Change Summer 2010 Registration: **P SC 4207**
- RLST 4000 - Religion and Cultural Diversity Summer 2010 Registration: **RLST 4000**

- SOCY 3001 - Urban Sociology Summer 2010 Registration: **SOC 3001**
- SOCY 3030 - Social Change Summer 2010 Registration: **SOC 3030**
- SOCY 4440 - Social Stratification Summer 2010 Registration: **SOC 4440**

Total: 9 Hours

Capstone

Total: 3 Hours

Minor Total: 18 Hours

Social Science, Master of

Director: Myra Bookman

Assistant Director: Margaret Woodhull

Office: Modular #1, MC01 (east of Tivoli Student Union)

Telephone: 303-556-2305

Fax: 303-352-3872

E-mail: masterhs@ucdenver.edu

Web site: clas.ucdenver.edu/ict/index.html

Faculty

Senior Instructors:

Myra Bookman, PhD, University of Colorado

Margaret Woodhull, PhD, University of Texas, Austin

The master of social science (MSS) program is designed to meet the needs of students who prefer flexibility in constructing an individualized course of study in social science. Emphasis is placed on the integration of knowledge across and beyond traditional disciplinary boundaries. This is accomplished through three required seminars, courses from a variety of disciplines chosen with the approval of advisors and program directors, and a project or thesis. Courses can be chosen from the social science disciplines: anthropology, communication, economics, geography, history, political science,

psychology and sociology, as well as from other disciplines and programs, e.g., English, philosophy, education, public affairs and architecture.

The MSS program is intended for students interested in developing their own interdisciplinary perspectives in such areas as social thought, public policy, women's studies, educational reform and cross-cultural studies or politics. The program can provide: training for advancement in the professions of education, business, social service and government; a basis for further graduate studies in a specific social science discipline or professional field; a means for teachers and other working students to tailor degree programs to fit their personal career development needs; and a nontraditional approach for recent university graduates or adults re-entering the university to pursue liberal educational goals in the social sciences.

MSS REQUIREMENTS

Programs

Master of Social Science

Social Science MSS

- ▶ Graduate School Rules apply to this program

Requirements for Admission

General rules for admission into the Graduate School apply to admission into the MSS program.

For admission as a regular graduate student, applicants must:

- have earned a bachelor's degree
- submit two official copies of all transcripts, with an overall GPA of at least 3.0 out of 4.0
- have appropriate undergraduate training or professional background or indicators that supply evidence of ability to pursue the MSS degree
- include a writing sample
- submit three letters of recommendation (at least two from academic sources)
- submit a written statement specifying the goal of advanced study in the social sciences, expressed in clear, correct and effective English
- standardized test scores are not required, but will be considered if submitted

After meeting all other requirements for admission, applicants may be required to have an interview to discuss their interest in the program and their plans for study. For out-of-

state applicants, an appropriate substitute for the interview may be determined by the director.

Provisional Admission:

Applicants may be admitted as provisional-status graduate students if their complete record indicates a high probability of success.

Non-degree Students:

Potential applicants may take graduate-level courses as nondegree students (unclassified student with a bachelor's degree) if they:

1. Wish to strengthen their record in order to demonstrate that they can successfully complete courses in the program
—or—
2. Wish to start courses in the program prior to completing their application. Up to 12 semester hours taken as a nondegree student may be accepted by the program once a student has been admitted into the program (the 12-hour limit also includes graduate work from another university).

International Students:

International students must also meet UC Denver requirements for international admission. See the Information for International Students section of this catalog or call 303-315-2230 for further information.

Degree Requirements

The MSS is a 36-semester-hour program, of which 30 hours must meet all specifications of the Graduate School. Throughout their work toward the MSS degree, students must maintain at least a *B* (3.0) average in all courses. A grade of *B-* or below will not be counted toward the degree.

Students may pursue courses around any coherent theme with the approval of MSS program directors and advisors. In addition to the unlimited self-structured options, there are four tracks in place from which students can select: women's and gender studies, international studies, society and environment and community health science.

Three Required Core Seminars

- The following two courses must be taken during the first year following entrance to the program:
 - SSCI 5013 - Philosophical Problems in the Social Sciences and Humanities
Summer 2010 Registration: S SC 5013
(Offered spring only)

- SSCI 5020 - Elements of Social Thought *Summer 2010 Registration: S SC 5020*
(Offered fall only)
The third required course should be taken later in the program when students are ready to write a proposal for the thesis or project:
- SSCI 5023 - Research Perspectives in Social Science *Summer 2010*
Registration: S SC 5023
(Offered spring only)

Total: 9 Hours

Electives

Additionally, students must complete a total of 21-24 semester hours comprising a coherent selection of courses from a variety of disciplines. All courses for the self-structured portion of the program must be selected with the approval of one of the MSS program directors.

A total of two independent study courses and two 4000-level undergraduate courses taken while enrolled in the program may count toward the degree. All independent study contracts must be approved by one of the program directors. The remaining course work must be 5000/6000-level courses offered through various departments.

Students completing a project take 24 hours of electives, while thesis students complete 21 hours of electives.

Total: 21-24 Hours

Thesis or Project

In order to proceed with a thesis or project, all students must submit a proposal approved by three faculty members (and approved by one of the program directors in cases where one of the directors is not serving on the committee). Students must also pass an oral comprehensive exam to graduate. Total hours required are: 3 hours of project and 6 hours of thesis.

- SSCI 6950 - Master's Thesis *Summer 2010 Registration: S SC 6950*
- SSCI 6960 - Master's Project or Report *Summer 2010 Registration: S SC 6960*

Total: 3-6 Hours

Degree Total: 36 Hours

Sociology

Chair: Sharon Araji, Chair

Program Assistant: Rachel Watson

Office: Lawrence Street Center, Suite 420

Telephone: 303-315-2148

Fax: 303-315-2149

Web site: clas.ucdenver.edu/sociology/

Faculty

Professors:

Sharon Araji, PhD, Washington State University

Karl H. Flaming, PhD, Syracuse University

Associate Professors:

Candan Duran-Aydintug, PhD, Washington State University

Jon Winterton, PhD, Michigan State University

Assistant Professors:

Stacey Bosick, PhD, Harvard University

Paula Fomby, PhD, University of Wisconsin-Madison

Akihiko Hirose, PhD, University of California, Riverside

Patrick Krueger, PhD, University of Colorado Boulder

Senior Instructor:

Lucy Dwight, PhD, The Pennsylvania State University

Instructors:

Edward Casteel, MSW, University of Denver

Andrea Haar, MA, University of Colorado Denver

Pete Padilla, PhD, Arizona State University

Associate Professor Emeritus:

Undergraduate

Sociology is the scientific study of groups, social process and behavior. The major in sociology is designed to familiarize the student with these areas through an understanding of theory, method and statistical procedures employed within them. Concentration is possible at the undergraduate level. However, the faculty believes the undergraduate should have a foundation in the basics of the discipline upon which to build a future specialization. Such specialization is more appropriate at the advanced levels.

Many career opportunities combine a foundation in sociology with business, computer science or community development. Opportunities within the field of sociology proper usually require graduate study. The major will prepare the student for such advanced work as well as for pursuit of career options with only the BA degree. For example, graduates with a sociology BA are employed in the human services field and with state and local government agencies.

The department has developed the following rationale for courses offered:

1. Lower-division courses (for majors and nonmajors)
 - a. 1000-level courses provide an introduction to the broad sociological perspective as it applies to social life, social systems and society.
 - b. 2000-level courses introduce the student to somewhat more specific content areas: population study, human ecology, social psychology, etc.
2. Upper-division courses (3000 and 4000)
 - a. 3000-level courses serve as advanced surveys of some specific area of concentration. They are designed to acquaint the student with the issues, methods, concepts and theoretical frameworks employed in the content area. Such courses as urban sociology, race and ethnicity, etc. are offered at this level. Many of these courses are open courses, in that students from other departments and colleges are encouraged to enroll in them.
 - b. 4000-level courses are devoted to a more detailed in-depth examination of specific issues, approaches and concepts within the previously identified content areas. These are advanced courses and are geared more directly to sociology and social science majors.
 - c. Undergraduate students can enroll in a course at the 4000/5000 level only if they are classified at junior or senior standing.

REQUIREMENTS FOR THE MAJOR

REQUIREMENTS FOR THE MINOR

Departmental Honors

Students wishing to graduate with departmental honors in sociology (*cum laude*, *magna cum laude*, or *summa cum laude*) must have a minimum cumulative GPA of 3.2 and a 3.2 or higher in all sociology courses. Additional requirements are available in the sociology office. Qualified students are encouraged to apply for the honors program no later than the beginning of their senior year.

Graduate

The MA degree in sociology offered at the Downtown Campus focuses on social psychology, sociology of the family, criminology, medical sociology, urban sociology and applied sociology. The program's urban emphasis complements professional degree programs in design and planning, medicine, nursing, community health, physical engineering, public and business administration, education and fine arts by providing advanced seminars and planning and research opportunities in theory and research.

Admission Requirements

Application to the MA program is open to all students holding a BA, BS or higher degree in any field. Students without prior training in sociology, but with otherwise exemplary records, may be admitted and may be required to make up deficiencies without graduate credit depending upon the results of the mandatory diagnostic exams in the areas of theory, methods and statistics.

Recommended Academic Standards

- A combined GPA of at least 3.3 for all courses taken at the undergraduate or graduate level prior to admission
- A combined GPA of at least 3.5 for all **sociology** courses taken at the undergraduate or graduate level prior to admission

Application Materials

- Complete application form
- Three letters of recommendation (at least two must be from academic/professional sources)
- Two copies of official transcripts sent directly to the Department of Sociology from all schools where BA credit hours were taken
- A statement of purpose and goal of graduate study
- Writing sample
- GRE score may be optionally submitted to aid application file
- **International Students:** You must complete an International Student Application. Minimum TOEFL score of 525 required.

Application Deadlines

Applications are accepted for **fall** admission only. All application materials are due on February 15th.

REQUIREMENTS FOR THE MA IN SOCIOLOGY

Programs

Bachelor of Arts

Sociology BA

Students must declare a major by the time they have completed 60 semester hours of course work. The major requires a total of 34 hours with an average grade of C (2.0) in all courses. At least 16 of the 34 hours must be upper-division (3000-4000 level) courses. The maximum number of hours allowed in sociology is 48.

Course Requirements

Core Courses

The core consists of the following group of courses, all of which must be completed with a grade of C (2.0) or better:

- SOCY 1001 - Introduction to Sociology Summer 2010 Registration: **SOC 1001**
- SOCY 3001 - Urban Sociology Summer 2010 Registration: **SOC 3001**
- * SOCY 3111 - Research Methods Summer 2010 Registration: **SOC 3111**
- * SOCY 3121 - Statistics Summer 2010 Registration: **SOC 3121**
- * SOCY 4150 - History of Sociological Theory Summer 2010 Registration: **SOC 4150**
- * SOCY 4160 - Contemporary Sociological Theory Summer 2010 Registration: **SOC 4160**

Total: 19 Hours

*Must be taken from Downtown Campus faculty

Electives: 15 Hours

Choose a minimum of 15 hours and a maximum of 29 hours of electives in sociology, with an average grade of C (2.0) in all courses.

Major Total: 34 Hours

All prospective majors should contact the department as early in their academic careers as possible for information and for assignment to a major advisor. Transfer or returning students should consult with the department chairman concerning completion of the core courses.

The department requires that at least 13 hours of sociology be taken from Downtown Campus faculty, including the following courses: SOC 3111, 3121, 4150 and 4160.

Non Degree

Sociology Minor

For an undergraduate minor in sociology, a minimum of 15 semester hours in sociology must be completed with a grade of C or better. Nine of these hours must be taken from Downtown Campus faculty.

Course Requirements

Required Courses

- SOCY 1001 - Introduction to Sociology *Summer 2010 Registration: SOC 1001*
and
- SOCY 4150 - History of Sociological Theory *Summer 2010 Registration: SOC 4150*

Total: 6 Hours

Electives

Nine hours of sociology elective courses, completed with a grade of C or better.

Total: 9 Hours

Minor Total: 15 Hours

Master of Arts

Sociology MA

► Graduate School Rules apply to this program

Program Requirements

Two plans of study are available for students. Both options require a minimum of 36 hours. A thesis is required for the thesis option, and a project and internship are required for the nonthesis option. Before beginning the required course work, attendance at an orientation is required for incoming cohorts as well as the completion of mandatory diagnostic exams.

Required Courses

Core courses are required for all graduate students, regardless of plan. Students who are officially admitted to the program are required to follow a sequential plan. SOC 5000 must be taken in the first fall semester. Students must take SOC 5014 before taking SOC 5015. Similarly, SOC 5024 must be taken before SOC 5183.

- SOCY 5000 - Professional Seminar: Sociological Inquiry Summer 2010
Registration: **SOC 5000**
- SOCY 5014 - Classical Sociological Theory Summer 2010 Registration: **SOC 5014**
- SOCY 5015 - Contemporary Sociological Theory Summer 2010 Registration: **SOC 5015**
- SOCY 5024 - Seminar: Research Methods I Summer 2010 Registration: **SOC 5024**
- SOCY 5183 - Seminar: Quantitative Data Analysis Summer 2010 Registration: **SOC 5183**

Total: 15 Hours

PLANS OF STUDY

Students must also choose **one** of the following options:

Thesis Option Requirements

Core course requirements	15 Hours

Five elective courses	15 Hours
Master's thesis	6 Hours total required

- SOCY 5955 - Master's Thesis *Summer 2010 Registration: SOC 5955*

Thesis Option Total: 36 Hours

Nonthesis Option Requirements

Core course requirements	15 Hours
Five elective courses	15 Hours
Internship	3 Hours
Master's project	3 Hours

- SOCY 5964 - Master's Report *Summer 2010 Registration: SOC 5964*

Nonthesis Option Total: 36 Hours

Elective Credit Requirements (15 semester hours for both options)

Students can take an unlimited number of sociology graduate seminars (i.e., 5000-level, stacked or not) to fulfill their 15 elective semester hours, or a combination of the following:

- Independent study: maximum 6 semester hours
- Courses in other departments: maximum 6 semester hours
- Internship: maximum 3 semester hours

For further information about the Department of Sociology or the MA program, visit the [Sociology Web Site](#).

Sustainability

Director: Stephen Koester (Anthropology)

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Telephone: 303-556-6795

E-Mail: steve.koester@ucdenver.edu

Web site: clas.ucdenver.edu/sustainability/

Faculty

(concurrently appointed)

Professors:

Larry G. Anderson, Chemistry
Stephen Koester, Anthropology
Diana F. Tomback, Integrative Biology

Associate Professors:

Steven R. Beckman, Economics
John Brett, Anthropology
Greg Cronin, Integrative Biology
Larry Erbert, Communication
Randall P. Tagg, Physics
Deborah S. K. Thomas, Geography
John W. Wyckoff, Environmental Sciences

Assistant Professors:

Casey Allen, Geography/Environmental Sciences
Thomas G. Andrews, History
Laurel Hartley, Integrative Biology
Rafael Moreno-Sanchez, Geography
Maria L. Talero, Philosophy
Bryan S. Wee, Geography

Adjoint Faculty:

Kathryn Cheever, Political Science

Questions of sustainability are currently among the most important facing humankind and are receiving tremendous attention in the media. Because issues of sustainability do not arise from single causes, nor can solutions be developed from within narrow disciplinary frameworks, a multidisciplinary perspective is not only desirable but necessary to identify and understand problems, and create, evaluate and implement solutions.

Specializations in this critical area of study include: health and the environment, sustainable ecology, environmental ethics, environmental policymaking and policy analysis, institutional behavior, community-based and participatory approaches to sustainable development and conservation, environmental justice, sustainable food production and critical consumerism. The sustainability minor offers a holistic approach to development and daily living, which demands scientific, economic, environmental and social perspectives to understand and implement actions that can inform the public, business, industry, government and service organizations on how their activities affect the environment.

REQUIREMENTS FOR THE SUSTAINABILITY MINOR

Programs

Non Degree

Sustainability Minor

The sustainability minor is interdisciplinary, drawing on the expertise across CLAS departments: anthropology, biology, chemistry, communication, economics, environmental sciences, geography, geology, history, economics, philosophy, physics and political science. The core courses are taught by a faculty team from natural sciences and social sciences, who will present the concepts from the empirical and humanistic perspectives. The teaching team changes each term so that faculty from any given CLAS department will rotate through the core courses every 3-4 years.

The minor comprises 18 hours, distributed as follows:

- two core courses that introduce students to the systems theories that document how living things affect and are affected by their environments
- two electives chosen from an approved list of CLAS courses
- students select either a field study, internship, service learning or related travel study course
- capstone course in sustainability

Requirements for the Minor

Core Courses

- SUST 3010 - The Non-Sustainable Past Summer 2010 Registration: **SUST 3010**

- SUST 3011 - Toward a Sustainable Future Summer 2010 Registration: **SUST 3011**

Total: 6 Hours

Electives

Choose two from the following list of approved electives:

Anthropology

- ANTH 1302 - Introduction to Archaeology Summer 2010 Registration: **ANTH 1302**
- ANTH 1303 - Introduction to Biological Anthropology Summer 2010 Registration: **ANTH 1303**
- ANTH 2102 - Culture and the Human Experience Summer 2010 Registration: **ANTH 2102**
- ANTH 3006 - Development, Environment and Culture Summer 2010 Registration: **ANTH 3006**
- ANTH 3301 - World Prehistory Summer 2010 Registration: **ANTH 3301**
- ANTH 3512 - Human Evolution Summer 2010 Registration: **ANTH 3512**
- ANTH 4030 - Ethnobiology Summer 2010 Registration: **ANTH 4030**
- ANTH 4060 - Evolutionary Medicine Summer 2010 Registration: **ANTH 4060**
- ANTH 4070 - Culture of Development and Globalization Summer 2010 Registration: **ANTH 4070**
- ANTH 4170 - Culture and the Environment Summer 2010 Registration: **ANTH 4170**
- ANTH 4220 - Community in Global Context Summer 2010 Registration: **ANTH 4220**
- ANTH 4250 - Culture Change in the Modern World Summer 2010 Registration: **ANTH 4250**
- ANTH 4450 - Development and Conservation: Contemporary Issues Summer 2010 Registration: **ANTH 4450**
- ANTH 4460 - Development and Conservation: Theory and Practice Summer 2010 Registration: **ANTH 4460**
- ANTH 4560 - Human Ecology Summer 2010 Registration: **ANTH 4560**

Biology

- BIOL 1550 - Basic Biology: Ecology and the Diversity of Life Summer 2010 Registration: **BIOL 1550**
- BIOL 3330 - Plant Diversity Summer 2010 Registration: **BIOL 3330**
- BIOL 3411 - Principles of Ecology Summer 2010 Registration: **BIOL 3411**

- BIOL 3412 - Fundamentals of Applied Ecology Summer 2010 Registration: **BIOL 3412**
- BIOL 3521 - Vertebrate Biology Summer 2010 Registration: **BIOL 3521**
- BIOL 4154 - Conservation Biology Summer 2010 Registration: **BIOL 4154**

Business

- MGMT 4950 - Special Topics in Management Summer 2010 Registration: **MGMT 4950**
when offered as Business and Sustainability
- MKTG 4950 - Special Topics Summer 2010 Registration: **MKTG 4950**
when offered as Nonprofit and Social Marketing

Chemistry

- CHEM 1474 - Core Chemistry: Chemistry For the Consumer Summer 2010 Registration: **CHEM 1474**
- CHEM 4700 - Environmental Chemistry Summer 2010 Registration: **CHEM 4700**
- CHEM 5700 - Environmental Chemistry Summer 2010 Registration: **CHEM 5700**

Communication

- COMM 4282 - Environmental Communication Summer 2010 Registration: **CMMU 4282**
- COMM 5282 - Environmental Communication Summer 2010 Registration: **CMMU 5282**

Economics

- ECON 4530 - Economics of Natural Resources Summer 2010 Registration: **ECON 4530**
- ECON 4540 - Environmental Economics Summer 2010 Registration: **ECON 4540**
- ECON 4770 - Economic Development--Theory and Problems Summer 2010 Registration: **ECON 4770**
- ECON 5530 - Economics of Natural Resources Summer 2010 Registration: **ECON 5530**
- ECON 5540 - Environmental Economics Summer 2010 Registration: **ECON 5540**

Geography / Geology / Environmental Science

- ENVS 1042 - Introduction to Environmental Sciences Summer 2010 Registration:
ENVS 1042
- ENVS 1342 - Introduction to Environment and Society Summer 2010
Registration: **ENVS 1342**
- ENVS 3082 - Energy and the Environment Summer 2010 Registration: **ENVS 3082**
- GEOG 1202 - Introduction to Physical Geography Summer 2010 Registration:
GEOG 1202
- GEOG 3302 - Water Resources Summer 2010 Registration: **GEOG 3302**
- GEOG 3411 - Globalization and Regional Development Summer 2010
Registration: **GEOG 3411**
- GEOG 4010 - Landscape Geochemistry Summer 2010 Registration: **GEOG 4010**
- GEOG 4020 - Earth Environments and Human Impacts Summer 2010
Registration: **GEOG 4020**
- GEOL 4030 - Environmental Geology Summer 2010 Registration: **GEOL 4030**
- GEOG 4090 - Environmental Modeling with Geographic Information Systems
Summer 2010 Registration: **GEOG 4090**
- GEOG 4230 - Hazard Mitigation and Vulnerability Assessment Summer 2010
Registration: **GEOG 4230**
- GEOG 4265 - Sustainability in Resources Management Summer 2010
Registration: **GEOG 4265**
- GEOG 4335 - Contemporary Environmental Issues Summer 2010 Registration:
GEOG 4335
- GEOG 4350 - Environment and Society in the American Past Summer 2010
Registration: **GEOG 4350**
- GEOG 4640 - Urban Geography: Denver and the U.S. Summer 2010
Registration: **GEOG 4640**
- GEOG 5090 - Environmental Modeling with Geographic Information Systems
Summer 2010 Registration: **GEOG 5090**
- GEOG 5230 - Hazard Mitigation and Vulnerability Assessment Summer 2010
Registration: **GEOG 5230**
- GEOG 5265 - Sustainability in Resources Management Summer 2010
Registration: **GEOG 5265**
- GEOG 5335 - Contemporary Environmental Issues Summer 2010 Registration:
GEOG 5335
- GEOG 5350 - Environment and Society in the American Past Summer 2010
Registration: **GEOG 5350**
- GEOG 5640 - Urban Geography: Denver and the U.S. Summer 2010
Registration: **GEOG 5640**

History

- HIST 3350 - Colonial Latin America Summer 2010 Registration: **HIST 3350**
- HIST 3360 - Denver History Summer 2010 Registration: **HIST 3360**

- HIST 3366 - Environmental History of North America Summer 2010 Registration: **HIST 3366**
- HIST 3451 - Introduction to African History Summer 2010 Registration: **HIST 3451**
- HIST 3460 - Introduction to Latin American History Summer 2010 Registration: **HIST 3460**
- HIST 3470 - Introduction to Asian History Summer 2010 Registration: **HIST 3470**
- HIST 3606 - Science, Technology, and Society in the Modern World Summer 2010 Registration: **HIST 3606**
- HIST 4217 - Consumer Culture Summer 2010 Registration: **HIST 4217**
- HIST 4226 - U.S. Business History Summer 2010 Registration: **HIST 4226**
- HIST 4227 - American West Summer 2010 Registration: **HIST 4227**
- HIST 4236 - Colorado Mining and Railroads Summer 2010 Registration: **HIST 4236**
- HIST 4411 - Modern Mexico Summer 2010 Registration: **HIST 4411**
- HIST 4417 - Commodities and Globalization: Dessert in World History Summer 2010 Registration: **HIST 4417**
- HIST 4421 - Modern China Summer 2010 Registration: **HIST 4421**
- HIST 4431 - Modern Japan Summer 2010 Registration: **HIST 4431**
- HIST 4451 - Southern Africa Summer 2010 Registration: **HIST 4451**
- HIST 4461 - The Modern Middle East Summer 2010 Registration: **HIST 4461**
- HIST 4501 - World History for Educators Summer 2010 Registration: **HIST 4501**
- HIST 4503 - Topics in History of Science Summer 2010 Registration: **HIST 4503**
- HIST 4504 - Animals in U.S. History Summer 2010 Registration: **HIST 4504**

Physics

- PHYS 3082 - Energy and the Environment Summer 2010 Registration: **PHYS 3082**
 - PHYS 4850 - Physics for Design and Innovation I Summer 2010 Registration: **PHYS 4850**
 - PHYS 4852 - Physics for Design and Innovation II Summer 2010 Registration: **PHYS 4852**
- Note: PHYS 4850 is prerequisite for PHYS 4852
- PHYS 5850 - Physics for Design and Innovation I Summer 2010 Registration: **PHYS 5850**
 - PHYS 5852 - Physics for Design and Innovation II Summer 2010 Registration: **PHYS 5852**

Note: PHYS 5850 is prerequisite for PHYS 5852

Philosophy

- PHIL 4250 - Environmental Ethics Summer 2010 Registration: **PHIL 4250**
- PHIL 5250 - Environmental Ethics Summer 2010 Registration: **PHIL 5250**

Political Science

- PSCI 3034 - Race, Gender, Law and Public Policy Summer 2010 Registration: **P SC 3034**
- PSCI 3035 - Political Movements: Race and Gender Summer 2010 Registration: **P SC 3035**
- PSCI 3042 - Introduction to International Relations Summer 2010 Registration: **P SC 3042**
- PSCI 3914 - The Urban Citizen Summer 2010 Registration: **P SC 3914**
- PSCI 4009 - Politics of the Budgetary Process Summer 2010 Registration: **P SC 4009**
- PSCI 4014 - Media and Politics Summer 2010 Registration: **P SC 4014**
- PSCI 4025 - Local Governance and Globalization Summer 2010 Registration: **P SC 4025**
- PSCI 4085 - Comparative Public Policy Summer 2010 Registration: **P SC 4085**
- PSCI 4144 - Indigenous Political Systems Summer 2010 Registration: **P SC 4144**
- PSCI 4206 - Social Movements, NGOs and Global Politics Summer 2010 Registration: **P SC 4206**
- PSCI 4207 - Theories of Social and Political Change Summer 2010 Registration: **P SC 4207**
- PSCI 4215 - Women's Rights, Human Rights: Global Perspectives Summer 2010 Registration: **P SC 4215**
- PSCI 4217 - Human Rights in Theory and Practice Summer 2010 Registration: **P SC 4217**
- PSCI 4226 - The United Nations in World Affairs Summer 2010 Registration: **P SC 4226**
- PSCI 4248 - Gender, Globalization and Development Summer 2010 Registration: **P SC 4248**
- PSCI 4324 - Politics, Public Policy and Leadership Summer 2010 Registration: **P SC 4324**
- PSCI 4326 - Advanced International Political Economy: Globalization Summer 2010 Registration: **P SC 4326**
- PSCI 4354 - Environmental Politics Summer 2010 Registration: **P SC 4354**
- PSCI 4365 - Global Ecological Crises Summer 2010 Registration: **P SC 4365**
- PSCI 4374 - Public Priorities for the 21st Century Summer 2010 Registration: **P SC 4374**
- PSCI 4545 - Immigration Politics Summer 2010 Registration: **P SC 4545**

- PSCI 4555 - International Women's Resistance *Summer 2010 Registration: P SC 4555*
- PSCI 4645 - Comparative Political Leadership *Summer 2010 Registration: P SC 4645*

Total: 6 Hours

Experiential learning course

Students choose a field study, internship, service learning or related travel study course.

Total: 3 Hours

Capstone

- SUST 4960 - Capstone in Sustainability *Summer 2010 Registration: SUST 4960*

Total: 3 Hours

Total: 18 Hours

Women's and Gender Studies

Co-Directors: Marjorie Levine-Clark (History), Gillian Silverman (English), Margaret Woodhull (Humanities and Social Sciences)

Office: KC 558

Telephone: 303-556-2896

Fax: 303-556-6037

Website: clas.ucdenver.edu/wgst/

Associated Faculty

Joanne Addison (English)

Brenda J. Allen (Communication)

Elizabeth Allen (Psychology)

Sharon Araj (Sociology)

Laura Argys (Economics)

Pompa Banerjee (English)

Myra Bookman (Humanities and Social Sciences)
Michelle Comstock (English)
Mary Coussons-Read (Psychology)
Jennifer Davis (English)
Candan Duran-Aydintug (Sociology)
Paula Espinoza (Ethnic Studies)
Jana Everett (Political Science)
Sonja Foss (Communication)
Andrea Haar (Sociology)
Rachel Harding (Ethnic Studies)
Pamela Laird (History)
Donna Langston (Ethnic Studies)
Myra Rich (History)
Candice Shelby (Philosophy)
Maria Talero (Philosophy)
Cate Wiley (English)

Women's and gender studies (WGST) is an interdisciplinary program that focuses on the centrality of gender and sexuality to understanding our past and present worlds. Students and faculty probe assumptions about men and women and question structures of inequality as they play out in local and global contexts. Through a study of gender and sexuality, we expand our thinking about other relations of power, such as race, class, ethnicity, nationality and physical ability. WGST fosters connections with the local community and promotes advocacy of human rights and social justice.

Undergraduate Studies

MINOR IN WOMEN'S AND GENDER STUDIES

Individually Structured Major

Students interested in a major in women's and gender studies may develop one through the individually structured major (ISM). The ISM is an interdisciplinary major based on an individual contract rather than a preset list of courses. By choosing an ISM, students can pursue their interests in WGST across a variety of departments. For more information on an ISM in women's and gender studies, contact [Marjorie Levine-Clark](#), and see the [individually structured major](#) section of this catalog.

Graduate Studies

At the graduate level, students may pursue women's and gender studies as a track in the master of [social science degree program](#). Students learn to think critically about the

condition of women and the role of gender in both historical and contemporary experience. Course work focuses on conceptual models for understanding women and gender, such as feminist, queer, post-colonial and race theories as they operate through culture, language, politics, visual representation and history. For more information, contact Myra Bookman or Margaret Woodhull.

The master of social science program also offers a certificate in women's studies for students pursuing master's degrees in departments in the College of Liberal Arts and Sciences. For details, contact [Myra Bookman](#) or [Margaret Woodhull](#).

Programs

Non Degree

Women's and Gender Studies Minor

The women's and gender studies minor gives students the opportunity to explore gender issues in the humanities and social sciences. To minor in WGST, a student must complete 18 semester hours in WGST courses with a grade of C or better. At least 12 semester hours for the WGST minor must be taken with UC Denver faculty, and all courses for the minor must be approved by a WGST advisor.

Requirements for the Minor

1. Required Course: WGST 1050 (3 semester hours)

This course provides an introduction to key concepts, themes and approaches to the interdisciplinary field of women's and gender studies. It helps students develop an overall framework for WGST in which to place their electives and internship.

- [WGST 1050 - Introduction to Women's and Gender Studies Summer 2010](#)
*Registration: **WGST 1050***

2. WGST-related courses at the 3000 level or above (12 semester hours)

These courses combine humanities and social science fields. Advisor approval is required for course selection. Students are strongly urged to take at least one course

that focuses on women's and gender issues in international perspective. Courses which are eligible for WGST credit include (but are not limited to):

Humanities

- ENGL 3450 - Twentieth Century Women Writers Summer 2010 Registration:
ENGL 3450
- ENGL 4510 - Whores and Saints: Medieval Women Summer 2010 Registration:
ENGL 4510
- FREN 4510 - French Women Writers Summer 2010 Registration: **FR 4510**
- HIST 3343 - Women in U.S. History Summer 2010 Registration: **HIST 3343**
- HIST 4230 - Women in the West Summer 2010 Registration: **HIST 4230**
- HIST 4303 - Sex and Gender in Modern Britain Summer 2010 Registration: **HIST 4303**
- HIST 4307 - History of Sexuality Summer 2010 Registration: **HIST 4307**
- HIST 4345 - Gender, Science, and Medicine: 1600 to the Present Summer 2010 Registration: **HIST 4345**
- PHIL 3500 - Ideology and Culture: Racism and Sexism Summer 2010 Registration: **PHIL 3500**
- PHIL 4933 - Philosophy of Eros Summer 2010 Registration: **PHIL 4933**
- RLST 4420 - Goddess Traditions Summer 2010 Registration: **RLST 4420**
- SPAN 4540 - Race, Class, and Gender in Spanish Golden Age Literature Summer 2010 Registration: **SPAN 4540**
- WGST 4306 - Survey of Feminist Thought Summer 2010 Registration: **WGST 4306**
- OR-
- ENGL 4306 - Survey of Feminist Thought Summer 2010 Registration: **ENGL 4306**
- OR-
- HIST 4306 - Survey of Feminist Thought Summer 2010 Registration: **HIST 4306**

Social Sciences

- ANTH 4200 - Gender in Cross-Cultural Perspective Summer 2010 Registration:
ANTH 4200
- ANTH 4260 - Human Reproductive Ecology Summer 2010 Registration: **ANTH 4260**
- COMM 4020 - Feminist Perspectives on Communication Summer 2010 Registration: **CMMU 4020**
- COMM 4045 - Female-Male Friendships Summer 2010 Registration: **CMMU 4045**
- COMM 4265 - Gender and Communication Summer 2010 Registration: **CMMU 4265**

- COMM 4268 - Communication and Diversity in U.S. History Summer 2010
Registration: **CMMU 4268**
 - COMM 4275 - Family Communication Summer 2010 Registration: **CMMU 4275**
 - ECON 3100 - Economics of Race and Gender Summer 2010 Registration:
ECON 3100
 - ECON 3400 - Economics of Sex and Drugs Summer 2010 Registration: **ECON 3400**
 - HBSC 3010 - Evolution of Human Sexuality Summer 2010 Registration: **HBSC 3010**
 - PSCI 3034 - Race, Gender, Law and Public Policy Summer 2010 Registration: **P SC 3034**
 - PSCI 3035 - Political Movements: Race and Gender Summer 2010 Registration:
P SC 3035
 - PSCI 4215 - Women's Rights, Human Rights: Global Perspectives Summer 2010
Registration: **P SC 4215**
 - PSCI 4248 - Gender, Globalization and Development Summer 2010 Registration:
P SC 4248
 - PSCI 4555 - International Women's Resistance Summer 2010 Registration: **P SC 4555**
 - PSCI 4564 - Gender and Politics Summer 2010 Registration: **P SC 4564**
 - PSCI 4827 - Women and the Law Summer 2010 Registration: **P SC 4827**
 - PSYC 3235 - Human Sexuality Summer 2010 Registration: **PSY 3235**
 - PSYC 3405 - Family Psychology Summer 2010 Registration: **PSY 3405**
 - PSYC 3611 - Psychology of Women Summer 2010 Registration: **PSY 3611**
 - PSYC 3612 - Domestic Abuse Summer 2010 Registration: **PSY 3612**
 - SOCY 3010 - Sociology of Human Sexuality Summer 2010 Registration: **SOC 3010**
 - SOCY 3080 - Sex and Gender Summer 2010 Registration: **SOC 3080**
 - SOCY 3700 - Sociology of the Family Summer 2010 Registration: **SOC 3700**
 - SOCY 4120 - Popular Culture and the American Family Summer 2010
Registration: **SOC 4120**
- See the WGST Web site for this semester's course offerings.

3. WGST Community Internship (3 semester hours)

An internship working in the community around issues related to women and gender. Working with a WGST advisor and the UC Denver Experiential Learning Center (ELC), students will choose an internship related to their interests in WGST. Through the ELC, students sign up for their internship under WGST 3939. Students will be required to complete a critical writing component comprising an ongoing log about the internship experience and an 8-10 page final paper discussing the interrelationships between the practical internship experience and the theoretical/scholarly insights of women's and gender studies. Students may also choose to use WGST 2900, Smart Girl Leadership

Training, in lieu of their internship and must follow the requirements of that course and practicum. Students must have taken WGST 1050 before enrolling for their internship.

- WGST 3939 - Cooperative Education Summer 2010 Registration: **WGST 3939**
-OR-
- WGST 2900 - Smart Girl Leadership Training and Practicum Summer 2010
Registration: **WGST 2900**

Total: 18 Hours

School of Public Affairs

Dean: Paul Teske

Associate Dean: Linda deLeon

Associate Dean, Colorado Springs: Teresa Schwart

Assistant Deans, Denver:

Jeanne Paradeis

Kelly Hupfeld

Contact

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Mailing Address

School of Public Affairs
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Current Student Inquiries

Telephone: 303-315-2228

Graduate Students Last Name A–K:

Dawn.Savage@ucdenver.edu

Graduate Students Last Name L–Z:

Antoinette.Sandoval@ucdenver.edu

Undergraduate Students

brendan.hardy@ucdenver.edu

Prospective Student Inquiries - PhD & MPA

Annie Davies

Telephone: 303-315-2896

E-mail: spa@ucdenver.edu

Prospective Student Inquiries - BA & MCJ

Brendan Hardy

Telephone: 303-315-2227

E-mail: spa@ucdenver.edu

Application Deadlines

Undergraduate

Fall—July 22

Spring—December 1

Summer—May 3

MPA & MCJ

	Preferred Deadline	Final
<i>Fall</i>	March 15	August 1
<i>Spring</i>	October 15	December 1
<i>Summer</i>	March 15	May 1

PhD

Fall admission only—

Feb. 1

*Graduates of the School of Public Affairs (SPA) are prepared to **lead** the field, **solve** pressing social issues and **change** communities for the better. Nationally ranked for excellence, SPA offers programs in multiple locations: on the UC Denver, Denver Campus, at the Colorado Springs campus, on the Western Slope (Grand Junction) and through the nation's oldest online MPA and brand new online MCJ. The school offers four degrees: the bachelor of arts in criminal justice, the master of public administration (MPA), the master of criminal justice (MCJ) and the PhD in public affairs. Qualified senior managers may elect to participate in the school's executive MPA option, an*

innovative partnership between the school and the federal management development centers. SPA offers an accelerated MPA option as well as a variety of concentrations and dual degrees in law, economics and urban and regional planning for students with diverse interests.

SPA Students

The School of Public Affairs (SPA) attracts a dynamic mix of students, from undergraduates just beginning their public service careers to well-seasoned professionals already immersed in public or nonprofit management and policy. Students encompass a range of age and experience, and they represent the diversity of the Denver metropolitan area. SPA classrooms promote interaction among students, and the variety of backgrounds including domestic, international, pre-career and mid-career students enriches learning enormously.

Our graduates are leaders. They include state legislators and department heads, city managers and mayors, police chiefs and correctional administrators, nonprofit and for-profit executives, school superintendents, university presidents and faculty.

The School of Public Affairs is accredited by the National Association of Schools of Public Affairs and Administration's (NASPAA) Commission on Peer Review and Accreditation.

The Mission of SPA

The School of Public Affairs will improve the quality of public life in Colorado and the Rocky Mountain West.

To achieve this mission, SPA has set the following objectives:

- **build educational and research excellence**, establishing the School of Public Affairs as the best school of public affairs in the Rocky Mountain West and a top-ranked national school
- **focus on solving pressing public problems**, both by helping students to build strong problem-solving skills and by committing the entire SPA community to participation in problem-solving efforts
- **strengthen SPA's contribution to successful student career development**
- **serve all of Colorado, the Mountain West and the global community**

A Commitment to Community, to Public Service and to Problem Solving

The School of Public Affairs seeks students committed to public service. It prepares those students through a rigorous course of study that combines scholarship and theory

while building practical analytical, management and policymaking skills. SPA faculty frequently engage students in community-centered research projects, and the school offers a variety of opportunities for students to engage in the work of its centers or to participate in events featuring visiting experts.

The Centers

The centers at the School of Public Affairs create bridges between the research-driven world of academia and the public and nonprofit sectors. This is how SPA contributes to the community—and how the school in turn seeks to provide leadership, policy solutions and ideas for societal change. The centers also enable students to engage first-hand in public policy research, work with client organizations, participate in internships and attend conferences and seminars. The SPA centers involve themselves in an impressive array of projects, from working with the Colorado Trust to helping Colorado communities establish health-delivery partnerships and studying Colorado's homeless population.

SPA Centers

- Institute for Policy Research and Implementation
- Center on Domestic Violence
- Wirth Chair in Environmental and Community Development Policy
- Center for Education Policy Analysis
- Center for Public/Private Sector Cooperation
- Center for the Improvement of Public Management
- Center on Reinventing Public Education—Denver

Departments and Programs

Programs

Bachelor of Arts

Criminal Justice BA

Program Director: Mary Dodge, PhD

Prospective Students: 303-315-2227

Current Students and Advising: 303-315-2227

Faculty

Professors:

Mark Pogrebin, PhD, University of Iowa

Eric Poole, PhD, Washington State University

Associate Professors:

Mary Dodge, PhD, University of California, Irvine

Angela Gover, PhD, University of Maryland

Callie Rennison, PhD, University of Houston

Paul Stretesky, PhD Florida State University

Assistant Professor:

Deanna Perez, PhD, University of Maryland

Associate Research Professor:

Jerry Williams, DPA, University of Colorado

The School of Public Affairs is excited to offer a new bachelor of arts program in criminal justice. It is an interdisciplinary program that combines specific course work in criminal justice with a liberal arts focus. The criminal justice degree offers training for specific occupations within criminal justice agencies and provides students with the critical thinking, writing and presentation skills necessary for career advancement and graduate study. The course work explores the complex nature of crime causation, criminal justice organizations and the implications of public policies that allow graduates to adapt to the evolving nature of the field.

As with all undergraduate degrees, students are required to complete the requirements of the Downtown Campus core curriculum, providing an education that draws heavily on social and natural sciences as well as liberal arts. The program will not only provide a direct line to employment in the growing field of criminal justice, but will also facilitate the movement of outstanding students into SPA's MCJ and PhD graduate programs. Junior and senior criminal justice students may be permitted to enroll in a graduate level MCJ course by advisement. Students will be well prepared to pursue additional advanced degrees in fields where critical thinking and analytical skills are required.

Admissions Requirements

Entering freshmen, current UC Denver students and transfer students are eligible for admission to the program. All students must meet the admission requirements described in the [Information for Undergraduate Students](#) chapter of this catalog.

Transfer Students

Students who have attended another college or university are expected to meet general requirements for admission of transfer students as described in the [Information for Undergraduate Students](#) chapter. A maximum of 15 semester credits of criminal justice coursework can be accepted and applied to the criminal justice major. The BACJ Program Director has the final discretionary authority to accept or reject criminal justice transfer credits. Transfer students with at least 30 semester hours of transferable credit who have been denied admission to the college by the Downtown Campus Office of Admissions, and who have special circumstances not covered by the regular admission policies, may petition the SPA Academic Standards for provisional admission. The Academic Standards Committee requires evidence of academic performance before provisional admission is granted. Policies and procedures for the SPA Academic Standards Committee are available through the SPA Advising Office.

Advising and Student Services

Upon matriculation into the criminal justice program, students will receive advising from the undergraduate academic advisor. The academic advisor will assist students with registration, clarify university and department policy and facilitate the graduation checkout. Advising will ensure that students take appropriate courses in the core curriculum to provide a foundation for their course work in the program. Students will also be assigned a faculty advisor who will assist them with questions about their majors, concentrations and career directions.

Grading and Policies

Dean's List Criteria

UC Denver will use a fixed criterion across all colleges for determining eligibility for the Dean's List. This policy applies to undergraduate students.

For fall and spring semesters, students must successfully complete 9 hours in the semester upon which to determine grade point. These courses can be both within and outside of the School of Public Affairs. MSCD Pooled courses will not be included in the calculation nor will they count towards the 9 hours required for consideration. The GPA set for inclusion in the Dean's List is 3.75. In the summer semesters, students must complete 6 hours as a basis for inclusion in the Dean's List. Course inclusion will be the same as in fall and spring semesters. The GPA for Dean's List in summer will also be 3.75. Colleges will collect data each semester on the number of students making the Dean's List and report the number and percentage of total students in the college. Students who make the Dean's List for both fall and spring semesters may be eligible of a Dean's List scholarship award. Dean's List Scholarship awards vary in amount each

semester depending on funding and the number of BACJ students who achieve Dean's List status. The Registrar's Office will calculate the semester GPAs for all students two weeks prior to the due date for semester grades. Those GPAs will be the basis for determining the Dean's List. Incompletes will not be considered in the calculation of minimum number of hours. The Dean's List will not be recalculated to include completed incompletes.

Academic Probation and Suspension

Students at the university are expected to maintain progress in their degree program, as defined by being in "good academic standing." Good academic standing requires minimally a cumulative grade point average (GPA) of 2.0 on all University of Colorado course work.

Academic Probation

- Academic probation is a warning to students that they are not progressing toward completion of their degree in a satisfactory manner.
- Students are placed on academic probation when their cumulative CU GPA falls below a 2.0 at the end of any academic term.
- Students are informed in writing (via University-assigned email and postal letter) of their academic probation status.
- Students on Academic Probation will be required to complete the Academic Success Plan during their first semester on Academic Probation.
- Students will be required to schedule an appointment and meet with their academic advisor to discuss the completed Academic Success Plan before they will be allowed to register for the subsequent term.
- Students on Academic Probation will be required to schedule an appointment and meet with their academic advisor every semester that they are on Academic Probation before they will be allowed to register.
- Academic Probation requires that students achieve a minimum 2.3 semester GPA each subsequent term until their cumulative CU GPA is at least a 2.0 to return to good academic standing. Students must achieve a minimum 2.0 cumulative CU GPA to meet graduation requirements.
- Students who fail to earn the 2.3 semester GPA during any semester of Academic Probation will be placed on Restricted Academic Probation.
- Students have five semesters or 30 credits (whichever happens sooner) to raise their cumulative GPA to above a 2.0, or they will be placed on Academic Suspension.
- Once a student has raised his/her cumulative CU GPA to at least a 2.0, s/he will be removed from Academic Probation and notified via University-assigned email that s/he is in Academic Good Standing.

Restricted Academic Probation

- Students who fail to earn the 2.3 semester GPA during any semester of Academic Probation will be placed on Restricted Academic Probation.
- Students are informed in writing (via University-assigned email and postal letter) of Restricted Academic Probation status.
- Students on Restricted Academic Probation will be allowed to enroll for a maximum of 6 credits/2 classes per semester (whichever is more). A course and its attached lab are considered to be one course in this case.
- Students on Restricted Academic Probation will be required to schedule an appointment and meet with their academic advisor in order to register for courses.
- Students on Restricted Academic Probation will not be able to register online; they will need to register for courses using a Schedule Adjustment Form, which must be submitted to the Service Center (North Classroom #1003) for processing.
- Restricted Academic Probation requires that students achieve a minimum 2.3 semester GPA each subsequent term until their cumulative CU GPA is at least a 2.0. Students must achieve a minimum 2.0 cumulative CU GPA to return to good academic standing and to meet graduation requirements.
- Students on Restricted Academic Probation who do not meet the 2.3 minimum semester GPA will be placed on Academic Suspension.
- Students who fail to raise their cumulative GPA to 2.0 or above in five semesters or 30 credit hours on Academic Probation and Restricted Academic Probation will be placed on Academic Suspension.

Academic Suspension

- Students on Restricted Academic Probation who do not meet the 2.3 minimum semester GPA will be placed on Academic Suspension.
- Students are informed in writing via certified/registered letter of their Academic Suspension status.
- The minimum duration of Academic Suspension is for a period of one year (three semesters, including summer term). Students placed on Academic Suspension will be unable to take courses from any CU campus during this time.
- Should a student be placed on Academic Suspension while registered for the next semester, s/he will be administratively dropped from their courses by the University.
- A student's Academic Suspension status is permanently indicated on his/her official University of Colorado transcript. During the one-year Academic Suspension period, students who wish to return to the University should consider one (or both) of the following actions:
 - Attend another regionally-accredited college/university.
Students who choose to attend another institution while on Academic Suspension can take as many or as few credits as they choose, but must earn a 2.75 cumulative GPA in all transferable course work. Students should consult their academic advisor to discuss appropriate course work.

- Use the time off to directly address and resolve the factors that contributed to the academic difficulty.
- After the one-year suspension period has elapsed, students must petition the appellate committee (of the school or college they wish to enter) for readmission and meet and document at least one of the following criteria:
 - Attendance at another regionally accredited college/university where they earned a minimum cumulative GPA of 2.75 in transferable credit.
 - Explanation of their previous academic difficulty, demonstration of what has changed, and how this will allow them to now achieve and maintain Good Academic Standing (including a semester GPA of at least 2.3 and a cumulative GPA of at least a 2.0).
- Students who choose to petition the School of Public Affairs appellate committee for readmission must submit their petitions by the following deadlines:
 - For fall admission: June 1
 - For spring admission: December 1
 - For Maymester/summer admission: April 1
- If a student is granted readmission and his/her CU GPA is below a 2.0, s/he will be readmitted on Restricted Academic Probation. These students must meet the condition of Restricted Academic Probation every semester until their cumulative CU GPA is at least a 2.0.

Second Suspension

- Students who are readmitted after their first Academic Suspension and fail to meet the conditions of Restricted Academic Probation for a second time are placed on a second suspension for an indefinite period of time.
- Students on a second suspension may be readmitted to the University only by petition to the college's appellate committee.
- Students will not be considered for readmission unless they have demonstrated significant improvement in academic performance at the college/university level, and/or considerable and positive change in personal circumstances.

Grade Policy

The University of Colorado Grading System is based on a 4.0 absolute scale.

Incomplete Grades

An incomplete grade of "I" can be issued at faculty discretion when there are special circumstances that preclude course completion. Incomplete grades are only issued when a small portion of the course remains. At minimum, 75% of the work in the course must be completed. Students are allowed up to 12 months to complete the unfinished portion of the course. After 12 months an "I" grade that has not been completed will become an "F."

Pass/Fail Grades

Core knowledge area and general electives are the only courses that can be completed pass/fail. Grades of “D-” or better is translated by the Records Office to a P (pass) grade. P grades do not affect students’ GPA. F grades do affect students’ GPA. Students interested in completing a course as pass/fail must submit a Schedule Adjustment Form during the add/drop during the respective semester to the BACJ Academic Advisor. Students need to consult the academic calendar posted on the Office of the Registrar’s webpage for add/drop dates. Up to 16 credits may be completed as pass/fail and credited toward the bachelor degree. Students can complete a maximum of 6 credits as pass/fail in any one semester.

The Internship Program

Undergraduate students without experience in the field will be expected to complete an internship for credit under the direction of a faculty sponsor. Internships are helpful for career exploration early in a student’s academic career or for job experience after developing academic content in the major. Students must have a minimum 2.0 cumulative GPA and a minimum of 15 semester hours completed at UC Denver before registering for the internship. A maximum of 3 semester hours of internship per semester and 6 semester hours total may be counted toward the 120 semester hours necessary for graduation.

Undergraduate students should contact the [Experiential Learning Center](#) for details on internship placements, paperwork and requirements.

Program Requirements

Students completing a BA in criminal justice at UC Denver will complete a minimum of 120 semester hours including:

- 34–36 general education core curriculum semester hours
- 21 undergraduate criminal justice semester hours, including 18 upper-division semester hours
- 15 elective semester hours in criminal justice and ancillary fields for the selected area of concentration (including an internship)
- 46–48 elective semester hours, an optional CLAS or language minor (15-21 hours), optional electives or internship
- students without experience in the field of criminal justice must complete a 3-semester-hour internship

Students must receive a minimum of a C (2.0) in each undergraduate course applied to satisfy major or minor degree requirements.

Required Criminal Justice Courses

- CRJU 1001 - Introduction to Criminal Justice Summer 2010 Registration: **C J 1001**
- CRJU 2041 - Crime Theory and Causes Summer 2010 Registration: **C J 2041**
- CRJU 3100 - Criminal Justice Research Methods Summer 2010 Registration: **C J 3100**
- CRJU 3150 - Statistics for Criminal Justice Summer 2010 Registration: **C J 3150**
- CRJU 4042 - Corrections Summer 2010 Registration: **C J 4042**
- CRJU 4043 - Law Enforcement Summer 2010 Registration: **C J 4043**
- CRJU 4044 - Courts and Judicial Process Summer 2010 Registration: **C J 4044**

Total: 21

Criminal Justice Electives

Criminal Justice Electives—15 semester hours, with 9 hours from the Department of Criminal Justice and 6 from other departments

- CRJU 2110 - Drugs, Alcohol and Crime Summer 2010 Registration: **C J 2110**
- CRJU 2210 - Probation and Parole Summer 2010 Registration: **C J 2210**
- CRJU 2320 - Police-Community Relations Summer 2010 Registration: **C J 2320**
- CRJU 2510 - Juvenile Justice Administration Summer 2010 Registration: **C J 2510**
- CRJU 3160 - White-Collar Crime Summer 2010 Registration: **C J 3160**
- CRJU 3220 - Community-Based Corrections Summer 2010 Registration: **C J 3220**
- CRJU 3250 - Violence in Society Summer 2010 Registration: **C J 3250**
- CRJU 3252 - Violent Offenders Summer 2010 Registration: **C J 3252**
- CRJU 3310 - Police in Contemporary Society Summer 2010 Registration: **C J 3310**
- CRJU 3420 - Pleas, Trials and Sentences Summer 2010 Registration: **C J 3420**
- CRJU 3540 - Crime and Delinquency Prevention Summer 2010 Registration: **C J 3540**
- CRJU 4120 - Race, Class and Crime Summer 2010 Registration: **C J 4120**
- CRJU 4130 - Poverty and Crime Summer 2010 Registration: **C J 4130**
- CRJU 4140 - Domestic Violence and Crime Summer 2010 Registration: **C J 4140**
- CRJU 4170 - Victim Studies Summer 2010 Registration: **C J 4170**

- CRJU 4180 - Comparative Study of Criminal Justice Systems Summer 2010
Registration: **C J 4180** (CJ 1001++)
- CRJU 4230 - Corrections and Treatment Summer 2010 Registration: **C J 4230**
- CRJU 4410 - Criminal Law and Constitutional Procedures Summer 2010
Registration: **C J 4410**
- CRJU 4430 - Law and Society Summer 2010 Registration: **C J 4430**
- CRJU 4440 - Courts and Social Policy Summer 2010 Registration: **C J 4440**
- CRJU 4520 - Gangs and Criminal Organizations Summer 2010 Registration: **C J 4520**
- CRJU 4530 - Families and Intergenerational Crime Summer 2010 Registration: **C J 4530**
- CRJU 4600 - Special Topics in Criminal Justice Summer 2010 Registration: **C J 4600** (CJ 1001, CJ 2041++)

Total: 9 hours

++Prerequisite

Other Department Electives**

- COMM 4265 - Gender and Communication Summer 2010 Registration: **CMMU 4265**
- ECON 3300 - Economics of Crime and Punishment Summer 2010 Registration: **ECON 3300**
- PSCI 3034 - Race, Gender, Law and Public Policy Summer 2010 Registration: **P SC 3034**
- PSCI 4124 - Denver Politics Summer 2010 Registration: **P SC 4124**
- PSCI 4185 - Corruption in the U.S. and Abroad Summer 2010 Registration: **P SC 4185**
- PSCI 4427 - Law, Politics and Justice Summer 2010 Registration: **P SC 4427**
- PSCI 4477 - Constitutional Law I Summer 2010 Registration: **P SC 4477**
- PSCI 4487 - Constitutional Law II Summer 2010 Registration: **P SC 4487**
- PSCI 4545 - Immigration Politics Summer 2010 Registration: **P SC 4545**
- PSCI 4837 - Contemporary Issues in Civil Liberties Summer 2010 Registration: **P SC 4837**
- PSYC 3135 - Organizational Psychology Summer 2010 Registration: **PSY 3135**
- PSYC 3205 - Human Development I: Child Psychology Summer 2010
Registration: **PSY 3205**
- PSYC 3215 - Human Development II: Adolescence and Adulthood Summer 2010
Registration: **PSY 3215**
- PSYC 3265 - Drugs, Brain and Behavior Summer 2010 Registration: **PSY 3265**
- PSYC 3305 - Abnormal Psychology Summer 2010 Registration: **PSY 3305**
- PSYC 3612 - Domestic Abuse Summer 2010 Registration: **PSY 3612**

- SOCY 2462 - Introduction to Social Psychology Summer 2010 Registration: **SOC 2462**
- SOCY 3020 - Race and Ethnicity in the U.S. Summer 2010 Registration: **SOC 3020**
- SOCY 3600 - Social Relations Summer 2010 Registration: **SOC 3600**
- SOCY 3700 - Sociology of the Family Summer 2010 Registration: **SOC 3700**
- SOCY 4340 - Juvenile Delinquency Summer 2010 Registration: **SOC 4340**
- SOCY 4440 - Social Stratification Summer 2010 Registration: **SOC 4440**
- SOCY 4460 - Hate Groups and Group Violence Summer 2010 Registration: **SOC 4460**
- SOCY 4770 - Advanced Topics in Sociology Summer 2010 Registration: **SOC 4770**

Total: 6 hours

****Students must comply with departmental prerequisites.**

Examples for Areas of Concentration

Juvenile Justice

- CRJU 2510 - Juvenile Justice Administration Summer 2010 Registration: **C J 2510**
- CRJU 3540 - Crime and Delinquency Prevention Summer 2010 Registration: **C J 3540**
- CRJU 4520 - Gangs and Criminal Organizations Summer 2010 Registration: **C J 4520**
- SOCY 3700 - Sociology of the Family Summer 2010 Registration: **SOC 3700**
- SOCY 4340 - Juvenile Delinquency Summer 2010 Registration: **SOC 4340**

Total: 15 hours

Law and Society

- CRJU 3420 - Pleas, Trials and Sentences Summer 2010 Registration: **C J 3420**
- CRJU 4430 - Law and Society Summer 2010 Registration: **C J 4430**
- CRJU 4440 - Courts and Social Policy Summer 2010 Registration: **C J 4440**
- PSCI 4427 - Law, Politics and Justice Summer 2010 Registration: **P SC 4427**
- PSCI 3034 - Race, Gender, Law and Public Policy Summer 2010 Registration: **P SC 3034**

Total: 15 hours

Domestic Violence

- CRJU 4140 - Domestic Violence and Crime Summer 2010 Registration: **C J 4140**
- CRJU 4170 - Victim Studies Summer 2010 Registration: **C J 4170**
- CRJU 4530 - Families and Intergenerational Crime Summer 2010 Registration: **C J 4530**
- COMM 4265 - Gender and Communication Summer 2010 Registration: **CMMU 4265**
- PSYC 3612 - Domestic Abuse Summer 2010 Registration: **PSY 3612**

Total: 15 hours

Bachelor of Arts/Master of Public Administration

Public Affairs BA/MPA

The College of Liberal Arts and Sciences and the School of Public Affairs, offer students the opportunity to complete both a bachelor's degree and master's degree in five years rather than the usual six years. The program combines undergraduate general education and major studies with a specialized curriculum in public affairs and strives to develop intellectual and professional skills in a coordinated manner. The five year BA/MPA program decreases the time and number of semester hours required to earn both degrees by allowing students to count graduate level courses in the School of Public Affairs toward the bachelor's degree requirements. The program is designed to give students an opportunity to prepare for professional positions and advancement with federal, state or local governments, nonprofits or private sector firms concerned or involved with public affairs.

Admissions Requirements and Recommendations

Interested students should contact their CLAS advisor as early as possible to ensure proper planning for the five year degree.

Interested students should contact the MPA Director as early as possible for advising (Dr. Mary Guy, 303-315-2007 or mary.guy@ucdenver.edu).

Students may apply to the program during the semester in which they will successfully complete 90 semester hours.

To apply, students must have a 3.5 or higher GPA in CLAS.

Students who wish to apply should have most of their general education and major requirements completed by the time they have earned 90 semester hours.

Students must complete all the required application materials for the School of Public Affairs:

- The UC Denver graduate application, parts 1 and 2
- A declaration of program form
- A resume highlighting work and volunteer experience, extra-curricular activities and any special skills, achievements and awards
- Scores from the GRE, GMAT or LSAT (GRE preferred)

Program Requirements

Students must fulfill all the requirements for graduation for CLAS:

- Total of 120 hours (includes hours in public affairs)
- 30 hours in the core curriculum
- 30-48 hours to satisfy major requirements
- Writing proficiency (1 – 7 hours)
- Mathematics proficiency (0 – 3 hours)
- Level III foreign language (0 – 13 hours)
- It is highly recommended that students complete a course in American government, statistics and economics before applying to the MPA program

Students must maintain a 3.5 GPA in CLAS course work.

Students may complete a maximum of 18 semester hours of SPA course work while classified as an undergraduate student.

Students must fulfill all the requirements for graduation from SPA:

- Total of 36–39 semester hours in public affairs
- Six core courses (PUAD 5001 – PUAD 5006)
- Five elective courses at the graduate level (5000 and 6000 level courses)
- Nine of the 15 elective semester hours must be PUAD courses
- An internship (3 hours) is required from those who do not have significant work experience in the field
- Successful completion of the advanced seminar (capstone) course taken in a semester AFTER all core courses are completed. A thesis option is available. Interested students should contact their SPA faculty advisor.

Students must maintain a 3.0 or higher GPA in public affairs course work.

Program Options

BA/MPA students may choose from any CLAS major.

BA/MPA students may choose to do a general MPA or select a MPA concentration in local government, nonprofit management, environmental policy, emergency management and homeland security or domestic violence.

Degree Confirmation

Students are eligible to receive a bachelor's degree once they have successfully completed 120 semester hours and all CLAS requirements. The BA/MPA will be conferred once the student has completed all requirements of the master of public administration degree, including at least 36 hours of graduate level course work.

Certificate

Domestic Violence Graduate Certificate

Certificate Requirements

Students take the four specified courses below and one elective.

- PUAD 5910 - Women and Violence: A Sociological Perspective *Summer 2010*
Registration: P AD 5910
- PUAD 5920 - Psychology of Violence Against Women *Summer 2010*
Registration: P AD 5920
- PUAD 5930 - Battered Women and the Legal System *Summer 2010*
Registration: P AD 5930
- PUAD 5940 - Domestic Violence Social Change and Advocacy *Summer 2010*
Registration: P AD 5940

Total: 15 Hours

Emergency Management and Homeland Security Graduate Certificate

Certificate Requirements

Students take two required courses as well as three elective courses approved by their advisor. The emergency management and homeland security concentration/certificate allows students to choose electives organized in the following tracks: policy and management, spatial analysis and quantitative assessment, public safety, homeland security and justice or public and environmental health. Students may choose courses in one track to create a more focused concentration or pick from among the tracks to fulfill their elective course requirements.

- GEOG 5230 - Hazard Mitigation and Vulnerability Assessment Summer 2010
Registration: **GEOG 5230**
 - PUAD 5650 - Disaster and Emergency Management Policies Summer 2010
Registration: **P AD 5650**
- Electives approved by advisor (3) (6-9 semester hours)

Total: 15 Hours

The emergency management and homeland security certificate requires the completion of three electives chosen from a preapproved, multidisciplinary list of courses relevant to emergency management. Students may choose electives in one of three tracks: policy and management; spatial analysis, planning and quantitative assessment; or public safety, homeland security and justice.

Environmental Policy, Management and Law Graduate Certificate

Certificate Requirements

Students take at least two of the three courses listed below:

- PUAD 5631 - Seminar in Environmental Politics and Policy Summer 2010
Registration: **P AD 5631**

- PUAD 5632 - Seminar in Environmental Management Summer 2010
Registration: **P AD 5632**
- PUAD 5633 - Seminar in Natural Resource and Environmental Health Law Summer 2010
Registration: **P AD 5633**

Total: 15 Hours

Local Government Graduate Certificate

Certificate Requirements

Students take at least two of the three courses listed below:

- PUAD 5625 - Local Government Management Summer 2010 Registration: **P AD 5625**
- PUAD 5626 - Local Government Politics and Policy Summer 2010 Registration: **P AD 5626**
- PUAD 5628 - Urban Social Problems Summer 2010 Registration: **P AD 5628**
Electives approved by advisor (3) (6-9 semester hours)

Total: 15 Hours

Nonprofit Management Graduate Certificate

Certificate Requirements

Students take two required courses as well as electives approved by advisor.

- PUAD 5110 - Seminar in Nonprofit Management Summer 2010 Registration: **P AD 5110**
- PUAD 5140 - Nonprofit Financial Management Summer 2010 Registration: **P AD 5140**
Additional electives (3): **Semester Hours: 9**

Total: 15 Hours

Non Degree

Criminal Justice Minor

Program Requirements

A minor in criminal justice requires 18 semester hours of course work including the following:

- CRJU 1001 - Introduction to Criminal Justice *Summer 2010 Registration: C J 1001*
- CRJU 2041 - Crime Theory and Causes *Summer 2010 Registration: C J 2041*

Total: 6 Hours

At least one of the following

- CRJU 4042 - Corrections *Summer 2010 Registration: C J 4042*
- CRJU 4043 - Law Enforcement *Summer 2010 Registration: C J 4043*
- CRJU 4044 - Courts and Judicial Process *Summer 2010 Registration: C J 4044*

Total: 3-9 Hours

One to three additional elective courses in criminal justice or ancillary fields.

Master of Criminal Justice

Criminal Justice MCJ

► Graduate School Rules apply to this program

Program Director: Mary Dodge, PhD

Faculty

Professors:

Mark Pogrebin, PhD, University of Iowa

Eric Poole, PhD, Washington State University

Associate Professors:

Mary Dodge, PhD, University of California, Irvine
Angela Gover, PhD, University of Maryland
Callie Rennison, PhD University of Houston
Paul Stretesky, PhD Florida State University

Assistant Professor:

Deanna Perez, PhD, University of Maryland

Associate Research Professor:

Jerry Williams, DPA, University of Colorado Denver

The master of criminal justice (MCJ) program is designed for students interested in comprehensive professional graduate education in the field of criminal justice. It is intended to develop in the student an in-depth understanding of the fields within criminal justice and of background material from supporting disciplines, which enables the student to adapt to many operational specializations.

As an academic and professional field of study, this program is dedicated to preparing men and women not only to administer the system as it presently exists—but also to evaluate, to analyze and to change—to become pioneers in accelerating the shaping of a rational and responsive criminal justice system.

To deal with this system effectively, research design capability must be developed along with the skills required for the ordering and analysis of empirical data. This course of study prepares the student to be an innovator in crime control and prevention through course work dealing with strategies and skills for promoting individual, organizational and social change.

MPA AND MCJ—General Information**Admission Requirements**

1. A baccalaureate degree from a college or university of accredited standing, with a minimum GPA of 3.0. Two sets of official transcripts are required from all higher education institutions attended.

2. Three recommendations from qualified references. Recommendations may be from professors, employers and/or others acquainted with the prospective student's professional and/or academic work.
3. Applicants are required to take the GRE, the GMAT or the LSAT unless they meet the requirements for waiver. Standard graduate admission test scores are normally waived when the candidate already has a graduate degree in another field from an accredited institution. Other applicants may have test scores waived if they have an undergraduate GPA of 3.0 or better *and* they have *significant* professional employment in management or policymaking positions for a minimum of 10 years or the equivalent.
4. A current resume highlighting professional accomplishments and community involvement.
5. International students whose first language is not English are required to take the TOEFL or IELTS. A score of 550 or higher on the paper-based exam or 213 or higher on the computer-based exam is required for the MPA or 525/197 for the MCJ.

All application material and test scores should be sent to SPA, University of Colorado Denver, Campus Box 142, P.O. Box 173364, Denver, CO 80217-3364.

SPA will process applications as they come in. Master-level applicants generally receive notification of their admission status three weeks after all materials have been received in the office. The preferred deadlines listed below allow students to receive best consideration for scholarships, financial aid and course selection. *Students who do not meet the preferred deadline may still submit application materials until approximately one month before the start of classes and will be considered on a space-available basis.*

<i>Semester</i>	<i>Preferred Application Deadline</i>	<i>Final Deadline*</i>
Fall	March 15	August 1
Spring	October 15	December 1
Summer	March 15	May 1

*Final deadline does not apply to international students who should contact the Office of International Admissions for deadline information.

Provisional Admission

Under special circumstances, a student may be admitted on provisional status for one semester. Students admitted on a provisional basis take two courses in their first semester. MPA students may select two of the following: PUAD 5001 , 5003 or 5004 .

They may take no other courses during that semester. Based on their performance in these courses, a decision will be made concerning their admission into the program.

Nondegree Admissions

Students may register as nondegree students while developing their application packet. However, students are discouraged from taking many courses as a nondegree student if they hope to pursue a degree. **Nine semester hours taken in the program as a nondegree student may be applied to the master's degree programs with approval of an advisor.** Nondegree student application forms are available in the Office of Admissions or online.

Transfer of Credit to SPA

Up to 9 semester hours of appropriate graduate work from an accredited college or university may transfer, if such credit was not applied to a completed degree.

Limitation of Course Load

The normal course load for a full-time student is 9 semester hours. A student who is employed full time may not carry more than 9 hours unless an excess load has been approved in advance by the faculty advisor.

Financial Assistance

Students in the master's degree programs are eligible for several types of financial assistance. Educational loans require application to the Office of Financial Aid on the Downtown Campus and completion of the FAFSA. A number of students secure internships or other part-time positions with local, state and federal agencies in the Denver metropolitan area. Scholarship assistance is available on a limited basis.

The school receives announcements for fellowships from various government organizations and actively seeks additional funding for student support in the form of internship positions and research assistantships.

Persons interested in applying for financial assistance should inquire in the SPA office. The deadline for current students is March 15 for the fall term. Prospective students seeking scholarship funds should have complete scholarship applications on file at the SPA office by the preferred application deadline for the semester they are requesting funds.

The Internship Program

An internship for the MPA and MCJ programs is required for students who have not had significant public, nonprofit or private-sector experience. The purpose of the internship is to continue the linkage between theory and practice that is the philosophical basis of SPA. The internships generally involve part-time work. A maximum of three semester hours will be awarded for internship service. Great care is taken by the SPA to ensure that the internship experience meets the intellectual needs of the student. Placements have included the Governor's Office, Colorado General Assembly, Denver Mayor's Office, City of Denver, Denver Police Department, Boulder Crime Lab, Western Governor's Association, the National Conference of State Legislatures, the Colorado Department of Public Health and Environment and the Denver Center for the Performing Arts.

Time Limit for Master's Degree

Master's degree students must complete all course work and degree requirements within six years of registration in their first course.

Degree Requirements

1. Graduate Study

The program leading to the MCJ degree requires a minimum of 36 semester hours of appropriate graduate study with an average of B or better. No grade below C will be accepted for graduate credit. No more than 6 semester hours of independent study can be applied toward the degree.

2. Core Courses

The completion of the following core courses is required with a grade of B- or better:

- CRJU 5000 - Law and Social Control Summer 2010 Registration: **C J 5000**
- CRJU 5100 - Administration of Criminal Justice Summer 2010 Registration: **C J 5100**
- CRJU 5120 - Nature and Causes of Crime Summer 2010 Registration: **C J 5120**
- CRJU 5321 - Research Methods Summer 2010 Registration: **C J 5321**

Total: 12 Hours

3. Course Work

Students must complete a minimum of 27 semester hours of course work in criminal justice.

4. Criminal Justice Experience

Students who have not had criminal justice experience are required to complete CRJU 6910 (field study). A minimum of 240 hours of supervised work is required to earn 3 hours of credit. All required core courses must be completed before taking CRJU 6910.

5. Advanced Seminar

All MCJ students, except those pursuing the thesis option, must complete the advanced seminar during the last semester of their degree program. All core classes must be completed before taking the advanced seminar. Students admitted before spring 2009 may opt to take a written comprehensive exam in lieu of CRJU 5561.

- CRJU 5561 - Advanced Seminar in Criminal Justice Summer 2010 Registration: **C J 5561**

Students must receive the approval of both a faculty advisor and the director of the criminal justice program to complete a thesis for 3–6 semester hours in lieu of the advanced seminar.

Elective Courses

The courses listed below may be taken as electives for the MCJ degree:

- CRJU 5200 - Wrongful Convictions Summer 2010 Registration: **C J 5200**
- CRJU 5210 - Prisoner Reentry Summer 2010 Registration: **C J 5210**
- CRJU 5220 - The American Jury System Summer 2010 Registration: **C J 5220**
- CRJU 5250 - Criminal Offenders Summer 2010 Registration: **C J 5250**
- CRJU 5260 - Crime and Literature Summer 2010 Registration: **C J 5260**
- CRJU 5325 - Qualitative Methods for Criminal Justice Summer 2010 Registration: **C J 5325** or
- CRJU 7325 - Qualitative Methods for Criminal Justice Summer 2010 Registration: **C J 7325**
- CRJU 5410 - Victimology Summer 2010 Registration: **C J 5410**
- CRJU 5430 - Drugs, Alcohol and Crime Summer 2010 Registration: **C J 5430**
- CRJU 5510 - Contemporary Issues in Law Enforcement Summer 2010 Registration: **C J 5510** or
- CRJU 7510 - Seminar: Contemporary Issues in Law Enforcement Summer 2010 Registration: **C J 7510**
- CRJU 5520 - Corrections Summer 2010 Registration: **C J 5520** or
- CRJU 7520 - Seminar: Corrections Summer 2010 Registration: **C J 7520**
- CRJU 5530 - Community Corrections Summer 2010 Registration: **C J 5530** or
- CRJU 7530 - Seminar: Community Corrections Summer 2010 Registration: **C J 7530**

- CRJU 5540 - Juvenile Justice Administration Summer 2010 Registration: C J 5540 or
- CRJU 7540 - Seminar: Juvenile Justice Administration Summer 2010 Registration: C J 7540
- CRJU 5552 - Criminal Justice Ethics Summer 2010 Registration: C J 5552 or
- CRJU 7552 - Seminar: Criminal Justice Ethics Summer 2010 Registration: C J 7552
- CRJU 5553 - Women and Crime Summer 2010 Registration: C J 5553 or
- CRJU 7553 - Seminar: Women and Criminal Justice Summer 2010 Registration: C J 7553
- CRJU 5554 - Criminal Justice Reform Summer 2010 Registration: C J 5554 or
- CRJU 7554 - Seminar: Criminal Justice Reform Summer 2010 Registration: C J 7554
- CRJU 5571 - The Social Organization of Crime Summer 2010 Registration: C J 5571 or
- CRJU 7571 - Advanced Seminar: The Social Organization of Crime Summer 2010 Registration: C J 7571
- CRJU 5572 - Race, Crime and Justice Summer 2010 Registration: C J 5572 or
- CRJU 7572 - Advanced Seminar: Race, Crime and Justice Summer 2010 Registration: C J 7572
- CRJU 5574 - White Collar Crime Summer 2010 Registration: C J 5574 or
- CRJU 7574 - Advanced Seminar: White Collar Crime Summer 2010 Registration: C J 7574
- CRJU 5575 - The Mentally Disordered Offender Summer 2010 Registration: C J 5575 or
- CRJU 7575 - Advanced Seminar: The Mentally Disordered Offender Summer 2010 Registration: C J 7575

MCJ Options

Concentration in Domestic Violence

A student may choose to complete a concentration in domestic violence as part of the MCJ degree. The concentration provides an interdisciplinary perspective on crime, the formulation of laws and codes, the criminal legal system and its intersection with women and violence. Students seeking a domestic violence concentration must complete 15 semester hours related to domestic violence, which are completed via intensive workshops that meet periodically throughout a two-year period.

- PUAD 5910 - Women and Violence: A Sociological Perspective Summer 2010 Registration: P AD 5910
- PUAD 5920 - Psychology of Violence Against Women Summer 2010 Registration: P AD 5920

- PUAD 5930 - Battered Women and the Legal System Summer 2010
Registration: P AD 5930
- PUAD 5940 - Domestic Violence Social Change and Advocacy Summer 2010
Registration: P AD 5940
Elective (1) (3 semester hours)

Total: 15 Hours

Online Option

SPA is launching an online option for the master of criminal justice degree in 2010.

Designed to serve students who are looking for a high-quality education, but who need an alternative to traditional classroom instruction, students may elect to do one or all of their courses online. This option allows students to complete the entire degree at a distance or to choose to come to campus for some courses while using an interactive online format for others. For both in-state and out-of-state online students, tuition is comparable to the rate charged to in-state students for courses that meet in the classroom.

Master of Public Administration

Public Administration MPA

Program Director: Mary Guy, PhD

Faculty

Professors:

Kathleen Beatty, PhD, Washington State University
Lloyd Burton, PhD, University of California, Berkley
Peter deLeon, PhD, Pardee RAND Graduate School
Robert Gage, PhD, Indiana University
Mary Guy, PhD, University of South Carolina
Richard Stillman, PhD, Syracuse University
Paul Teske, PhD, Princeton University

Associate Professors:

Linda deLeon, PhD, University of California, Los Angeles
Angela Gover, PhD, University of Maryland

Tanya Heikkila, PhD University of Arizona
Jody Fitzpatrick, PhD, University of Texas, Austin
Christine Martell, PhD, Indiana University
Jessica Sowa, PhD, Syracuse University
Paul Stretesky, PhD, Florida State University
Allan Wallis, PhD, City University Graduate Center

Assistant Professors:

Danielle Varda, PhD, University of Colorado Denver
Chris Weible, PhD, University of California-Davis

MPA, West Slope Director:

Fred Rainguet, PhD, University of Colorado

Wirth Chair:

Sen. Gary Hart (Ret.), JD, Yale University

Research Professor:

Stephen Block, PhD, University of Colorado

Clinical Professor:

Malcolm Goggin, PhD, Stanford University

Research Associate:

Robert Reichardt, PhD, Pardee RAND Graduate School
Kelly Hupfeld, JD, Northwestern University

Professors Emeritus:

John Buechner, PhD, University of Michigan
Dale Neugarten, PhD, University of Southern California

The master of public administration (MPA) is designed to provide graduate professional education for students who wish to prepare themselves for careers in public management or policy, in nonprofit organizations or in private corporations that interface with the other sectors. The program also offers to those already in public service an opportunity to pursue additional education as a means of furthering their careers.

MPA AND MCJ—General Information

Admission Requirements

1. A baccalaureate degree from a college or university of accredited standing, with a minimum GPA of 3.0. Two sets of official transcripts are required from all higher education institutions attended.
2. Three recommendations from qualified references. Recommendations may be from professors, employers and/or others acquainted with the prospective student's professional and/or academic work.
3. Applicants are required to take the GRE, the GMAT or the LSAT unless they meet the requirements for waiver. Standard graduate admission test scores are normally waived when the candidate already has a graduate degree in another field from an accredited institution. Other applicants may have test scores waived if they have an undergraduate GPA of 3.0 or better *and* they have *significant* professional employment in management or policymaking positions for a minimum of 10 years or the equivalent.
4. A current resume highlighting professional accomplishments and community involvement.
5. International students whose first language is not English are required to take the TOEFL or IELTS. A score of 550 or higher on the paper-based exam or 213 or higher on the computer-based exam is required for the MPA or 525/197 for the MCJ.

All application material and test scores should be sent to SPA, University of Colorado Denver, Campus Box 142, P.O. Box 173364, Denver, CO 80217-3364.

SPA will process applications as they come in. Master-level applicants generally receive notification of their admission status three weeks after all materials have been received in the office. The preferred deadlines listed below allow students to receive best consideration for scholarships, financial aid and course selection. *Students who do not meet the preferred deadline may still submit application materials until approximately one month before the start of classes and will be considered on a space-available basis.*

<i>Semester</i>	<i>Preferred Application Deadline</i>	<i>Final Deadline*</i>
Fall	March 15	August 1
Spring	October 15	December 1

Summer

March 15

May 1

*Final deadline does not apply to international students who should contact the Office of International Admissions for deadline information.

Provisional Admission

Under special circumstances, a student may be admitted on provisional status for one semester. Students admitted on a provisional basis take two courses in their first semester. MPA students may select two of the following: PUAD 5001 , 5003 or 5004 . They may take no other courses during that semester. Based on their performance in these courses, a decision will be made concerning their admission into the program.

Nondegree Admissions

Students may register as nondegree students while developing their application packet. However, students are discouraged from taking many courses as a nondegree student if they hope to pursue a degree. **Nine semester hours taken in the program as a nondegree student may be applied to the master's degree programs with approval of an advisor.** Nondegree student application forms are available in the Office of Admissions or online.

Transfer of Credit to SPA

Up to 9 semester hours of appropriate graduate work from an accredited college or university may transfer, if such credit was not applied to a completed degree.

Limitation of Course Load

The normal course load for a full-time student is 9 semester hours. A student who is employed full time may not carry more than 9 hours unless an excess load has been approved in advance by the faculty advisor.

Financial Assistance

Students in the master's degree programs are eligible for several types of financial assistance. Educational loans require application to the Office of Financial Aid on the Downtown Campus and completion of the FAFSA. A number of students secure internships or other part-time positions with local, state and federal agencies in the Denver metropolitan area. Scholarship assistance is available on a limited basis.

The school receives announcements for fellowships from various government organizations and actively seeks additional funding for student support in the form of internship positions and research assistantships.

Persons interested in applying for financial assistance should inquire in the SPA office. The deadline for current students is March 15 for the fall term. Prospective students seeking scholarship funds should have complete scholarship applications on file at the SPA office by the preferred application deadline for the semester they are requesting funds.

The Internship Program

An internship for the MPA and MCJ programs is required for students who have not had significant public, nonprofit or private-sector experience. The purpose of the internship is to continue the linkage between theory and practice that is the philosophical basis of SPA. The internships generally involve part-time work. A maximum of three semester hours will be awarded for internship service. Great care is taken by the SPA to ensure that the internship experience meets the intellectual needs of the student. Placements have included the Governor's Office, Colorado General Assembly, Denver Mayor's Office, City of Denver, Denver Police Department, Boulder Crime Lab, Western Governor's Association, the National Conference of State Legislatures, the Colorado Department of Public Health and Environment and the Denver Center for the Performing Arts.

Time Limit for Master's Degree

Master's degree students must complete all course work and degree requirements within six years of registration in their first course.

Degree Requirements

The minimum requirements for the basic MPA degree are outlined below. Occasionally, changes are made; students may graduate under the requirements that were in effect when they were admitted.

1. Graduate Course Work

All students must complete a minimum of 36 semester hours of graduate course work, with an average of B or better. No more than 6 semester hours of independent study can be applied toward the degree. Students who have not had professional work experience in the public or nonprofit sectors must complete an internship through an additional 3-

semester-hour course described in No. 6 below, bringing their total semester-hour requirements to 39.

2. Complete the Following Core Courses

All MPA students (with the exception of those in the executive MPA option) must complete the following core courses or approved equivalents:

- PUAD 5001 - Introduction to Public Administration and Public Service *Summer 2010 Registration: P AD 5001*
- PUAD 5002 - Organizational Management and Change *Summer 2010 Registration: P AD 5002*
- PUAD 5003 - Research and Analytic Methods *Summer 2010 Registration: P AD 5003*
- PUAD 5004 - Economics and Public Finance *Summer 2010 Registration: P AD 5004*
- PUAD 5005 - The Policy Process and Democracy *Summer 2010 Registration: P AD 5005*
- PUAD 5006 - Leadership and Professional Ethics *Summer 2010 Registration: P AD 5006*

Total: 18 Hours

Students must receive a grade of *B-* or better in each core course. Students who earn a lower grade may repeat the course once to attempt to earn a *B-* or better.

3. Electives

All MPA students must complete 15 hours of electives. Courses in which a student earns a grade of less than a *C* will not be counted toward a degree.

4. Advanced Seminar Class

All MPA students, except those pursuing the thesis option, must complete the advanced seminar class during the last semester of their degree program. All core courses must be completed before beginning the advanced seminar.

- PUAD 5361 - Advanced Seminar in Public Policy and Management *Summer 2010 Registration: P AD 5361*

5. Thesis Option

The thesis option is available in lieu of PAD 5361 for MPA students who have an interest in pursuing a topic in-depth or who are planning to pursue a career in research or

academia. Students must receive approval from their faculty advisor or the MPA director to pursue the thesis option. The thesis is a six credit course that normally spans two semesters.

6. Internships

Students who have limited experience (generally defined as less than one year of experience) in public, nonprofit or relevant private-sector service must enroll in P AD 6910, Field Study in Public Administration. The decision to require P AD 6910 for a particular student is made by the faculty admissions committee or the student's faculty advisor upon the student's acceptance to the MPA program. A minimum of 300 hours of supervised work and study is required to earn 3 semester hours of credit. This requirement raises the total semester hours needed to earn the MPA degree to 39.

MPA Options

Concentrations and Graduate Certificates

All SPA concentrations are a total of 15 semester hours and may either be taken as part of the MPA program or as a stand-alone graduate certificate.

A student *may* choose to select one of the concentrations described below or may complete the MPA without a specified concentration. Students completing a concentration take their electives in the area of their concentration, complete the advanced seminar project in the area of their concentration and are advised by faculty from the concentration. The concentrations and their particular required courses are:

Environmental Policy, Management and Law Concentration

Students take at least two of the three courses listed below:

- PUAD 5631 - Seminar in Environmental Politics and Policy Summer 2010
Registration: P AD 5631
 - PUAD 5632 - Seminar in Environmental Management Summer 2010
Registration: P AD 5632
 - PUAD 5633 - Seminar in Natural Resource and Environmental Health Law Summer 2010
Registration: P AD 5633
- Electives approved by advisor (3) (6-9 semester hours)

Total: 15 Hours

Local Government Concentration

Students take at least two of the three courses listed below:

- PUAD 5625 - Local Government Management *Summer 2010 Registration: P AD 5625*
- PUAD 5626 - Local Government Politics and Policy *Summer 2010 Registration: P AD 5626*
- PUAD 5628 - Urban Social Problems *Summer 2010 Registration: P AD 5628*
Electives approved by advisor (3) (6-9 semester hours)

Total: 15 Hours

Domestic Violence Concentration

Students take four specified courses and one elective.

- PUAD 5110 - Seminar in Nonprofit Management *Summer 2010 Registration: P AD 5110*
- PUAD 5910 - Women and Violence: A Sociological Perspective *Summer 2010 Registration: P AD 5910*
- PUAD 5920 - Psychology of Violence Against Women *Summer 2010 Registration: P AD 5920*
- PUAD 5930 - Battered Women and the Legal System *Summer 2010 Registration: P AD 5930*
Elective approved by advisor (1) (3 semester hours)

Total: 15 Hours

Emergency Management and Homeland Security Concentration

Students take two required courses as well as electives approved by advisor.

- GEOG 5230 - Hazard Mitigation and Vulnerability Assessment *Summer 2010 Registration: GEOG 5230*
- PUAD 5650 - Disaster and Emergency Management Policies *Summer 2010 Registration: P AD 5650*
Electives approved by advisor (3) (6-9 semester hours)

Total: 15 Hours

The emergency management and homeland security concentration requires the completion of three electives chosen from a preapproved, multidisciplinary list of courses relevant to emergency management. Students may choose electives in one of three

tracks: policy and management; spatial analysis, planning and quantitative assessment; or public safety, homeland security and justice.

Nonprofit Organizations Concentration

Students take two required courses as well as nonprofit electives approved by advisor.

- PUAD 5110 - Seminar in Nonprofit Management *Summer 2010 Registration: P AD 5110*
 - PUAD 5140 - Nonprofit Financial Management *Summer 2010 Registration: P AD 5140*
- Other nonprofit courses (9 semester hours)

Total: 15 Hours

The Accelerated Cohort

The accelerated MPA is a fast-paced, full-time option that brings academically superior students together with a dedicated research and teaching faculty in the midst of the vibrant downtown Denver environment.

The accelerated option enables students to focus their energies in a concentrated program of study and earn a nationally accredited, 36-hour MPA in 12 months. (It is preferred that applicants have some knowledge of economics, statistics and political science.)

The cost for the accelerated option is the same for both in-state and out-of- state students, providing out-of-state students with substantial savings.

The students in the cohort enjoy a unique experience as they go through all classes in the MPA together, fostering a community of scholar-practitioners.

Students are admitted to the program in cohorts of approximately 20 participants. A new cohort starts each fall. The cohort format helps to increase the opportunity to become acquainted with other graduate students and increases the opportunities for interaction between program participants and faculty.

The Executive Option

The School of Public Affairs and the management development centers of the federal Office of Personnel Management have formed a partnership to offer an innovative course of study for selected senior level professionals in the public and nonprofit sectors.

The executive MPA option provides students with an opportunity to earn a master's degree targeted at improving their leadership competencies, while also offering significant flexibility in customizing coursework to fit students' individual needs and career objectives. In addition, the course formats—online courses and weekend or week-long intensive meetings—enable students to fit their study into the framework of busy lives.

The executive MPA option is intended to serve high-level managers and policy experts from public agencies—federal, state and local—as well as those from the nonprofit sector.

Program Design

The executive MPA option requires 30 semester hours of credit plus two required seminars at one of the management development centers of the federal Office of Personnel Management. One is in Aurora, Colorado; the other is outside Washington, D.C. The first required seminar is an assessment seminar. Students explore their own managerial and leadership styles, their personality types and their levels of competence in a variety of executive skills. A group of highly-skilled trainers and psychologists administers and interprets test results, and participants use this self-knowledge to plan their MPA degree.

Near the end of the program, students also participate in one of the management development centers' core leadership seminars. These seminars focus on developing competencies identified by the federal government as necessary for its highest-level managers, the senior executive service. The required Western Management Development Center courses should total six semester hours of graduate credit. More information is available online at www.leadership.opm.gov or by e-mail from WMDC Program Manager Bruce Kirschner at bhkirsch@opm.gov.

Executive students must take PUAD 5001, Introduction to Public Administration and Public Service, as one of their first courses. They then must select a minimum of three of the core courses listed below. Their advisor will assist in this selection. They must be able to demonstrate that they have gained competencies in the core courses they do not take through job experience and/or past course work.

Three of five are required:

- PUAD 5002 - Organizational Management and Change Summer 2010
Registration: P AD 5002
- PUAD 5003 - Research and Analytic Methods Summer 2010 *Registration: P AD 5003*
- PUAD 5004 - Economics and Public Finance Summer 2010 *Registration: P AD 5004*

- PUAD 5005 - The Policy Process and Democracy *Summer 2010 Registration: P*
AD 5005
- PUAD 5006 - Leadership and Professional Ethics *Summer 2010 Registration: P*
AD 5006

Total: 9 Hours

These courses may be taken at one of SPA's sites in Denver, Colorado Springs or Grand Junction, or, for students who live outside of Colorado, online.

Students also take five elective courses (15 semester hours), which may be selected either from the offerings at the management development centers or from SPA. Both partners provide a wide variety of courses. At least 18 semester hours must be SPA course work.

At or very near the end of their program, students participate in PUAD 5361, Advanced Seminar. In this course, students engage in a self-designed professional project that integrates their new skills and knowledge. In addition, they reassess their professional competencies, charting the progress they have made during the program and designing a plan for future developmental experiences.

Online Option

SPA provides a unique opportunity for students who live at a distance from the university to obtain a MPA degree.

Designed to serve students who are looking for a high-quality education, but who need an alternative to traditional classroom instruction, students may elect to do one or all of their courses online. This option allows students to complete the entire degree at a distance or to choose to come to campus for some courses while using an interactive online format for others. For both in-state and out-of-state online students, tuition is comparable to the rate charged to in-state students for courses that meet in the classroom. The nonprofit organization concentration is available online, as well as a variety of other electives leading to a general MPA degree. Students in the executive option may also choose to do all SPA course work online.

Domestic Violence Cohort

The first graduate program of its kind in the nation, the University of Colorado Denver's MPA concentration in domestic violence focuses on the management and policies surrounding domestic violence, as well as grass-roots social justice work and best practices in this emerging field. Each fall, 10 to 20 students are accepted into the cohort program, allowing the participants to build a strong community of advocates and learners.

The program invites students from around the world to participate in a unique cohort program, which combines online courses with five intensive campus seminars spaced throughout the two-year program. Students may choose to take all courses in the classroom if they wish.

The cost of the domestic violence concentration courses is the same for in-state and out-of-state students. Nonresident students pursuing the MPA with a concentration in domestic violence may also qualify for reduced tuition through the Western Regional Graduate Program which covers 14 western states.

Western Slope Cohort

Public and nonprofit sector professionals living in Colorado's Western Slope have the opportunity to earn a MPA without traveling to the Front Range. SPA offers one MPA course each semester in Grand Junction at Mesa State College and supplements these offerings with online courses. Courses are designed to integrate the academic and applied experiences necessary to be an effective modern manager. The courses are offered in an intensive weekend format and emphasize the needs of small and rural communities.

Master of Public Administration/Dual Degree

Public Administration MPA/JD

The School of Public Affairs and the University of Colorado at Boulder School of Law jointly sponsor a dual degree program leading to the simultaneous granting of the master of public administration (MPA) and juris doctor (JD) degrees. The program may be of particular interest to students who wish to practice law within the public sector, obtain a senior administrative post, represent public-sector clients, represent private-sector clients in transactions with government agencies and institutions and/or develop scholarly expertise in the relationship between law and public administration.

Interested persons must separately apply to and be admitted by both SPA and the School of Law. Upon admission, students may begin full-time study at either SPA or the School of Law; however, law study must be initiated no later than the beginning of the second year of enrollment in the program, and the first year of law study must be taken in its entirety and exclusive of nonlaw course work.

Through the choice of electives, students may develop a limited substantive specialization within the study of law and public administration. The dual degree program is structured to allow for 12 semester hours from the law school to be accepted as electives in the 36-semester-hour MPA program, and 12 semester hours from SPA to be accepted into the law school's 89-semester-hour JD program. Students are thus simultaneously awarded both degrees with a cumulative total of 101 semester hours; the

program therefore allows students to complete all dual degree requirements in approximately four years of full-time study. Students without prior public-sector work experience will be required to complete an internship in an appropriate governmental institution or closely related nonprofit organization.

Public Administration/Economics

MPA/MA

The fields of public administration and economics are inextricably linked. Economists provide much of the theory and analytic foundation that administrators use to evaluate and implement policy. Given that the capitol of Colorado is in Denver, there is great need for administrators that fully understand methods of program evaluation and have the theoretical background needed to forecast how individuals and institutions will respond to new proposals. Similarly, good theory and practice must take into account how the proposals will be implemented and results interpreted. Both administrators and economists need to be engaged in constructive dialogue for either to be fully effective.

Therefore the Department of Economics of the College of Liberal Arts and Sciences and the School of Public Affairs jointly sponsor a dual degree program. This program enables students to simultaneously earn an MA degree in economics with a master of public administration (MPA).

The dual degree program provides students to opportunity to take the core of both programs and choose electives that suit their career and personal goals best. Electives in one program are allowed to count as an elective in the other. The net result is that while both degrees separately require 66 hours, the dual degree program provides a more comprehensive and effective education in 48 hours or 73 percent of the dual degree total.

Degree Requirements

Admission into both programs

Students must apply separately to each program, meet the admission requirements of each program and be accepted by each program. If one program accepts a student for the dual degree but the other program does not, then the student will not be accepted for the dual degree. It is possible for students currently admitted to one program to learn about the dual degree and choose to apply after admission to either economics or SPA.

Other policies

Minimum Grade for Graduation

Students must maintain a GPA of 3.0 or higher across all courses that are applied to the dual degree. Students who fail to maintain a GPA of 3.00 will be placed on probation for a semester, after which they may be dropped from the dual degree program if the GPA is not increased to 3.0 or above. Additionally, any core course in which a student receives a final grade lower than B- cannot be counted toward the total credits required for the dual degree; in such a case, the student must retake the course.

Capstone Advising

All students are required to complete a capstone paper and obtain the signatures of three graduate faculty. Every dual degree student, regardless of the capstone course they choose (ECON 6073 or PUAD 5361) must select a committee composed of faculty from both programs.

Course Credit Transfers from Other Universities

No more than 6 hours may be transferred, and both SPA and economics program directors must approve any transfers.

Sample Plan of Study for the MPA/MA Economics

Total: 48 semester hours with 21 in economics and 27 in public administration

Core

(33 semester hours)

A grade of B- or better is required in all core courses, with a B average overall. No public administration course may be taken a third time.

- ECON 5073 - Microeconomic Theory Summer 2010 Registration: **ECON 5073**
- ECON 5083 - Macroeconomic Theory Summer 2010 Registration: **ECON 5083**
- ECON 5803 - Mathematical Economics Summer 2010 Registration: **ECON 5803**
- ECON 5813 - Econometrics I Summer 2010 Registration: **ECON 5813**
- ECON 5823 - Econometrics II Summer 2010 Registration: **ECON 5823**
- PUAD 5001 - Introduction to Public Administration and Public Service Summer 2010 Registration: **P AD 5001**
- PUAD 5002 - Organizational Management and Change Summer 2010 Registration: **P AD 5002**
- PUAD 5003 - Research and Analytic Methods Summer 2010 Registration: **P AD 5003**
- or
- PUAD 5004 - Economics and Public Finance Summer 2010 Registration: **P AD 5004**

- PUAD 5005 - The Policy Process and Democracy *Summer 2010 Registration: P AD 5005*
- PUAD 5006 - Leadership and Professional Ethics *Summer 2010 Registration: P AD 5006*
- ECON 6073 - Research Seminar *Summer 2010 Registration: ECON 6073*
or
- PUAD 5361 - Advanced Seminar in Public Policy and Management *Summer 2010 Registration: P AD 5361*
To be completed after all other core courses or with instructor and advisor consent.

Electives

(15 semester hours)

If the student takes PUAD 5361, then they are required to take 6 semester hours of economics electives and 9 semester hours of electives from SPA labeled 5000 or above.

If the student takes ECON 6073, then they are required to take 3 semester hours of economics electives and 12 semester hours of electives from SPA labeled 5000 or above.

Public Affairs/Urban and Regional Planning MPA/MURP

Background and Purpose

Public administration and urban and regional planning have many aspects in common. To provide students with an excellent education through understanding of both professions, the School of Public Affairs and the College of Architecture and Planning have developed a dual degree program. Students can obtain both master of public administration (MPA) and master of urban and regional planning (MURP) degrees with a minimum of 63 semester hours, as compared to a total of 87 semester hours to complete both degrees independently.

To be eligible for the dual MPA/MURP degree program, students must be admitted to each of the two schools under their respective admission procedures and standards and indicate an intention to pursue the dual degree. Students will take all the core courses and the advanced seminar in public policy and management required for an MPA, plus the core and concentration requirements necessary for the MURP.

Students in each school must apply to the other school before completing 18 hours in their respective programs. Upon admission to both schools, students will be assigned an advisor in each school to work out a specific degree plan.

Core and Elective Requirements

Core Courses (42 semester hours)

MURP

- URPL 5501 - Planning Issues and Processes Summer 2010 Registration: **URP 5501**
- URPL 5511 - Planning Methods II Summer 2010 Registration: **URP 5511**
- URPL 5520 - Urban Spatial Analysis Summer 2010 Registration: **URP 5520**
- URPL 5530 - Planning Law Summer 2010 Registration: **URP 5530**
- URPL 6630 - Planning Studio I Summer 2010 Registration: **URP 6630**
- URPL 6631 - Planning Studio II Summer 2010 Registration: **URP 6631**

Total: 18 Hours

MPA

- PUAD 5001 - Introduction to Public Administration and Public Service Summer 2010 Registration: **P AD 5001**
- PUAD 5002 - Organizational Management and Change Summer 2010 Registration: **P AD 5002**
- PUAD 5004 - Economics and Public Finance Summer 2010 Registration: **P AD 5004**
- PUAD 5005 - The Policy Process and Democracy Summer 2010 Registration: **P AD 5005**
- PUAD 5006 - Leadership and Professional Ethics Summer 2010 Registration: **P AD 5006**

Total: 15 Hours

Take one of two

- PUAD 5003 - Research and Analytic Methods Summer 2010 Registration: **P AD 5003**
- URPL 5510 - Planning Methods I Summer 2010 Registration: **URP 5510**

Total: 3 Hours

Additional Course Work (21 semester hours)

MURP

12 hours if URPL 5510 elected, or 15 hours if PUAD 5003 elected. Courses are to be selected with MURP advisor's approval.

- URPL 5510 - Planning Methods I *Summer 2010 Registration: **URP 5510***
- PUAD 5003 - Research and Analytic Methods *Summer 2010 Registration: **P AD 5003***

Total: 12-15 Hours

MPA

6 hours if PUAD 5003 elected, or 9 hours if URPL 5510 elected.

- PUAD 5003 - Research and Analytic Methods *Summer 2010 Registration: **P AD 5003***
- URPL 5510 - Planning Methods I *Summer 2010 Registration: **URP 5510***

Total: 6-9 Hours

Practicum

- PUAD 5361 - Advanced Seminar in Public Policy and Management *Summer 2010 Registration: **P AD 5361** (3 hours required)*

Total: 3 Hours (required)

Electives

Take one of the following or another option with MPA advisor's approval (3 hours):

- PUAD 5250 - Intergovernmental Management *Summer 2010 Registration: **P AD 5250***
- PUAD 5410 - Administrative Law *Summer 2010 Registration: **P AD 5410***
- PUAD 5440 - Negotiation and Conflict Resolution *Summer 2010 Registration: **P AD 5440***
- PUAD 5502 - Public Financial Management and Policy *Summer 2010 Registration: **P AD 5502***
- PUAD 5503 - Governmental Budgeting *Summer 2010 Registration: **P AD 5503***
- PUAD 5540 - Organization Development *Summer 2010 Registration: **P AD 5540***

- PUAD 5625 - Local Government Management Summer 2010 Registration: P AD 5625
- PUAD 5626 - Local Government Politics and Policy Summer 2010 Registration: P AD 5626
- PUAD 5631 - Seminar in Environmental Politics and Policy Summer 2010 Registration: P AD 5631
- PUAD 5632 - Seminar in Environmental Management Summer 2010 Registration: P AD 5632

Total: 3 Hours

Doctor of Philosophy

Public Affairs PhD

► Graduate School Rules apply to this program

Program Director: Peter deLeon, PhD

Faculty

Professors:

Kathleen Beatty, PhD, Washington State University
 Lloyd Burton, PhD, University of California, Berkley
 Peter deLeon, PhD, Pardee RAND Graduate School
 Robert Gage, PhD, Indiana University
 Mary Guy, PhD, University of South Carolina
 Richard Stillman, PhD, Syracuse University
 Paul Teske, PhD, Princeton University

Associate Professors:

Linda deLeon, PhD, University of California, Los Angeles
 Angela Gover, PhD, University of Maryland
 Jody Fitzpatrick, PhD, University of Texas, Austin
 Allan Wallis, PhD, City University Graduate Center
 Christine Martell, PhD, Indiana University

Assistant Professors:

George Busenberg, PhD, University of North Carolina at Chapel Hill

Danielle M. Varda, PhD, University of Colorado Denver
Christopher M. Weible, PhD, University of California-Davis
Wirth Chair:

Sen. Gary Hart (Ret.), JD, Yale University

Research Professor:

Stephen Block, PhD, University of Colorado

Clinical Professor

Malcolm Goggin, PhD, Stanford University

Research Associate:

Robert Reichardt, PhD, Pardee RAND Graduate School

Lecturers:

Todd Bryan, MPA, Harvard University
Floyd Ciruli, JD, Georgetown University
Wellington Webb, MA, University of Northern Colorado

Professors Emeritus:

John Buechner, PhD, University of Michigan
Dale Neugarten, PhD, University of Southern California

The School of Public Affairs offers a program of advanced graduate study leading to the doctor of philosophy in public affairs. The program, based on the Downtown Campus, permits elective work to be taken on any campus of the university if it is part of the approved program of study or degree plan.

The doctoral program was developed to meet the need for people with mastery in the scholarly theory, concepts and research skills of public administration, public policy and public management, and who are able to use such skills in careers of research, teaching and analysis of public-sector challenges. The PhD is designed to prepare students for leadership responsibilities in academia, research and public policy analysis. Accordingly,

the PhD stresses the development of theoretical, conceptual and methodological knowledge in public administration, policy and management.

Participants

The doctoral program is primarily designed to serve (1) people who desire to further the field of public policy and public and nonprofit management through teaching and research; (2) scholar-practitioners working in government, private-sector organizations concerned with government and nonprofit organizations; and (3) policy analysts in government, private-sector organizations concerned with government and nonprofit organizations.

Time Required for PhD Degree

The PhD program requires an intense commitment. Most courses and seminars are offered during the late afternoon, in the evenings or on an intensive basis. (Some electives are offered online, but core courses are not.) Anyone starting the PhD program with a master's degree in public administration can expect to take at least three but no more than eight years to complete all of the requirements for the PhD.

Students are required to enroll for a minimum of 6 semester hours of course work each fall and spring semester. All requirements for the PhD degree should be completed within eight years of admittance. Any student entering the program with no prior graduate work in public administration, public policy or management should expect additional course requirements.

PhD Admission Requirements

Admission to the program is based on the personal and professional qualifications of the applicant. It is desirable that an applicant have a master's degree in public administration or a closely related field before undertaking doctoral work. Applicants should have a 3.5 GPA or above in master-level course work, as well as a combined score of 1,000 or better on the quantitative and verbal sections of the GRE. Successful applicants will also show the potential for productive careers of scholarship, research and analysis.

Meeting the minimum thresholds listed above does not assure admission. In unusual cases, students who fail to meet the thresholds may be admitted if high academic skills are demonstrated in other ways.

PhD Application Process

Applicants must submit the following items to the SPA office before they can be formally considered for admission. The application deadline is February 1; admitted students will begin in the fall semester.

- application forms
- official transcripts (two copies) from all degree granting institutions
- GRE scores (no more than three years old)
- a resume or vita
- three letters of recommendation from colleagues and previous professors, focusing on the potential for deriving benefit from the PhD program
- a 500–1,000 word statement of educational and career goals, focusing on research interests

In addition, students may also submit samples of research reports or publications. All application materials will be retained by SPA and will not be returned. A personal meeting with the PhD director or other faculty member is recommended.

Financial Assistance

For excellent candidates, SPA will fund a small number of doctoral research assistantships each year based on financial availability. Students selected will receive a full-tuition waiver as well as a stipend of \$15,000 for the academic year. Our goal is to provide such funding for students for at least three years.

Degree Requirements

Course Work

A total of 36 semester hours of course work is required past a master's degree in public administration or a related degree. In some cases, additional prerequisite courses may be required to assure adequate preparation for doctoral studies. All PhD students are required to take a minimum of 6 semester hours of course work in both the fall and spring semesters, until their course work requirements are met, if they wish to maintain their full-time student status.

During their first year of study, all PhD students are required to take the following four doctoral seminars:

- PUAD 8010 - Historical and Comparative Foundations of Public Administration *Summer 2010 Registration: P AD 8010*
- PUAD 8020 - Seminar in Public Management *Summer 2010 Registration: P AD 8020*

- PUAD 8030 - Seminar in Public Policy Summer 2010 Registration: P AD 8030
- PUAD 8040 - Critical Issues in Public Affairs Summer 2010 Registration: P AD 8040

Total: 12 Hours

During the next year, doctoral students are required to take

- PUAD 8040 - Critical Issues in Public Affairs Summer 2010 Registration: P AD 8040
- PUAD 8070 - Advanced Seminar in Research Methods Summer 2010 Registration: P AD 8070
- PUAD 8060 - Seminar on Conduct of Empirical Inquiry Summer 2010 Registration: P AD 8060

Total: 6 Hours

Prerequisites for PUAD 8070 include PUAD 7330, Intermediate Statistical Analysis, PUAD 8010, 8020, 8030, 8040 and 8060. These prerequisites may be waived with the permission of the doctoral director.

In addition, all PhD students must complete a second methodology course (as well as four elective courses) relevant to the student's dissertation plans.

Comprehensive Exam and Dissertation

In addition to course work, PhD students must pass a comprehensive exam no later than the beginning of their third year of study. Students are also required to complete and defend, before a faculty committee, a dissertation that makes a significant contribution to the literature and theory of public administration, management or policy.

Students are advanced to candidacy for the PhD once they have completed all required course work and examinations, have successfully presented their research colloquium and have been certified for candidacy by his/her doctoral committee. After students are formally advanced to candidacy, they must register for a total of 30 hours of dissertation research credit to complete the PhD. Each fall and spring semester, students are expected to register for 5 semester hours of dissertation research; if unable to register for at least 5 semester hours, students must request a leave of absence from the PhD program until able to complete the minimum dissertation requirement. Students may take up to two semesters' leave of absence before they are disenrolled from the program. Students then would need to reapply to the program.

Further details on the program can be found in the *Handbook for the Doctor of Philosophy in Public Affairs Program*, available from the SPA office online at <http://spa.ucdenver.edu>.

Bachelor of Arts/Master of Criminal Justice

Criminal Justice BA/MCJ

The dual BA/MCJ program is designed to allow students to work concurrently toward the BA in criminal justice and the master in criminal justice (MCJ). Graduate credit hours earned while enrolled in the BA/MCJ program can be counted toward both the bachelor of arts and master of criminal justice. This program offers high-achieving students the opportunity to complete their undergraduate and graduate degrees in criminal justice in five years.

Admissions Requirements and Process

Interested students should contact their BA academic advisor as early as possible to ensure proper planning for the five year degree.

Eligibility Requirements

Both current UC Denver students and new transfer students are eligible to apply after meeting the following:

- Currently enrolled in the School of Public Affairs as a criminal justice major
- Completed the University of Colorado Denver's core curriculum
- Completed 60 semester credit hours
- Completed the following 12 semester credit hours in criminal justice: CRJU 1001 Introduction to Criminal Justice, CRJU 2041 Crime Theory and Causes, CRJU 3100 Criminal Justice Research Methods, and CRJU 3150 Statistics for Criminal Justice (transfer criminal justice courses must have been approved and accepted toward the major).
- Minimum 3.0 cumulative GPA
- Minimum 3.5 cumulative GPA in criminal justice courses
- Completed or Scheduled official GRE or LSAT exam

Application Process

Students can apply for the joint program anytime from their second year forward, but students will most likely apply during the second semester of their junior year. We require students submit all application materials by Oct. 15 for admission to the spring

semester and by March 15 for admission to the fall semester for full consideration. The following steps should help in the application process:

1. Plan ahead when scheduling courses through the junior year. All four of the required criminal justice courses and all of the student's core education requirements must be completed by the end of the student's junior year.
2. At the beginning of the semester in which the student is applying to the program, the student should approach a criminal justice faculty member about writing a letter of recommendation. The student should also begin working on a personal statement of purpose. The following guidelines should help with writing the statement.
 - Length 1 to 2 pages
 - The statement should describe:
 - Applicant's reasons for undertaking graduate study in criminal justice
 - Applicant's future career plans
 - Planned area of concentration within criminal justice
3. By Oct 15 of the fall semester or March 15 of the spring semester the student must submit the following items to the undergraduate coordinator:
 - Personal statement of purpose
 - One letter of recommendation from a faculty member
 - School of Public Affairs' BA/MCJ application form
 - Official GRE or LSAT scores

Admission Criteria

Admission to the BA/MCJ program is competitive. Applicants will be evaluated on the following:

1. Grade point average (overall and in criminal justice course work)
2. Grade trend (improving, consistent, or declining)
3. Total number of credit hours completed
4. Likelihood of success and persistence based from the Statement of Intent and Reference Letter
5. Official GRE or LSAT scores

Students who are not admitted to the BA/MCJ program are eligible to reapply after completing an additional 12 semester credit hours. *Students can apply and be considered for admission to the dual BACJ/MCJ program a maximum of two times.*

BA/MCJ Program Matriculation

Students must successfully complete (B, or better) a minimum of 6 semester credit hours of graduate criminal justice course work each academic year following admission

to the BA/MCJ program. A maximum of 15 graduate semester credits can be completed as a BA/MCJ student, for dual credit.

Students must maintain a minimum 3.0 cumulative grade point average for all course work and a 3.0 grade point average for courses in criminal justice.

The School of Public Affairs reserves the right to rescind a BA/MCJ student's admittance to the dual program *if at any point the students' grade point average falls below the requirements lists above.*

Tuition and Fees

Students will be assessed tuition and fees at the undergraduate rate until the bachelor of arts in criminal justice degree is conferred.

Students will assess tuition and fees at the graduate level upon formal acceptance to the master of criminal justice program.

Program Requirements

General BA/MCJ Degree Program Requirements

- 144 total semester credit hours passed
- 34-36 semester credit hours in UC Denver general education core curriculum
- 46-48 semester credit hours in general electives
- 21 semester hours of undergraduate criminal justice course work
- 18 upper-level (3000 or higher) semester credit hours in criminal justice
- 45 total semester hours of upper-division course work (3000 and above)
- Minimum 3.0 CU cumulative grade point average in undergraduate criminal justice courses
- Full acceptance to the Graduate School and the master in criminal justice program
- Minimum 36 semester hours of graduate-level course work (5000 and above)
- Minimum of 30 hours of resident credit; 21 out of the last 30 hours in resident course work
- Minimum of a B (3.0) in each required core MCJ course
- Minimum of 3.0 CU cumulative grade point average in all graduate level courses
- Successful completion of master of criminal justice capstone/advanced seminar or thesis
- Fulfillment of all college and major requirements

Degree Confirmation

Students are eligible to receive the BA in criminal justice degree once they have successfully completed 120 semester hours and all UC Denver undergraduate degree

requirements. The MCJ will be conferred once the student has completed all requirements of the master of criminal justice degree.

Programs

Undergraduate Areas of Study

Accounting Emphasis BS in Business Administration

Program Director: Michael Roberts

Telephone: 303-556-5884

E-mail: Michael.Roberts@ucdenver.edu

Accounting courses are offered in several fields of professional accountancy at the intermediate, advanced and graduate levels. They provide preparation for practice in one or more of the following fields:

- Auditing
- Financial Accounting
- Financial Management
- Management Control Systems
- Managerial Accounting
- Tax Accounting
- Teaching and Research

In all of these fields a thorough knowledge of the social, legal, economic and political environment is needed. A high degree of analytical ability and communication skill is indispensable. A grade of C must be earned in all accounting courses to qualify for graduation.

Courses in English composition, speech, ethics and logic are desirable. Courses in statistics and information systems, beyond the required business core courses, are highly recommended.

Required Courses

- ACCT 3054 - Accounting Systems and Data Processing
Summer 2010 Registration **ACCT 3054**
The design and analysis of accounting information systems, with special emphasis on computers and computer programming, and the role of accounting in the role of accounting in the management process. Must earn a grade of 'C' or

better to qualify for graduation. Prereq: Completion of ACCT 2220 and ISMG 2050 with a grade of 'C' or better (Strictly enforced). **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

- ACCT 3220 - Intermediate Financial Accounting I
Summer 2010 Registration **ACCT 3220**
An intensive analysis of generally accepted accounting principles, accounting theory and preparation of annual financial statements for public corporations. Must complete course with a 'C' to qualify in graduation requirements. Prereq: Completion of ACCT 2220 with a grade of 'C' or better. Strictly enforced. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.
- ACCT 3230 - Intermediate Financial Accounting II
Summer 2010 Registration **ACCT 3230**
Selected topics not covered in ACCT 3220. Must complete course with a grade of 'C' to qualify in graduation requirements. Prereq: ACCT 3220, completed with a grade of a 'C' or better. Strictly enforced. **Semester Hours:** 3to 3 **When Offered:** FALL SPR
Registration is changing. Visit our website for details ucdenver.edu/registration.
- ACCT 3320 - Intermediate Cost Accounting
Summer 2010 Registration **ACCT 3320**
Cost analysis for purposes of control and decision making. Analysis of cost behavior, role of accounting in planning and control, and managerial uses of cost accounting data. Includes use of computer assisted decision models. Must receive a 'C' grade to qualify in graduation requirements. Prereq: ACCT 2220, and DSCI 2010 completed with a grade of 'C' or better. Strictly enforced. **Semester Hours:** 3to 3 **When Offered:** FASPRSUM
Registration is changing. Visit our website for details ucdenver.edu/registration.
- ACCT 4410 - Income Tax Accounting
Summer 2010 Registration **ACCT 4410**
Provisions and procedures of federal income tax laws and requirements affecting individuals and business organizations, including problems of tax planning and compliance. Note: Students cannot receive credit for both ACCT 4410 and ACCT 6140. Prereq: ACCT 3230 completed with a grade of "C" or better. Strictly enforced. Cross-listed with ACCT 6140. **Semester Hours:** 3to 3 **When Offered:** FALL SPR
Registration is changing. Visit our website for details ucdenver.edu/registration.
- ACCT 4620 - Auditing
Summer 2010 Registration **ACCT 4620**
Generally accepted auditing standards and the philosophy supporting them; auditing techniques available to the independent public accountant. Pertinent

publications of the AICPS reviewed. Note: Students cannot receive credit for both ACCT 4620 and ACCT 6020. Prereq: ACCT 3230 must be completed with a grade of a 'C' or better. Strictly enforced. Cross-listed with ACCT 6020. **Semester Hours:** 3to 3**When Offered:** FALL SPR

Registration is changing. Visit our website for details ucdenver.edu/registration.

ACCT free elective (4000 level) (3 semester hours) choose one course from the following:

- ACCT 4240 - Advanced Financial Accounting
Summer 2010 Registration **ACCT 4240**
Advanced financial accounting concepts and practices with emphasis on accounting for partnerships, business combinations and consolidations. Prereq: Completion of ACCT 3230 with a grade of a 'C' or better. Strictly enforced. Cross-listed with ACCT 6024. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.
- ACCT 4070 - Management Accounting
Summer 2010 Registration **ACCT 4070**
Designed to provide students with a foundation in management accounting models and information, with emphasis on management decision making uses of accounting information. (Not recommended for candidates planning to sit for the CPA examination.) Prereq: ACCT 2200 and 2220 or equivalent with a grade of a 'C' or better. Note: students who have taken ACCT 3320 or its equivalent may not take this course. **Semester Hours:** 3to 3**When Offered:** SPRING
Registration is changing. Visit our website for details ucdenver.edu/registration.
- ACCT 4330 - Managerial Accounting Problems and Cases
Summer 2010 Registration **ACCT 4330**
Critical analysis of advanced topics in managerial accounting. Considerable use of cases and current readings. Prereq: Completion of ACCT 3320 with a grade of 'C'. Strictly enforced. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.
- ACCT 4370 - International Accounting
Summer 2010 Registration **ACCT 4370**
Designed to expose students to the international aspects of accounting and financial management. Includes discussion of some of the different financial accounting practices across countries; financial statement analysis in a global context, international auditing practices and procedures, international tax implications and the implications of operating within the regulations of the Foreign Corrupt Practices Act, the European Union, North American Free Trade Agreement and General Agreement on Tariffs and Trade. Prereq: Completion of ACCT 3220 with a grade of 'C' or better. Strictly enforced. Cross-listed with

ACCT 6370 and INTB 6370. **Semester Hours:** 3to 3**When Offered:** *SPRING*
Registration is changing. Visit our website for details ucdenver.edu/registration.

- ACCT 4520 - Oil and Gas Accounting

Summer 2010 Registration **ACCT 4520**

The Oil and Gas Accounting course is designed to give students an overview of the oil and gas industry and the particular accounting issues this industry faces. The focus is on the oil and gas industry but many of the issues discussed are appropriate and applicable to all energy-related entities. This is a valuable learning experience for those interested in acquiring an understanding of the accounting issues for energy management firms in preparation for entry into public accounting. The course enjoys support from the energy industry in the form of guest speakers and project ideas. Prereq: Completion of ACCT 3220 with a grade of 'C' or better. Strictly enforced. Cross-listed with ACCT 6520. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

- ACCT 4780 - Accounting and Information Systems Processes and Controls

Summer 2010 Registration **ACCT 4780**

The course is designed to develop knowledge and skills used to understand and evaluate corporate accounting processes and systems. It focuses on financial and information system internal controls and the flow of corporate information through an accounting system. A financial system objective and risk assessment approach is used to present concepts and techniques for evaluating the adequacy of system processes and controls. Prereq: Completion of ACCT 2200, ACCT 2220 and ACCT 3054 with a grade of 'C' or better (strictly enforced). Cross-listed with ACCT 6510, ISMG 4780, and ISMG 6510. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

- ACCT 4800 - Accounting for Government and Nonprofit Organizations

Summer 2010 Registration **ACCT 4800**

Planning and control of government and nonprofit organizations. Includes program budgets, responsibility accounting and fund accounting. Prereq: Completion of ACCT 3220 with a grade of 'C' and permission of instructor, strictly enforced. Cross-listed with ACCT 6080. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

- ACCT 4840 - Independent Study

Summer 2010 Registration **ACCT 4840**

Semester Hours: 1to 8

Registration is changing. Visit our website for details ucdenver.edu/registration.

- ACCT 4915 - Accounting for the Public Interest

Summer 2010 Registration **ACCT 4915**

Applies accounting knowledge and concepts in a not-for-profit organization. Student volunteers help with functions or special projects and are supervised by both faculty members and personnel from the agency to which they are assigned. Prereq: Permission of instructor. Cross-listed with ACCT 6015. **Semester Hours:** 3to 3 **When Offered:** FASPRSUM
Registration is changing. Visit our website for details ucdenver.edu/registration.

- ACCT 4950 - Special Topics

Summer 2010 Registration **ACCT 4950**

Research methods and results, special topics and professional developments in accounting. Consult the current 'Schedule Planner' for semester offerings. Prereq: Varies according to topic and instructor requirements. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 21 Hours

Students planning to pursue accounting as a career may take more than the above required hours. Many students complete a total of 30 hours of accounting, often taking two accounting courses each semester in their junior and senior years. Students should work closely with the accounting faculty and business advisors in planning their accounting programs.

The accounting program offers several 4000/6000-level courses. Students with credit for a 4000-level course cannot receive credit for the corresponding 6000-level course. Graduate students should take 6000-level courses.

Accounting students often specialize in a particular topical area of accounting.

Financial Accounting

Recommended Electives

- ACCT 4240 - Advanced Financial Accounting

Summer 2010 Registration **ACCT 4240**

Advanced financial accounting concepts and practices with emphasis on accounting for partnerships, business combinations and consolidations. Prereq: Completion of ACCT 3230 with a grade of a 'C' or better. Strictly enforced. Cross-listed with ACCT 6024. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

- ACCT 4800 - Accounting for Government and Nonprofit Organizations

Summer 2010 Registration **ACCT 4800**

Planning and control of government and nonprofit organizations. Includes program budgets, responsibility accounting and fund accounting. Prereq: Completion of ACCT 3220 with a grade of 'C' and permission of instructor, strictly enforced. Cross-listed with ACCT 6080. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Managerial Accounting

Recommended Electives

- ACCT 4330 - Managerial Accounting Problems and Cases

Summer 2010 Registration **ACCT 4330**

Critical analysis of advanced topics in managerial accounting. Considerable use of cases and current readings. Prereq: Completion of ACCT 3320 with a grade of 'C'. Strictly enforced. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

- ACCT 4800 - Accounting for Government and Nonprofit Organizations

Summer 2010 Registration **ACCT 4800**

Planning and control of government and nonprofit organizations. Includes program budgets, responsibility accounting and fund accounting. Prereq: Completion of ACCT 3220 with a grade of 'C' and permission of instructor, strictly enforced. Cross-listed with ACCT 6080. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Accounting and Information Systems (ACIS)

Within the accounting curriculum students can choose to add courses in information systems to complement their individual interests as well as prior education and work experiences.

Required Courses

- ACCT 3054 - Accounting Systems and Data Processing

Summer 2010 Registration **ACCT 3054**

The design and analysis of accounting information systems, with special emphasis on computers and computer programming, and the role of accounting in the role of accounting in the management process. Must earn a grade of 'C' or better to qualify for graduation. Prereq: Completion of ACCT 2220 and ISMG 2050 with a grade of 'C' or better (Strictly enforced). **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

- ACCT 3220 - Intermediate Financial Accounting I
*Summer 2010 Registration **ACCT 3220***
 An intensive analysis of generally accepted accounting principles, accounting theory and preparation of annual financial statements for public corporations. Must complete course with a 'C' to qualify in graduation requirements. Prereq: Completion of ACCT 2220 with a grade of 'C' or better. Strictly enforced. **Semester Hours:** 3to 3
 Registration is changing. Visit our website for details ucdenver.edu/registration.
- ACCT 3230 - Intermediate Financial Accounting II
*Summer 2010 Registration **ACCT 3230***
 Selected topics not covered in ACCT 3220. Must complete course with a grade of 'C' to qualify in graduation requirements. Prereq: ACCT 3220, completed with a grade of a 'C' or better. Strictly enforced. **Semester Hours:** 3to 3**When Offered:** FALL SPR
 Registration is changing. Visit our website for details ucdenver.edu/registration.
- ACCT 3320 - Intermediate Cost Accounting
*Summer 2010 Registration **ACCT 3320***
 Cost analysis for purposes of control and decision making. Analysis of cost behavior, role of accounting in planning and control, and managerial uses of cost accounting data. Includes use of computer assisted decision models. Must receive a 'C' grade to qualify in graduation requirements. Prereq: ACCT 2220, and DSCI 2010 completed with a grade of 'C' or better. Strictly enforced. **Semester Hours:** 3to 3**When Offered:** FASPRSUM
 Registration is changing. Visit our website for details ucdenver.edu/registration.
- ACCT 4410 - Income Tax Accounting
*Summer 2010 Registration **ACCT 4410***
 Provisions and procedures of federal income tax laws and requirements affecting individuals and business organizations, including problems of tax planning and compliance. Note: Students cannot receive credit for both ACCT 4410 and ACCT 6140. Prereq: ACCT 3230 completed with a grade of "C" or better. Strictly enforced. Cross-listed with ACCT 6140. **Semester Hours:** 3to 3**When Offered:** FALL SPR
 Registration is changing. Visit our website for details ucdenver.edu/registration.
- ACCT 4620 - Auditing
*Summer 2010 Registration **ACCT 4620***
 Generally accepted auditing standards and the philosophy supporting them; auditing techniques available to the independent public accountant. Pertinent publications of the AICPS reviewed. Note: Students cannot receive credit for both ACCT 4620 and ACCT 6020. Prereq: ACCT 3230 must be completed with a grade of a 'C' or better. Strictly enforced. Cross-listed with ACCT 6020. **Semester**

Hours: 3to 3**When Offered:** FALL SPR

Registration is changing. Visit our website for details ucdenver.edu/registration.

- ACCT 4780 - Accounting and Information Systems Processes and Controls
Summer 2010 Registration **ACCT 4780**
The course is designed to develop knowledge and skills used to understand and evaluate corporate accounting processes and systems. It focuses on financial and information system internal controls and the flow of corporate information through an accounting system. A financial system objective and risk assessment approach is used to present concepts and techniques for evaluating the adequacy of system processes and controls. Prereq: Completion of ACCT 2200, ACCT 2220 and ACCT 3054 with a grade of 'C' or better (strictly enforced). Cross-listed with ACCT 6510, ISMG 4780, and ISMG 6510.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.
- ISMG 4780 - Accounting and Information Systems Processes and Controls
Summer 2010 Registration **ISMG 4780**
The course is designed to develop knowledge and skills used to understand and evaluate corporate accounting processes and systems. It focuses on financial and information system internal controls and the flow of corporate information through accounting system. A financial system objective and risk assessment approach is used to present concepts and techniques for evaluating the adequacy of system processes and controls. Prereq: Completion of ACCT 2200 and 2220 with a grade of 'C' or better. Strictly enforced. Cross-listed with ACCT 4780, 6510 and ISMG 6510.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG Electives

Choose two:

- ISMG 4500 - Database Management and Applications
Summer 2010 Registration **ISMG 4500**
The success of today's business often hinges on the ability to turn mountains of data into critical information and to utilize the critical information to make the right decisions quickly and efficiently. This course introduces students to the basic principles of data management and utilization. Topics include data modeling, normalization and database design, query formulation using SQL and QBE and interface design. Actual database management systems products (e.g. Oracle and Access) are utilized to demonstrate the design of database applications in management, marketing, finance, accounting and other business areas. Each

student will also design a working database system as a project. Prereq: ISMG 3000.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

- ISMG 4600 - Systems Analysis and Design
*Summer 2010 Registration **ISMG 4600***
Provides an understanding of the system development and maintenance process. It enables students to evaluate and choose a system development methodology. Topics include: systems development life cycle phases, structured analysis and design, object-oriented analysis and design; prototyping, joint application development (JAD) and structured walk-through; communication, interviewing, interpersonal and presentation skills; risk and feasibility analysis, project management, systems operations and support. Prereq: ISMG 3000.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.
- ISMG 4900 - Project Management and Practice
*Summer 2010 Registration **ISMG 4900***
Covers the factors necessary for successful management of enhancement projects. Both technical and behavioral aspects of project management are discussed. The focus is on management of development for enterprise-level systems. Topics include: managing the system lifecycle; requirements determination, logical design, physical design, testing, implementation; metrics for project management; managing expectations: superiors, users, team members and others related to the project; determining skill requirement and staffing the project; cost-effectiveness analysis; reporting and presentation techniques; effective management of both behavioral and technical aspects of the project; change management. Note: Successful completion of this course meets the educational requirements to sit for both the PMP and CAPM exams. Prereq: ISMG 2200. Cross-listed with CSCI 4900 and MGMT 4900.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 27 Hours

To further specialize, consider a graduate accounting program. Graduate study in accounting is receiving increasing emphasis by professional organizations and employers. Students meeting admission requirements should consider continuing their education at the graduate level. Qualified undergraduates may petition for permission to take one or two graduate accounting courses as electives (e.g. ACCT 6800, Special Topics).

Anthropology BA

Students majoring in anthropology for the BA degree must declare such by the time they have completed 60 semester hours. Majors must complete a minimum of 40 semester hours in anthropology with a grade of C (2.0) or better in each course. At least 24 hours must be at the upper-division level and a minimum of 21 semester hours must be taken from Downtown Campus faculty. (Note that all upper-division courses have lower-division prerequisites.)

Program Requirements

Required Anthropology Courses

- ANTH 1302 - Introduction to Archaeology
Summer 2010 Registration **ANTH 1302**
Introduces the study of past cultures and their environments. Emphasis is on the scientific method, aspects of research design and analytical techniques used by archaeologists to determine chronology, taphonomy, source production areas, exchange networks, and human-environment interactions. Note: Three hours of lecture and a two-hour lab each week. **Semester Hours: 4to 4GT Pathways**
Category Key: GT-SS3
Registration is changing. Visit our website for details ucdenver.edu/registration.
- ANTH 1303 - Introduction to Biological Anthropology
Summer 2010 Registration **ANTH 1303**
Introduces the study of human biological evolution, both processes and outcomes, from primate ancestors to fossil hominids to contemporary human populations. Methods of obtaining and interpreting data concerning the genetic, biological and evolutionary basis of physical variation in living and skeletal populations. Note: 3 hours of lecture and a 2 hour lab each week. **Semester Hours: 4to 4GT Pathways** **Category Key: GT-SC1**
Registration is changing. Visit our website for details ucdenver.edu/registration.
- ANTH 2102 - Culture and the Human Experience
Summer 2010 Registration **ANTH 2102**
An application of the concept of culture to several aspects of the human experience, including gender relations, emotion and personality, cognition, language, health and healing and economic behavior. In exploring these dimensions of the human experience, the course focuses on selected cultures from each of the world's major geographic areas. **Semester Hours: 3to 3GT**

Pathways Category Key: GT-SS3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Choose three:

- ANTH 3101 - Foundations of Cultural Anthropology
Summer 2010 Registration **ANTH 3101**
Covers current theories in cultural anthropology and discusses the nature of field work. Major schools of thought and actual field studies are explored with an emphasis on anthropological data gathering, analysis and writing. Prereq: Introductory course in cultural anthropology. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.
- ANTH 3121 - Language and Communication
Summer 2010 Registration **ANTH 3121**
Definitions of language and communication and their relationship to human behavior, thought and culture. The classification of languages, linguistic universals, language acquisition, multilingualism, and nonhuman communication, with consideration of the evolutionary implications of such studies. Prereq: Introductory course in cultural anthropology. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.
- ANTH 3301 - World Prehistory
Summer 2010 Registration **ANTH 3301**
Explores of 3.5 million years of human cultural development that examines the prehistory of Africa, Asia, Europe and the Americas. Patterns and processes that underlie the earliest hominid expansion out of Africa, tool use, origins of fire, the peopling of the Americas, the development of metallurgy, the domestication of plants and animals and the rise of cities and the state are examined. Emphasis is on both regional developments and landmark projects that have helped clarify prehistory. Prereq: Introductory course in archaeology. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.
- ANTH 3512 - Human Evolution
Summer 2010 Registration **ANTH 3512**
Provides an overview of the fossil and archaeological evidence for human origins. Theory and method in paleoanthropology is emphasized. The goal is to outline current knowledge of human biological evolution and the lifeways of our evolutionary relatives. Prereq: ANTH 1303. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 20 Hours

Anthropology Electives

Recommended courses:

- ANTH 4050 - Quantitative Methods in Anthropology
Summer 2010 Registration **ANTH 4050**
Surveys the ways of deriving meaning from anthropological data by numerical means, including, but not confined to basic statistical procedures. Prereq: College-level algebra or its equivalent. Cross-listed with ANTH 5053. **Semester Hours: 3 to 3**
Registration is changing. Visit our website for details ucdenver.edu/registration.
- ANTH 4810 - Integrating Anthropology
Summer 2010 Registration **ANTH 4810**
Designed to build on specialized course work in the subdisciplines of anthropology, this course emphasizes the basic concepts that integrate and unite the discipline and give it unique perspective. These are the concepts of culture, adaptation and human evolution. In the last several weeks of the course, students consider the applicability of the anthropological perspective to specific human issues. Note: Centers on the critical examination and discussion of presentations made by department faculty and graduate students. Prereq: junior or senior standing and course work equivalent to a minor in anthropology. Cross-listed with ANTH 5810. **Semester Hours: 3 to 3**
Registration is changing. Visit our website for details ucdenver.edu/registration.

Total (minimum): 20 Hours

Major Total: 40 Hours

Biology BS

Biology students must declare their major by the time they have taken 60 semester hours. A minimum of 36 hours of biology must be completed, of which 18 hours are at the upper-division level and taken in residence with UC Denver Downtown Campus biology faculty. Included in the 36 hours are 22 semester hours of biology core courses, required of all majors. At least 14 hours of upper-division biology elective courses beyond the core are required to fulfill the remaining hours, including one 4000-level lecture course. A maximum of 6 semester hours of independent study (BIOL 3840/4840) **or** a combined maximum total of 6 hours of independent study (3 hours) and internship/cooperative education (BIOL 3939) (3 hours) can be counted toward the 14 hours of upper-division electives in biology. The minimum grade in each UC Denver

biology course is C- (1.7). However, a GPA of 2.5 in biology courses taken at UC Denver is required to graduate.

To ensure a proper background for the study of biology, majors are required to pass 31-33 hours of course work in ancillary disciplines, including two semesters of general chemistry laboratory, for which the minimum grade is C- (1.7). MATH 1110, with either BIOL 4764 or MATH 4830, may substitute for Calculus I (MATH 1401). All biology courses applied to the undergraduate biology major must be completed within 10 years of graduation. The following biology and ancillary courses are required and must be completed with a letter grade of C- (1.7) or higher:

Requirements for the Major

Biology Core Courses

- BIOL 2051 - General Biology I
Summer 2010 Registration **BIOL 2051**
Introduces four major areas of study: (1) the chemistry of biological systems; (2) the structure and function of the cell; (3) cellular energy transformations (photosynthesis and respiration); and (4) genetics (mitosis, meiosis, patterns of inheritance, molecular genetics). Note: Biology and health science (pre-med, pre-vet, pre-physical therapy, etc.) majors must also take the accompanying laboratory - BIOL 2071. Prereq: CHEM 1000 or high school chemistry required. **Semester Hours:** 3to 3 **GT Pathways Category Key:** GT-SC1
Registration is changing. Visit our website for details ucdenver.edu/registration.
- BIOL 2071 - General Biology Laboratory I
Summer 2010 Registration **BIOL 2071**
Introduces the basic scientific approach and report preparation through exercises and experiments in cell biology, basic biochemical techniques, genetics, molecular genetics and applications of biotechnology. Note: Exercises corresponding to topics in BIOL 2051. Coreq: BIOL 2051. **Semester Hours:** 1to 1 **GT Pathways Category Key:** GT-SC1
Registration is changing. Visit our website for details ucdenver.edu/registration.
- BIOL 2061 - General Biology II
Summer 2010 Registration **BIOL 2061**
This course is a continuation of BIOL 2051. Introduces four major areas of study: (1) evolution, (2) animal structure and function, (3) plant structure and function and (4) ecology. Note: Biology and health science (pre-med, pre-vet, nursing, etc.) majors must also take the accompanying laboratory - BIOL 2081. Prereq: BIOL 2051 or equivalent with a grade of "C" (2.0) or higher. **Semester Hours:** 3to 3 **GT Pathways Category Key:** GT-SC1
Registration is changing. Visit our website for details ucdenver.edu/registration.

- BIOL 2081 - General Biology Laboratory II
*Summer 2010 Registration **BIOL 2081***
 Study of evolution, plant and animal anatomy, developmental biology; includes two off- campus ecology field trips. Note: Exercises corresponding to topics in BIOL 2061. Prereq: BIOL 2071 or equivalent with a grade of "C" (2.0) or higher; Coreq: BIOL 2061. **Semester Hours:** 1to 1**GT Pathways Category Key:** GT-SC1
 Registration is changing. Visit our website for details ucdenver.edu/registration.
- BIOL 3411 - Principles of Ecology
*Summer 2010 Registration **BIOL 3411***
 A lecture course that examines the interrelationships between organisms and their environments. Subject matter includes organism, population and ecosystem levels of study and application to current environmental issues. The emphasis is on the underlying principles of ecology that involve all types of organisms. Note: Satisfies core ecology requirement for biology major. May not be used as upper division biology elective. No co-credit with BIOL 3412. Prereq: One year of general biology with a grade of "C" (2.0) or higher. **Semester Hours:** 3to 3
 Registration is changing. Visit our website for details ucdenver.edu/registration.
 -OR-
- BIOL 3412 - Fundamentals of Applied Ecology
*Summer 2010 Registration **BIOL 3412***
 Ecology is the science of interrelationships between organisms, including humans and their environment. This lecture course examines applications of ecological principles to human needs and environmental protection. Covers the ecology of humans and managed systems. Note: Satisfies core ecology requirement for biology major. May not be used as upper division biology elective. No co-credit with BIOL 3411. Prereq: One year of general biology with a grade of "C" (2.0) or higher. **Semester Hours:** 3to 3
 Registration is changing. Visit our website for details ucdenver.edu/registration.
- BIOL 3611 - General Cell Biology
*Summer 2010 Registration **BIOL 3611***
 Covers the structure and function of the cell including bioenergetics, membranes, secretion, respiration and the cell cycle. Prereq: One year of general biology with a grade of "C" (2.0) or higher and one year of general chemistry. **Semester Hours:** 3to 3
 Registration is changing. Visit our website for details ucdenver.edu/registration.
- BIOL 3832 - General Genetics
*Summer 2010 Registration **BIOL 3832***
 Introduces molecular, classical, developmental and population genetics. Prereq:

One year of general biology with a grade of "C" (2.0) or higher. **Semester Hours:** 4to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

One of the following structure/function courses:

- BIOL 3225 - Human Physiology
Summer 2010 Registration **BIOL 3225**
The basic orientation of the course is toward understanding the functioning of the body as a set of homeostatic mechanisms. Particular emphasis is placed on membrane potentials, muscle, circulation, respiration, digestion, the kidney, the control of metabolism and acid-based balance. Prereq: One year of general biology, general cell biology and one year of chemistry with grades of 'C' (2.0) or higher. **Semester Hours:** 4to 4
Registration is changing. Visit our website for details ucdenver.edu/registration.
- BIOL 3244 - Human Anatomy
Summer 2010 Registration **BIOL 3244**
Introduces the structural aspects of the human body. Anatomical models, microscope slides and dissections, including human cadavers are used in the lab. Prereq: one year of general biology with a grade of "C" (2.0) or higher. **Semester Hours:** 4to 4
Registration is changing. Visit our website for details ucdenver.edu/registration.
- BIOL 3654 - General Microbiology
Summer 2010 Registration **BIOL 3654**
Covers all aspects of the biology of microorganisms: their cellular structures and function, growth and metabolism, general and molecular genetics, diversity and interactions with other organisms and the environment (ecology). The objective is to provide students with a thorough introduction to microbiology including basic micro-biological laboratory techniques. Note: General cell biology or general genetics is recommended. Prereq: One year of general biology and one year of general chemistry with grades of "C" (2.0) or higher. **Semester Hours:** 4to 4
Registration is changing. Visit our website for details ucdenver.edu/registration.
- BIOL 4335 - Plant Science
Summer 2010 Registration **BIOL 4335**
Lecture, lab and field trips. An in-depth study of flowering plants, including embryology, structure, function, reproduction, ecology and evolution of the group. Emphasis is placed upon morphology and anatomy at all stages of plant development. Prereq: One year of general biology with a grade of "C" (2.0) or higher. Cross-listed with BIOL 5335. **Semester Hours:** 4to 4
Registration is changing. Visit our website for details ucdenver.edu/registration.

Total Biology Core: 22 Hours

Biology Electives

*Biology elective courses (3000 or 4000 level) **

Total Electives: 14 Hours

Biology (core and electives) Total: 36 Hours

* Biochemistry as a Biology Elective

Students who have taken both semesters of organic chemistry (CHEM 3411 and CHEM 3421) may use either biochemistry (CHEM 3810) or 4 hours of the general biochemistry series (CHEM 4810 and 4820 combined) as one of their required upper-division biology electives.

Ancillary Core Courses

- CHEM 2031 - General Chemistry I
Summer 2010 Registration **CHEM 2031**
Topics include chemical structure, atomic and molecular properties, molecular geometry and bonding, and gas laws. Prepares students to take upper division chemistry courses. Note: a beginning course for science majors, medical technologists, pre-medical and pre-dental students. Prereq: One year of high school chemistry or CHEM 1000 and MATH 1110 (or high school equivalent); Coreq: CHEM 2038. **Semester Hours: 3** to 3 **GT Pathways Category Key: GT-SC1**
Registration is changing. Visit our website for details ucdenver.edu/registration.
- CHEM 2038 - General Chemistry Laboratory I
Summer 2010 Registration **CHEM 2038**
Students perform laboratory experiments on topics covered in CHEM 2031 and gain experience in observing, recording, and interpreting physical and chemical phenomena. Note: Laboratory to accompany CHEM 2031. Coreq: CHEM 2031. **Semester Hours: 1** to 1 **GT Pathways Category Key: GT-SC1**
Registration is changing. Visit our website for details ucdenver.edu/registration.
- CHEM 2061 - General Chemistry II
Summer 2010 Registration **CHEM 2061**
(Continuation of CHEM 2031.) Topics include kinetics, equilibria and thermodynamics. Prereq: CHEM 2031; Coreq: CHEM 2068. **Semester Hours:**

3to 3GT Pathways Category Key: GT-SC1

Registration is changing. Visit our website for details ucdenver.edu/registration.

- CHEM 2068 - General Chemistry Laboratory II

Summer 2010 Registration **CHEM 2068**

Students gain experience with laboratory technique and elementary chemical instrumentation. Note: Laboratory to accompany CHEM 2061 and a continuation of CHEM 2038. Prereq: CHEM 2038; Coreq: CHEM 2061. **Semester Hours:** 2to 2

2GT Pathways Category Key: GT-SC1

Registration is changing. Visit our website for details ucdenver.edu/registration.

- CHEM 3411 - Organic Chemistry I

Summer 2010 Registration **CHEM 3411**

Lecture course designed to introduce the study of structure, reactions, properties, and mechanisms of organic molecules. Prereq: CHEM 2061. **Semester Hours:**

4to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

- CHEM 3421 - Organic Chemistry II

Summer 2010 Registration **CHEM 3421**

Lecture course designed to introduce the study of structure, reaction, properties and mechanisms of organic molecules. Note: Continuation of CHEM 3411.

Prereq: CHEM 3411. **Semester Hours:** 4to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

- CHEM 3810 - Biochemistry

Summer 2010 Registration **CHEM 3810**

Introduces the principles of biochemistry for science and health science-oriented majors. Designed to cover the important aspects of modern biochemistry. Prereq: BIOL 2061 and CHEM 3411. **Semester Hours:** 4to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

- MATH 1401 - Calculus I

Summer 2010 Registration **MATH 1401**

First course of a three-semester sequence (MATH 1401, 2411, 2421) in calculus.

Topics covered include limits, derivatives, applications of derivatives, and the definite integral. Note: Students cannot receive credit for both MATH 1080 and 1401. Prereq: MATH 1120 or 1130 and satisfactory score on the placement exam. **Semester Hours:** 4to 4

GT Pathways Category Key: GT-MA1

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

- MATH 1110 - College Algebra

Summer 2010 Registration **MATH 1110**

Topics in algebra designed for students who intend to take the calculus

sequence. Functions, domains, ranges, graphs, data scatter plots and curve fitting, solving equations and systems of equations, polynomial functions, rational functions, and selected other topics. Graphic calculators and/or computer algebra systems are used extensively. Applications are emphasized. Note: No co-credit with either MATH 1070 or 1130. Prereq: intermediate algebra and satisfactory score on the placement exam. **Semester Hours:** 3to 3 **GT Pathways Category Key:** GT-MA1

Registration is changing. Visit our website for details ucdenver.edu/registration.

- **with either** BIOL 4764 – Biostatistics *Summer 2010 Registration* **BIOL 4764**
Covers the quantitative aspects of data collection, organization, and analysis in the biological sciences. Emphasizes understanding of relationships among probability theory, parameter estimation, test statistics, scope of inference, and interpretation. Provides "Hands-on" experience with data analysis. Prereq: One year of general biology with a "C" (2.0) or higher, college-level algebra with "B" (3.0) or higher, or permission of instructor. Cross-listed with BIOL 5764. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

- **or** MATH 4830 - Applied Statistics *Summer 2010 Registration* **MATH 4830**
Review of estimation, confidence intervals and hypothesis testing; Anova; categorical data analysis; non-parametric tests; linear and logistic regression. Prereq: an introductory course in statistics such as MATH 2830 or permission of instructor. Cross-listed with MATH 5830. **Semester Hours:** 3to 3 **When Offered:** SPRING

Registration is changing. Visit our website for details ucdenver.edu/registration.

- PHYS 2010 - College Physics I
Summer 2010 Registration **PHYS 2010**
(This course is an approved Colorado Statewide Guaranteed Transfer Course). Mechanics, heat and sound. Prereq: College algebra and trigonometry. **Semester Hours:** 4to 4 **GT Pathways Category Key:** GT-SC1
Registration is changing. Visit our website for details ucdenver.edu/registration.

- PHYS 2030 - College Physics Lab I
Summer 2010 Registration **PHYS 2030**
Semester Hours: 1to 1 **GT Pathways Category Key:** GT-SC1
Registration is changing. Visit our website for details ucdenver.edu/registration.

- PHYS 2020 - College Physics II
Summer 2010 Registration **PHYS 2020**
Electricity, magnetism, light and modern physics. Prereq: PHYS 2010. **Semester Hours:** 4to 4 **GT Pathways Category Key:** GT-SC1
Registration is changing. Visit our website for details ucdenver.edu/registration.

- PHYS 2040 - College Physics Lab II

Summer 2010 Registration **PHYS 2040**

Prereq: PHYS 2030. **Semester Hours:** 1to 1 **GT Pathways Category Key:** GT-SC1

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total Ancillary Core: 31-33 Hours

The following courses will **not** count toward the BS in biology:

- BIOL 1136 - Human Biology
Summer 2010 Registration **BIOL 1136**
Topics include: basic human body chemistry, healthy internal body balance, new disease treatments, human inheritance and human beings as part of Earth's living systems. Note: For students who are not majoring in biology. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.
- BIOL 1550 - Basic Biology: Ecology and the Diversity of Life
Summer 2010 Registration **BIOL 1550**
Introduces important biological concepts, including: the process of science, biological diversity, evolution, basic ecological principles and environmental issues. Lectures emphasize current issues. Note: For students who are not majoring in biology. Biology and health career majors should not take this course. **Semester Hours:** 4to 4 **GT Pathways Category Key:** GT-SC1
Registration is changing. Visit our website for details ucdenver.edu/registration.
- BIOL 1560 - Basic Biology: From Cells to Organisms
Summer 2010 Registration **BIOL 1560**
Introduces students to cell structure and function, survey of representative human systems, genetics and applications of biotechnology. Immune systems featured with an emphasis on Aids, cancer and other human diseases prevalent in today's world. Note: For students who are not majoring in biology. Biology and health career majors should not take this course. **Semester Hours:** 4to 4 **GT Pathways Category Key:** GT-SC1
Registration is changing. Visit our website for details ucdenver.edu/registration.

Degree Total: 36 Hours Biology + 31-33 Hours Ancillary

Chemistry BS

Requirements for Major

Students must declare their major by the time they have completed 60 semester hours. The chemistry major requires 45 semester hours in chemistry. Transfer students must

take at least 14 upper-division chemistry hours, including CHEM 4128, 4518 or 4538, in residency at the Downtown Campus. A student who has declared a chemistry major at UC Denver may not take additional chemistry courses outside of the department for the purpose of applying those credits toward meeting the requirements of the major without prior written approval of the undergraduate advisor. Normally, no more than 3 additional hours of transfer credits will be allowed. The minimum grade in chemistry courses is C- (1.7) and a minimum chemistry GPA of 2.0 is required in chemistry and ancillary required courses. All majors must successfully complete the following core:

TRADITIONAL CHEMISTRY MAJOR

Required Chemistry Courses

- CHEM 2031 - General Chemistry I
Summer 2010 Registration **CHEM 2031**
Topics include chemical structure, atomic and molecular properties, molecular geometry and bonding, and gas laws. Prepares students to take upper division chemistry courses. Note: a beginning course for science majors, medical technologists, pre-medical and pre-dental students. Prereq: One year of high school chemistry or CHEM 1000 and MATH 1110 (or high school equivalent); Coreq: CHEM 2038. **Semester Hours:** 3to 3**GT Pathways Category Key:** GT-SC1
Registration is changing. Visit our website for details ucdenver.edu/registration.
- CHEM 2038 - General Chemistry Laboratory I
Summer 2010 Registration **CHEM 2038**
Students perform laboratory experiments on topics covered in CHEM 2031 and gain experience in observing, recording, and interpreting physical and chemical phenomena. Note: Laboratory to accompany CHEM 2031. Coreq: CHEM 2031. **Semester Hours:** 1to 1**GT Pathways Category Key:** GT-SC1
Registration is changing. Visit our website for details ucdenver.edu/registration.
- CHEM 2061 - General Chemistry II
Summer 2010 Registration **CHEM 2061**
(Continuation of CHEM 2031.) Topics include kinetics, equilibria and thermodynamics. Prereq: CHEM 2031; Coreq: CHEM 2068. **Semester Hours:** 3to 3**GT Pathways Category Key:** GT-SC1
Registration is changing. Visit our website for details ucdenver.edu/registration.
- CHEM 2068 - General Chemistry Laboratory II
Summer 2010 Registration **CHEM 2068**
Students gain experience with laboratory technique and elementary chemical instrumentation. Note: Laboratory to accompany CHEM 2061 and a continuation of CHEM 2038. Prereq: CHEM 2038; Coreq: CHEM 2061. **Semester Hours:** 2to 2**GT**

Pathways Category Key: GT-SC1

Registration is changing. Visit our website for details ucdenver.edu/registration.

- CHEM 3011 - Inorganic Chemistry
Summer 2010 Registration **CHEM 3011**
The fundamentals of inorganic chemistry, including: atomic, molecular and crystal structures; the energetics of reactions, acid-base interactions; and the chemistry of main group and transition metal elements, including coordination and organometallic chemistry. Prereq or Coreq: CHEM 3421 or 3491. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.
- CHEM 3111 - Analytical Chemistry
Summer 2010 Registration **CHEM 3111**
Topics include sampling, volumetric analyses, instrumental analyses and statistical treatment of data. Note: Lecture course for chemistry, biology, medical technology and environmental students. Prereq: CHEM 2061. **Semester Hours:** 3to 3**When Offered:** FALL
Registration is changing. Visit our website for details ucdenver.edu/registration.
- CHEM 3118 - Analytical Chemistry Laboratory
Summer 2010 Registration **CHEM 3118**
Students gain experience with technique of sampling and analysis, including an introduction to instrumental methods. Note: Laboratory course to be taken concurrently with CHEM 3111. Prereq: CHEM 2068; Coreq: CHEM 3111. **Semester Hours:** 2to 2**When Offered:** FALL
Registration is changing. Visit our website for details ucdenver.edu/registration.
- CHEM 3411 - Organic Chemistry I
Summer 2010 Registration **CHEM 3411**
Lecture course designed to introduce the study of structure, reactions, properties, and mechanisms of organic molecules. Prereq: CHEM 2061. **Semester Hours:** 4to 4
Registration is changing. Visit our website for details ucdenver.edu/registration.
- CHEM 3418 - Organic Chemistry Laboratory I
Summer 2010 Registration **CHEM 3418**
Laboratory course to augment concepts of CHEM 3411, illustrating the practical aspects of organic chemistry. Prereq: CHEM 2068; Prereq or Coreq: CHEM 3411. **Semester Hours:** 1to 1
Registration is changing. Visit our website for details ucdenver.edu/registration.
- CHEM 3491 - Honors Organic Chemistry II
Summer 2010 Registration **CHEM 3491**
Second semester organic chemistry. Theoretical concepts and practical aspects of organic structure, mechanism, synthesis and analysis. Note: Required for chemistry majors and open to all students. No joint credit with CHEM 3421. Prereq: CHEM

3411. Coreq: CHEM 3498. **Semester Hours:** 4to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

- CHEM 3498 - Honors Organic Chemistry Laboratory II
Summer 2010 Registration **CHEM 3498**
In small groups, students use the chemical literature to devise multi-step syntheses and determine reaction mechanisms for organic compounds. Note: Laboratory course required for chemistry majors. Open to non-majors on approval of the instructor. Prereq or Coreq: CHEM 3491. **Semester Hours:** 2to 2
Registration is changing. Visit our website for details ucdenver.edu/registration.
- CHEM 4121 - Instrumental Analysis
Summer 2010 Registration **CHEM 4121**
Surveys instrumental methods of analysis. Emphasis on spectrophotometry, electrochemistry, chromatography and radiochemical techniques. Prereq: CHEM 3111, 3421 or 3491, and PHYS 2331; Coreq for Chemistry majors: CHEM 4128. **Semester Hours:** 3to 3 **When Offered:** *SPRING*
Registration is changing. Visit our website for details ucdenver.edu/registration.
- CHEM 4128 - Instrumental Analysis Laboratory
Summer 2010 Registration **CHEM 4128**
Laboratory practice to accompany CHEM 4121. One hour of discussion and three hours of laboratory, with an emphasis on writing laboratory reports. Note: Required of chemistry majors and open to other students in CHEM 4121. Coreq: CHEM 4121. **Semester Hours:** 2to 2 **When Offered:** *SPRING*
Registration is changing. Visit our website for details ucdenver.edu/registration.
- CHEM 4511 - Physical Chemistry I
Summer 2010 Registration **CHEM 4511**
Includes study of the laws of thermodynamics, thermochemistry, chemical equilibria, solutions and statistical mechanics. Prereq: PHYS 2331; Coreq: MATH 3511. **Semester Hours:** 3to 3 **When Offered:** *FALL*
Registration is changing. Visit our website for details ucdenver.edu/registration.
- CHEM 4518 - Physical Chemistry Laboratory I
Summer 2010 Registration **CHEM 4518**
Instruction in the experimental techniques of physical chemistry with emphasis on the properties of gases, thermodynamics and chemical equilibrium. Prereq: CHEM 3118; Coreq: CHEM 4511. **Semester Hours:** 2to 2
Registration is changing. Visit our website for details ucdenver.edu/registration.
- CHEM 4521 - Physical Chemistry II
Summer 2010 Registration **CHEM 4521**
Continuation of CHEM 4511, with emphasis on chemical kinetics, quantum mechanics, molecular structure and spectroscopy. Prereq: CHEM 4511 and MATH

3511. **Semester Hours:** 3to 3**When Offered:** *SPRING*

Registration is changing. Visit our website for details ucdenver.edu/registration.

- CHEM 4538 - Physical Chemistry II Laboratory
Summer 2010 Registration **CHEM 4538**
Instruction in the experimental techniques of physical chemistry with emphasis on quantum chemistry, spectroscopy and chemical kinetics. Prereq: CHEM 4518; Coreq: CHEM 4521. **Semester Hours:** 2to 2
Registration is changing. Visit our website for details ucdenver.edu/registration.

And one of the following two courses:

- CHEM 3018 - Inorganic Chemistry Laboratory
Summer 2010 Registration **CHEM 3018**
Combines theoretical concepts with hands-on laboratory experience and introduces students to modern inorganic chemistry. Experiments cover both main group and transition metal chemistry with an emphasis on synthesis, characterization, and application of inorganic compounds. Prereq or Coreq: CHEM 3011. **Semester Hours:** 2to 2
Registration is changing. Visit our website for details ucdenver.edu/registration.
- CHEM 4828 - Biochemistry Lab
Summer 2010 Registration **CHEM 4828**
Focuses on modern laboratory techniques for biochemical research, with an emphasis on methods for protein isolation, purification, and identification. Students perform experiments involving (but not limited to) chromatography, electrophoresis, spectrophotometry, and protein activity assays. Prereq: CHEM 3810 or 4810. **Semester Hours:** 2to 2
Registration is changing. Visit our website for details ucdenver.edu/registration.

Total Required Courses: 45 Hours

Required Ancillary Courses

- MATH 1401 - Calculus I
Summer 2010 Registration **MATH 1401**
First course of a three-semester sequence (MATH 1401, 2411, 2421) in calculus. Topics covered include limits, derivatives, applications of derivatives, and the definite integral. Note: Students cannot receive credit for both MATH 1080 and 1401. Prereq: MATH 1120 or 1130 and satisfactory score on the placement exam. **Semester**

Hours: 4to 4**GT Pathways Category Key:** GT-MA1

Registration is changing. Visit our website for details ucdenver.edu/registration.

- MATH 2411 - Calculus II
Summer 2010 Registration **MATH 2411**
The second of a three-semester sequence (MATH 1401, 2411, 2421) in calculus. Topics covered include exponential, logarithmic, and trigonometric functions, techniques of integration, indeterminate forms, improper integrals and infinite series. Prereq: MATH 1401.**Semester Hours:** 4to 4**GT Pathways Category Key:** GT-MA1
Registration is changing. Visit our website for details ucdenver.edu/registration.
- MATH 3511 - Mathematics of Chemistry
Summer 2010 Registration **MATH 3511**
Multivariate functions, probability and statistics for chemistry, matrices and vectors, mathematics of reaction kinetics and symmetry point groups. Course covers mathematics needed for CHEM 4511 and 4521. Can also be an elective for the mathematics minor. Prereq: MATH 2411, CHEM 2031, CHEM 2061.**Semester Hours:** 4to 4**When Offered:** FALL
Registration is changing. Visit our website for details ucdenver.edu/registration.
- PHYS 2311 - General Physics I: Calculus-Based
Summer 2010 Registration **PHYS 2311**
Covers vector displacement, uniform and accelerated motion, force, momentum, energy, rotating systems, oscillations, and an introduction to thermodynamics. Emphasis is on basic principles. Coreq: MATH 1401.**Semester Hours:** 4to 4
Registration is changing. Visit our website for details ucdenver.edu/registration.
- PHYS 2321 - General Physics Lab I
Summer 2010 Registration **PHYS 2321**
Semester Hours: 1to 1
Registration is changing. Visit our website for details ucdenver.edu/registration.
- PHYS 2331 - General Physics II: Calculus-Based
Summer 2010 Registration **PHYS 2331**
Covers electrostatics, magnetic fields, electromagnetic waves (including light), and optics. Prereq: PHYS 2311. Coreq: MATH 2411.**Semester Hours:** 4to 4
Registration is changing. Visit our website for details ucdenver.edu/registration.
- PHYS 2341 - General Physics Lab II
Summer 2010 Registration **PHYS 2341**
Prereq: PHYS 2321.**Semester Hours:** 1to 1
Registration is changing. Visit our website for details ucdenver.edu/registration.

Total Required Ancillary Courses : 22 Hours

Recommended Electives

- CHEM 3018 - Inorganic Chemistry Laboratory
Summer 2010 Registration **CHEM 3018**
Combines theoretical concepts with hands-on laboratory experience and introduces students to modern inorganic chemistry. Experiments cover both main group and transition metal chemistry with an emphasis on synthesis, characterization, and application of inorganic compounds. Prereq or Coreq: CHEM 3011. **Semester Hours:** 2 to 2
Registration is changing. Visit our website for details ucdenver.edu/registration.
- CHEM 3810 - Biochemistry
Summer 2010 Registration **CHEM 3810**
Introduces the principles of biochemistry for science and health science-oriented majors. Designed to cover the important aspects of modern biochemistry. Prereq: BIOL 2061 and CHEM 3411. **Semester Hours:** 4 to 4
Registration is changing. Visit our website for details ucdenver.edu/registration.
- OR-
- CHEM 4810 - General Biochemistry I
Summer 2010 Registration **CHEM 4810**
Topics include structure, conformation, and properties of proteins; enzymes, mechanisms and kinetics; carbohydrates, lipids and membranes, and energetics. Prereq: CHEM 3421 or 3491. Cross-listed with CHEM 5810. **Semester Hours:** 3 to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.
- CHEM 4700 - Environmental Chemistry
Summer 2010 Registration **CHEM 4700**
A discussion of the sources, reactions, transport, effects, and fates of chemical species in the water, soil, and air environments. Prereq: CHEM 3111 or 3411. Cross-listed with CHEM 5700. **Semester Hours:** 3 to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.
- CHEM 4820 - General Biochemistry II
Summer 2010 Registration **CHEM 4820**
Topics include biosynthesis and metabolism of carbohydrates, lipids and amino acids, information processing. Note: continuation of CHEM 4810. Prereq: CHEM 4810. Cross-listed with CHEM 5820. **Semester Hours:** 3 to 3 **When Offered:** *SPRING*
Registration is changing. Visit our website for details ucdenver.edu/registration.

Any CHEM 5000-level lecture class (3-4 semester hours)

Total Electives: 14-16 Hours

Chemistry Major Total: 81-83 Hours

Students interested in the chemistry major should consult regularly with a chemistry advisor. A complete description of the chemistry major's program may be obtained in the Department of Chemistry office or [department Web site](#).

Qualified majors are strongly urged to participate in independent study or departmental honors programs.

Students planning chemistry as a career should be familiar with the recommendations of the American Chemical Society for the professional training of chemists. For ACS certification, students are required to take inorganic laboratory and at least one semester of biochemistry. No course with a grade of less than C (2.0) can be applied toward ACS certification. Students should check with a chemistry advisor for details. The Downtown Campus maintains an ACS chapter of student affiliates.

Civil Engineering BS

Program Objectives

The objectives of the bachelor of science in civil engineering program are to produce graduates who:

- are able to perform the technical analyses and design tasks of entry-level civil engineers
- can successfully work toward professional engineering licensure
- communicate effectively, both orally and in writing
- understand the importance of leadership skills, team building and ethical practice
- value lifelong learning and improvement through graduate degrees or professional study
- appreciate the importance of community involvement and social contribution civil engineers are dedicated to improving our living environment

Civil engineering offers an interesting and challenging career in the design, construction, and maintenance of buildings and urban infrastructure; in transportation systems, including highways, airports, rapid transit lines, railroads, and harbor facilities; in the development of water resources, including reservoirs for storage, canals for irrigation, dams for power generation, stormwater management for drainage, groundwater recharge for contamination prevention, wastewater treatment for environmental protection, and water purification for drinking purposes; in the construction industry; including foundations, bridges, concrete and steel structures, in problems concerned

with environmental preservation; and in the sustainable development of cities. In preparing for work in such a broad field, the civil engineering student studies mathematics, basic science, communication, social science and humanities, engineering science and civil engineering design. UC Denver's civil engineering graduates usually find their first professional employment with consulting engineering firms, government agencies and various industries.

Typical Curriculum for BS (Civil Engineering)

Freshman Year

First Semester

- CHEM 1130 - Engineering General Chemistry
Summer 2010 Registration **CHEM 1130**
A one-semester non-laboratory version of general chemistry for engineers and those science majors who do not require laboratory credit and do not plan to take a second semester of chemistry. Prereq: One year of high school chemistry or Chem 1000 and Math 1110 (or high school equivalent). **Semester Hours:** 5 to 5
Registration is changing. Visit our website for details ucdenver.edu/registration.
- ENGL 1020 - Core Composition I
Summer 2010 Registration **ENGL 1020**
Provides opportunities to write for different purposes and audiences, with an emphasis on learning how to respond to various rhetorical situations; improving critical thinking, reading, and writing abilities; understanding various writing processes; and gaining a deeper knowledge of language conventions. **Semester Hours:** 3 to 3 **GT Pathways Category Key:** GT-C01
Registration is changing. Visit our website for details ucdenver.edu/registration.
- MATH 1401 - Calculus I
Summer 2010 Registration **MATH 1401**
First course of a three-semester sequence (MATH 1401, 2411, 2421) in calculus. Topics covered include limits, derivatives, applications of derivatives, and the definite integral. Note: Students cannot receive credit for both MATH 1080 and 1401. Prereq: MATH 1120 or 1130 and satisfactory score on the placement exam. **Semester Hours:** 4 to 4 **GT Pathways Category Key:** GT-MA1
Registration is changing. Visit our website for details ucdenver.edu/registration.

Core Curriculum Elective (*see note 2*) (3 semester hours)

Total: 15 Hours

Second Semester

- CVEN 1025 - Civil Engineering Graphics & Computer Aided Design
Summer 2010 Registration **C E 1025**
Introduces microcomputer-based, menu-driven, 2-D and 3-D computer-aided design systems; standard Civil Engineering industry details and some three-dimensional modeling of solid objects; principles on engineering drawing and descriptive geometry with applications specifically geared for civil engineers. Prereq: High School Geometry and Algebra. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.
- CVEN 2212 - Plane Surveying
Summer 2010 Registration **C E 2212**
Observation, analysis and presentations of basic linear, angular, area and volume field measurements common to civil engineering endeavors. Prereq/Coreq: MATH 1401. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.
- ENGL 2030 - Core Composition II
Summer 2010 Registration **ENGL 2030**
Focuses on academic and other types of research-based writing and builds on the work completed in ENGL 1020. Focuses on critical thinking, reading and writing as well as working with primary and secondary source material to produce a variety of research-based essays. Emphasis on using both print-based and electronic-based information. Prereq: ENGL 1020. **Semester Hours:** 3to 3 **GT Pathways Category Key:** GT-C02
Registration is changing. Visit our website for details ucdenver.edu/registration.
- MATH 2411 - Calculus II
Summer 2010 Registration **MATH 2411**
The second of a three-semester sequence (MATH 1401, 2411, 2421) in calculus. Topics covered include exponential, logarithmic, and trigonometric functions, techniques of integration, indeterminate forms, improper integrals and infinite series. Prereq: MATH 1401. **Semester Hours:** 4to 4 **GT Pathways Category Key:** GT-MA1
Registration is changing. Visit our website for details ucdenver.edu/registration.
- PHYS 2311 - General Physics I: Calculus-Based
Summer 2010 Registration **PHYS 2311**
Covers vector displacement, uniform and accelerated motion, force, momentum, energy, rotating systems, oscillations, and an introduction to thermodynamics. Emphasis is on basic principles. Coreq: MATH 1401. **Semester Hours:** 4to 4
Registration is changing. Visit our website for details ucdenver.edu/registration.

- PHYS 2321 - General Physics Lab I
Summer 2010 Registration **PHYS 2321**
Semester Hours: 1to 1
 Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 18 Hours

Sophomore Year

First Semester

- CVEN 2121 - Analytical Mechanics I
Summer 2010 Registration **C E 2121**
 A vector treatment of force systems and their resultants; equilibrium of trusses, beams, frames, and machines, including internal forces and three-dimensional configurations, static friction, properties of areas, distributed loads and hydrostatics. Prereq: PHYS 2311. Coreq: ENGR 1025, MATH 2422. Cross-listed with MECH 2023.**Semester Hours:** 3to 3
 Registration is changing. Visit our website for details ucdenver.edu/registration.
- CVEN 2200 - Computing Methods in Civil Engineering
Summer 2010 Registration **C E 2200**
 Introduces Fortran computer programming and advanced spreadsheet methods of solving civil engineering problems. Prereq: ENGR 1025 and MATH 2411.**Semester Hours:** 3to 3
 Registration is changing. Visit our website for details ucdenver.edu/registration.
- MATH 2421 - Calculus III
Summer 2010 Registration **MATH 2421**
 The third of a three-semester sequence in calculus (MATH 1401, 2411 and 2421). Topics include vectors, vector-valued functions, partial differentiation, differentiation, multiple integration, and vector calculus. Prereq: MATH 2411.**Semester Hours:** 4to 4
GT Pathways Category Key: GT-MA1
 Registration is changing. Visit our website for details ucdenver.edu/registration.
- PHYS 2331 - General Physics II: Calculus-Based
Summer 2010 Registration **PHYS 2331**
 Covers electrostatics, magnetic fields, electromagnetic waves (including light), and optics. Prereq: PHYS 2311. Coreq: MATH 2411.**Semester Hours:** 4to 4
 Registration is changing. Visit our website for details ucdenver.edu/registration.

Core Curriculum Elective (see note 2) (3 semester hours)

Total: 17 Hours

Second Semester

- CVEN 3121 - Mechanics of Materials
*Summer 2010 Registration **C E 3121***
Mechanical properties of materials, stresses and strains in members subjected to tension, compression and shear, combined stresses, flexural and shearing stresses in beams, deflections of beams, column analysis, principal stresses. Prereq: CVEN 2121. Cross-listed with MECH 3043. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.
- CVEN 3141 - Introduction to Structural Materials
*Summer 2010 Registration **C E 3141***
Introduces the production, properties, and behavior of common engineering materials. Emphasis is placed on concrete, steel, and wood. Includes the techniques used to determine material properties. Coreq: CVEN 3121. **Semester Hours:** 2to 2
Registration is changing. Visit our website for details ucdenver.edu/registration.
- CVEN 3401 - Introduction to Environmental Engineering
*Summer 2010 Registration **C E 3401***
An introductory course that provides a unique systems approach to environmental engineering, examining the source-to-receptor feedback loop for pollution control. Physical, chemical and biological processes are integrated across atmospheric, wastewater and sub-surface systems. Laboratory exercises provide direct experiential learning of key concepts. Prereq: CHEM 1130 or equivalent. Cross-listed with CVEN 5401. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.
- CVEN 4780 - Engineering Geology
*Summer 2010 Registration **C E 4780***
Studies geology as utilized in engineering and environmental practice. Emphasizes a conceptual integration of geologic materials, processes, and rates of change as a basis for successful application of geologic knowledge to environmental planning and engineering design projects. Prereq: MATH 2411 and CVEN 2121. Cross-listed with CVEN 5780 and GEOL 4780, 5780. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.
- GEOL 1072 - Physical Geology: Surface Processes
*Summer 2010 Registration **GEOL 1072***
Introductory course in physical geology that covers surface processes and landforms, and includes one all-day field trip. Note: Required for geology majors. **Semester Hours:** 4to 4 **GT Pathways Category Key:** GT-SC1
Registration is changing. Visit our website for details ucdenver.edu/registration.

- MATH 3800 - Probability and Statistics for Engineers
Summer 2010 Registration **MATH 3800**
 Basic probability theory, discrete and continuous random variables, point and interval estimation, test of hypotheses, one-way analysis of variance, and simple linear regression. Note: no co-credit with MATH 4810. Prereq: MATH 2411; coreq: MATH 2421. **Semester Hours:** 3to 3
 Registration is changing. Visit our website for details ucdenver.edu/registration.
- MATH 3195 - Linear Algebra and Differential Equations
Summer 2010 Registration **MATH 3195**
 Presents the essential ideas and methods of linear algebra and differential equations, emphasizing the connections between and the applications of both subjects. The course is designed for students in the sciences and engineering. Note: No co-credit with MATH 3200 and MATH 3191. Prereq: MATH 2411. **Semester Hours:** 4to 4
 Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 15 Hours

Junior Year

First Semester

- CVEN 3111 - Analytical Mechanics II
Summer 2010 Registration **C E 3111**
 A vector treatment of dynamics of particles and rigid bodies, including rectilinear translation, central-force, general motion of particles, kinematics of rigid bodies, the inertia tensor, plane motion of rigid bodies; energy and momentum methods for particles, systems of particles and rigid bodies. Prereq: CVEN 2121. Cross-listed with MECH 2033. **Semester Hours:** 3to 3
 Registration is changing. Visit our website for details ucdenver.edu/registration.
- CVEN 3313 - Theoretical Fluid Mechanics
Summer 2010 Registration **C E 3313**
 Introduces the fundamentals of fluid mechanics. Subject matter includes fluid properties, hydrostatics, the continuity principle, the energy principle, the momentum principle, similitude and dimensional analysis, forces on immersed bodies and laminar and turbulent flow in a closed conduit. Prereq: CVEN 2121. **Semester Hours:** 3to 3
 Registration is changing. Visit our website for details ucdenver.edu/registration.
- CVEN 3505 - Structural Analysis

Summer 2010 Registration **C E 3505**

Principles of structural analysis applied to statically determinate and indeterminate structures. Prereq: CVEN 3121. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

- CVEN 3602 - Transportation Engineering

Summer 2010 Registration **C E 3602**

This course will introduce you to the concepts and methods of transportation engineering, planning and management. This course will emphasize traffic engineering. Topics will include vehicle dynamics, traffic flow fundamentals, accident analysis, signal timing, highway capacity analysis, level of service analysis, freeway operations, and evaluation procedures for alternative transportation projects. Prereq: Junior standing or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Core Curriculum Elective (see note 2) (3 semester hours)

Total: 15 Hours

Second Semester

- CVEN 3323 - Applied Fluid Mechanics

Summer 2010 Registration **C E 3323**

Applies the principles of fluid mechanics to analysis and design of hydraulic systems involving pressurized pipelines, open channels and pumps. Introduces fluid measurements which includes laboratory demonstrations and experiments. Prereq: CVEN 2200 and CVEN 3313. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

- CVEN 3414 - Design of Water and Wastewater Systems

Summer 2010 Registration **C E 3414**

Covers the design of water distribution and wastewater collection systems. Topics include the design process, estimation of water demand and sewage flows, analysis of pipe networks and sewer systems, cost estimating, and design selection. Field trips are required. Prereq/Coreq: CVEN 3323. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

- CVEN 3708 - Introduction to Geotechnical Engineering

Summer 2010 Registration **C E 3708**

Index properties of soils, soil classification, clay minerals, compaction and other soil improvement methods; shrinkage, swelling and frost action; permeability and seepage analysis, consolidation settlement and time rate of consolidation, shear strength of soils, bearing capacity and lateral earth pressure. Prereq: CVEN 3121.

Prereq/Coreq: CVEN 3313. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

- CVEN 4718 - Intermediate Soils Engineering

Summer 2010 Registration **C E 4718**

Continuation of CVEN 3708 into selected topics in soils engineering. Laboratory experiments are performed to assess index properties of soils including gradation, soil consistency and specific gravity; moisture/density relations; soil classification, permeability, compressibility; and shear strength of soils. These soil parameters are then used in a design project required for the course. Prereq/Coreq: CVEN 3708. **Semester Hours:** 2to 2

Registration is changing. Visit our website for details ucdenver.edu/registration.

- ENGR 3012 - Thermodynamics

Summer 2010 Registration **ENGR 3012**

Introduces thermodynamic properties and state relationships, processes and cycles with work and heat transfer. Applications of the first and second laws to energy-related engineering systems. Prereq: MATH 1401 and PHYS 2311. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Core Curriculum Elective (see note 2) (3 semester hours)

Total: 17 Hours

Senior Year

First Semester

- CVEN 4000 - Senior Seminar

Summer 2010 Registration **C E 4000**

Required of all Civil Engineering majors. Each student shall take the state-administered Fundamentals of Engineering (F.E.) examination. This course must be taken prior to the semester of graduation. Prereq: CVEN 3111, ENGR 3012, ELEC 3030, senior standing and approved 30 credit hour check. **Semester Hours:** 0to 0

When Offered: FALL SPR

Registration is changing. Visit our website for details ucdenver.edu/registration.

- ELEC 3030 - Electric Circuits and Systems

Summer 2010 Registration **E E 3030**

This basic electrical engineering course is for non-majors (does not apply to BSEE degree). Students study circuit analysis, transformers, electric motors, and simple electronic circuits (diodes and transistors). Prereq: MATH 2421 and PHYS 2331. Cross-listed with MECH 3030. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Civil Engineering Design Electives (*see note 3*) (6 semester hours)
Upper-level Science, Math or Engineering Electives (*see note 4*) (6 semester hours)
Core Curriculum Elective (*see note 2*) (3 semester hours)

Total: 18 Hours

Second Semester

Civil Engineering Design Electives (*see note 3*) (6 semester hours)

- CVEN 4067 - Senior Design Projects
Summer 2010 Registration **C E 4067**

Senior civil engineering students, working in teams, are assigned significant open-ended design problems requiring the synthesis of material learned in previous engineering courses for solution. Design teams work independently under the supervision of a civil engineering faculty member. Prereq: An approved graduation agreement. **Semester Hours:** 3 to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Core Curriculum Elective (*see note 2*) (3 semester hours)
Science, Math or Engineering Electives (*see note 4*) (3 semester hours)

Total: 15 Hours

Program Total: 130 Hours

1. Or CHEM 2031 and CHEM 2038, which are required for students wishing to take CHEM 2061 and CHEM 2068 as general electives.
2. The communication, humanities and social science electives selected by the student and approved by his/her advisor must satisfy the college core curriculum.
3. Students must satisfactorily complete four of the six civil engineering design courses listed below:

CVEN 4427 Storm Water System Design

CVEN 4565 Timber Structure Design

CVEN 4575 Structural Steel Design

CVEN 4585 Reinforced Concrete Design

CVEN 4602 Highway Engineering

CVEN 4738 Intermediate Foundation Engineering

4. Science, math or engineering electives. The purpose of the electives is to extend the student's knowledge beyond the basic civil engineering requirements. Electives chosen should come from the areas of engineering, mathematics, chemistry, biology, physics or geology. In the case of mathematics, chemistry, physics or geology, the elective must be of higher level than courses in this field required by the civil engineering program. Suggested courses are CVEN 4077, CVEN 4087, CVEN design courses or any 5000-level CVEN course.

Communication BA

Requirements for Admission

Undergraduates must declare their intention to major in communication by the time they have completed 60 semester hours; they must apply to the communication department to be accepted as majors.

Program Requirements

The communication major requires that students take a total of 39 hours of course work in communication, 18 of which must be taken in residence at the Downtown Campus. At least 21 of the 39 hours must be upper division. Students must achieve a grade of C (2.0) or higher to receive credit for a course in the major and must maintain a minimum GPA of C+ (2.75) in their communication courses.

Students must complete 12 credits (4 courses) from the menu of core classes; they must complete at least 24 credits (8 classes) from the menu of electives; they must also complete at least 3 credits (1 class) from the menu of "exit" classes.

Core Courses

- COMM 1011 - Fundamentals of Communication
Summer 2010 Registration **CMMU 1011**
Studies communication theory and application. Topics include communication models, interpersonal communication and the concept of self, nonverbal communication, message preparation and analysis, and decision making. **Semester Hours: 3 to 3** **GT Pathways Category Key: GT-SS3**
Registration is changing. Visit our website for details ucdenver.edu/registration.
- COMM 1021 - Fundamentals of Mass Communication
Summer 2010 Registration **CMMU 1021**
Studies relationships among television, radio, newspapers, magazines and society. Examines the effects of exposure to mass media, mass media ownership and

control, mass media law, technical aspects of message and program production, and delivery. **Semester Hours:** 3to 3 **GT Pathways Category Key:** GT-SS3
Registration is changing. Visit our website for details ucdenver.edu/registration.

- COMM 2020 - Communication and Citizenship
Summer 2010 Registration **CMMU 2020**
Offers an introduction to debates about, and the different means of practicing, citizenship in America. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.
- COMM 2050 - Business and Professional Speaking
Summer 2010 Registration **CMMU 2050**
Development of communication skills often used in business and professional settings, with an emphasis on various kinds of presentations. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.
-OR-
- COMM 2101 - Presentational Speaking
Summer 2010 Registration **CMMU 2101**
Theory and practice of presentational speaking in a variety of contexts to accomplish goals of asserting individuality, building community, securing adherence, discovering knowledge and belief, and offering perspectives. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 12 Hours

Electives

Skill Area Electives

In addition to the four communication core courses, students are required to complete at least 24 credits (8 classes) from among the department's nine pathways, which include community service and public affairs, legal communication, health communication, mass media, human resources and organizational communication, mediation and conflict resolution, political communication and government, technical communication and public relations and advertising. Students may use the pathways to help craft a program of study, but *they are not required to do so*; the pathways are simply suggestions for ways to organize courses that will prepare students for careers.

Total: 24 Hours

Upper Division Elective

"Exit" Course—majors are required to complete at least one "exit" class that concludes their course of study with a special experience focused on high-level research,

community engagement, international travel or workplace experience. Students may choose from the following courses:

- COMM 3939 - Internship/Cooperative Education
*Summer 2010 Registration **CMMU 3939***
Applies communication or technical communication concepts and skills in supervised employment situations. Prereq: Junior standing and 2.75 GPA. **Semester Hours:** 1to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.
- COMM 4282 - Environmental Communication
*Summer 2010 Registration **CMMU 4282***
Studies the communication processes involved in policies and practices affecting natural and human environments. Cross-listed with COMM 5282. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.
- COMM 4500 - Health Communication
*Summer 2010 Registration **CMMU 4500***
Examines the role of communication in a wide range of health contexts. Topics include cultural constructions of health and illness, public health communication campaigns, client-provider interactions, telemedicine, community-based health programs and medical journalism. Cross-listed with COMM 5500. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.
- COMM 4510 - Usability Testing
*Summer 2010 Registration **CMMU 4510***
Teaches students how to evaluate technical documentation testing needs, evaluate testing options for their feasibility and costs/benefits, design and carry out a usability testing plan, evaluate and write up test results for actual client documents and products. Prereq: COMM 3120 or permission of instructor. Cross-listed with COMM 5510. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.
- COMM 4620 - Health Risk Communication
*Summer 2010 Registration **CMMU 4620***
Acquaints students with contemporary theory, research, and practice in health risk communication. Prereq: COMM 3120, COMM 4011, COMM 4200, COMM 4500, or permission of instructor. Cross-listed with COMM 5620, HBSC 4620, HBSC 5620, and ENVS 5620. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.
- COMM 4688 - Senior Seminar: Transitioning from College to Career
*Summer 2010 Registration **CMMU 4688***
Synthesis experience for communication majors designed to prepare students to

enter the job market and to integrate and reflect on their experience in communication. Prereq: Communication major status. **Semester Hours:** 3 to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

- COMM 4710 - Topics in Communication
*Summer 2010 Registration **CMMU 4710***
Special classes for faculty-directed experiences examining communication issues and problems not generally covered in the curriculum. Cross-listed with COMM 5710. **Semester Hours:** 1 to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.
Take under topic "Communication, Social Justice, and Prisons"
- COMM 4995 - Travel Study Topics
*Summer 2010 Registration **CMMU 4995***
Students study various topics in a foreign country led by a CU-Denver instructor; register through the Office of International Education. Cross-listed with COMM 5995. **Semester Hours:** 1 to 15
Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 3 Hours

Major Total: 39 Hours

For more information, see the faculty advisor and the department's Web site.

Computer Science and Engineering BS

Program Objectives

The objectives of the bachelor of science degree in the computer science and engineering program are to:

1. Produce graduates who are successful professionals in computer science and engineering
2. Prepare students for graduate or professional study
3. Develop team building
4. Involve students in software design and projects
5. Support and enhance leadership skills
6. Produce students who can communicate effectively

Measurable Outcomes

To attain the educational objectives of the BS CSE program, the CSE department intends to produce the following measurable outcomes at the time of graduation.

Graduates of the BS CSE program will have the following skills:

- an ability to apply knowledge of mathematics, science and engineering
- an ability to analyze a problem and identify and define the computing requirements appropriate to its solution
- an ability to design and conduct software and/or hardware experiments, as well as to analyze and interpret data
- an ability to design software and/or hardware to meet desired needs
- an ability to function on multidisciplinary teams
- an ability to identify, formulate and solve computer science and engineering problems
- an understanding of professional and ethical responsibility
- an ability to communicate effectively
- the broad education necessary to understand the impact of engineering and computer science solutions in a global and societal context
- a recognition of the need for, and an ability to engage in, lifelong learning
- a knowledge of contemporary issues
- an ability to use the techniques, skills and modern tools necessary for computer science and engineering practice
- an ability to display leadership

Typical Curriculum for BS in Computer Science and Engineering

Freshman Year

First Semester

- CSCI 1410 - Fundamentals of Computing
Summer 2010 Registration **C SC 1410**
First course in computing for those who will take additional computer science courses. Covers the capabilities of a computer, the elements of the computer language C++, and basic techniques for solving problems using a computer. Coreq: CSCI 1411. **Semester Hours:** 3 to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.
- CSCI 1411 - Fundamentals of Computing Laboratory

Summer 2010 Registration **C SC 1411**

This laboratory is taken with CSCI 1410 and will provide students with additional help with problem solving and computer exercise to compliment the course material covered in CSCI 1410. Prereq: Freshman status. Coreq: CSCI 1410. **Semester**

Hours: 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

- CSCI 1510 - Logic Design

Summer 2010 Registration **C SC 1510**

The design and analysis of combinational and sequential logic circuits. Topics include binary and hexadecimal number systems, Boolean algebra and Boolean function minimization, and algorithmic state machines. Lecture/lab includes experiments with computer-aided design tools. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

- ENGL 1020 - Core Composition I

Summer 2010 Registration **ENGL 1020**

Provides opportunities to write for different purposes and audiences, with an emphasis on learning how to respond to various rhetorical situations; improving critical thinking, reading, and writing abilities; understanding various writing processes; and gaining a deeper knowledge of language conventions. **Semester**

Hours: 3to 3 **GT Pathways Category Key:** GT-C01

Registration is changing. Visit our website for details ucdenver.edu/registration.

- MATH 1401 - Calculus I

Summer 2010 Registration **MATH 1401**

First course of a three-semester sequence (MATH 1401, 2411, 2421) in calculus.

Topics covered include limits, derivatives, applications of derivatives, and the definite integral. Note: Students cannot receive credit for both MATH 1080 and 1401. Prereq: MATH 1120 or 1130 and satisfactory score on the placement exam. **Semester**

Hours: 4to 4 **GT Pathways Category Key:** GT-MA1

Registration is changing. Visit our website for details ucdenver.edu/registration.

Core Curriculum Elective. Semester Hours: 3 (see note 1)

Total: 17 Hours

Second Semester

- CSCI 2312 - Intermediate Programming

Summer 2010 Registration **C SC 2312**

Programming topics in the C++ language. The emphasis is on problem solving using object oriented and Generic Programming. Topics include advanced I/O, classes, inheritance, polymorphism and virtual functions, abstract base classes, exception handling, templates, and the Standard Template Library. Prereq: CSCI

1410.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

- MATH 2411 - Calculus II
Summer 2010 Registration **MATH 2411**
The second of a three-semester sequence (MATH 1401, 2411, 2421) in calculus. Topics covered include exponential, logarithmic, and trigonometric functions, techniques of integration, indeterminate forms, improper integrals and infinite series. Prereq: MATH 1401.**Semester Hours:** 4to 4**GT Pathways Category Key:** GT-MA1
Registration is changing. Visit our website for details ucdenver.edu/registration.
- PHYS 2311 - General Physics I: Calculus-Based
Summer 2010 Registration **PHYS 2311**
Covers vector displacement, uniform and accelerated motion, force, momentum, energy, rotating systems, oscillations, and an introduction to thermodynamics. Emphasis is on basic principles. Coreq: MATH 1401.**Semester Hours:** 4to 4
Registration is changing. Visit our website for details ucdenver.edu/registration.
- PHYS 2321 - General Physics Lab I
Summer 2010 Registration **PHYS 2321**
Semester Hours: 1to 1
Registration is changing. Visit our website for details ucdenver.edu/registration.
- ENGL 2030 - Core Composition II
Summer 2010 Registration **ENGL 2030**
Focuses on academic and other types of research-based writing and builds on the work completed in ENGL 1020. Focuses on critical thinking, reading and writing as well as working with primary and secondary source material to produce a variety of research-based essays. Emphasis on using both print-based and electronic-based information. Prereq: ENGL 1020.**Semester Hours:** 3to 3**GT Pathways Category Key:** GT-C02
Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 15 Hours

Sophomore Year

First Semester

- CSCI 2421 - Data Structures and Program Design
Summer 2010 Registration **C SC 2421**
Topics include a first look at an algorithm, data structures, abstract data types, and basic techniques such as sorting, searching, and recursion. Programming exercises are assigned through the semester. Prereq: ENGL 1020, CSCI 2312.**Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

- CSCI 2511 - Discrete Structures
Summer 2010 Registration C SC 2511
Covers the fundamentals of discrete mathematics, including: logic, sets, functions, asymptotics, mathematical reasoning, induction, combinatorics, discrete probability, relations and graphs. Emphasis on how discrete mathematics applies to computer science in general and algorithm analysis in particular. Prereq: MATH 1401.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.
- CSCI 2525 - Assembly Language and Computer Organization
Summer 2010 Registration C SC 2525
Topics include computer architecture, program execution at the hardware level, programming in assembly language, the assembly process, hardware support of some high-level language features, and a program's interface to the operating system. Programming exercises are assigned in this course. These exercises involve the use of specific hardware in designated laboratories. Prereq: CSCI 1410 and 1510.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.
- PHYS 2331 - General Physics II: Calculus-Based
Summer 2010 Registration PHYS 2331
Covers electrostatics, magnetic fields, electromagnetic waves (including light), and optics. Prereq: PHYS 2311. Coreq: MATH 2411.**Semester Hours:** 4to 4
Registration is changing. Visit our website for details ucdenver.edu/registration.
- PHYS 2341 - General Physics Lab II
Summer 2010 Registration PHYS 2341
Prereq: PHYS 2321.**Semester Hours:** 1to 1
Registration is changing. Visit our website for details ucdenver.edu/registration.

Core Curriculum Elective Semester Hours: 3 (see note1)

Total: 17 Hours

Second Semester

- CSCI 2132 - Circuit Analysis I
Summer 2010 Registration C SC 2132
Basic theorems of circuit analysis. Transient solution of circuits by classical techniques. Ideal operational amplifier analysis techniques and applications. Prereq:

MATH 2411 and PHYS 2331. Cross-listed with ELEC 2132. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

- CSCI 3320 - Advanced Programming
Summer 2010 Registration C SC 3320
A continuation of programming and problem solving methodologies. The focus will be on generic programming with C++ templates and the standard template library, and will be supplemented with object-oriented programming and top-down design. Prereq: CSCI 2421. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.
- CSCI 3412 - Algorithms
Summer 2010 Registration C SC 3412
Design and analysis of algorithms. Asymptotic analysis as a means of evaluating algorithm efficiency. The application of induction and other mathematical techniques for proving the correctness of an algorithm. Data structures for simplifying algorithm design, such as hash tables, heaps and search trees. Elementary graph algorithms. Assignments include written work and programming projects. Prereq: CSCI 2421 and CSCI 2511. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

Core Curriculum Elective Semester Hours: 3 (see note 1)

- CSCI 3287 - Database System Concepts
Summer 2010 Registration C SC 3287
Introduces database design, database management systems, and the SQL standard database language. Includes data modeling techniques, conceptual database design, theory of object-relational and relational databases, relational algebra, relational calculus, normalization and database integrity. Prereq: CSCI 2421. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 15 Hours

Junior Year

First Semester

- CSCI 3415 - Principles of Programming Languages
Summer 2010 Registration C SC 3415
Introduces programming language design concepts and implementation issues. Includes language concepts such as control structures and data types, formal language specification techniques, and syntactic and semantic implementation

issues. Prereq: CSCI 2421 and 2525. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

- CSCI 3453 - Operating System Concepts
Summer 2010 Registration C SC 3453
Covers the principles of computer operating systems and the essential components of an operating system. Topics include: I/O devices, file systems, CPU scheduling and memory management. Prereq: CSCI 3412 (Algorithm). **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.
- CSCI 3511 - Hardware-Software Interface
Summer 2010 Registration C SC 3511
Hardware and software techniques needed to control and program device interfaces. Input and output devices, computer peripherals, device drivers and interfaces are introduced. Specific programmable devices are used in class projects. Prereq: CSCI 2525. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.
- CSCI 3560 - Probability and Computing
Summer 2010 Registration C SC 3560
Events and probability. Discrete random variables and expectation. Moments and deviations. Chernoff bounds. The probabilistic method. Markov chains and random walks. Continuous distributions and the Poisson process. Entropy, randomness and information. The Monte Carlo method. Martingales. Pairwise independence and universal hash functions. Statistical inference. Bayesian methods. Prereq: MATH 2411. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CSE Tech Elective. Semester Hours: 3

Core Curriculum Elective Semester Hours: 3 (see note 1)

Total: 18 Hours

Second Semester

- CSCI 3508 - Introduction to Software Engineering
Summer 2010 Registration C SC 3508
Introduces principles and practices of software engineering: software life-cycle models, requirements engineering, analysis and design tools, human factors risk management, program certification, project management and intellectual property rights. Prereq: ENGL 1020 and CSCI 3412. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.
- MATH 3195 - Linear Algebra and Differential Equations
Summer 2010 Registration MATH 3195
Presents the essential ideas and methods of linear algebra and differential

equations, emphasizing the connections between and the applications of both subjects. The course is designed for students in the sciences and engineering. Note: No co-credit with MATH 3200 and MATH 3191. Prereq: MATH 2411. **Semester**

Hours: 4to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

CSE Tech Elective. Semester Hours: 3

CSE Tech Elective. Semester Hours: 3

Core Curriculum Elective. Semester Hours: 3 (see note 1)

Total: 16 Hours

Senior Year

First Semester

- CSCI 3287 - Database System Concepts
Summer 2010 Registration C SC 3287
Introduces database design, database management systems, and the SQL standard database language. Includes data modeling techniques, conceptual database design, theory of object-relational and relational databases, relational algebra, relational calculus, normalization and database integrity. Prereq: CSCI 2421. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.
- CSCI 4034 - Theoretical Foundations of Computer Science
Summer 2010 Registration C SC 4034
Introduces abstract models for computation, formal languages and machines. Topics include: automata theory, formal languages, grammars and Turing machines. Prereq: CSCI 3412. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.
- CSCI 4650 - Numerical Analysis I
Summer 2010 Registration C SC 4650
Methods and analysis of techniques used to resolve continuous mathematical problems on the computer. Solution of linear and nonlinear equations, interpolation and integration. Prereq: MATH 2411, MATH 3191 or MATH 3195, and programming experience. Cross-listed with CSCI 5660, MATH 4650, and MATH 5660. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.
- CSCI 4738 - Senior Design I
Summer 2010 Registration C SC 4738
This is an advanced practical course in which students design, implement, and

document and test software systems for use in industry, non-profits, government and research institutions. The course offers practical experience by working closely with project sponsors. It also offers extensive experience in oral and written communication throughout the software lifecycle. Prereq: CSCI 3508. **Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CSE Tech Elective. Semester Hours: 3

Total: 15 Hours

Second Semester

- CSCI 4739 - Senior Design II

Summer 2010 Registration **C SC 4739**

This course is a continuation of Senior Design I. Students must have taken Senior Design I in order to enroll for Senior Design II. In this course, the projects begun in Senior Design I are completed and presented. Prereq: CSCI 4738. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

- CSCI 4591 - Computer Architecture

Summer 2010 Registration **C SC 4591**

Deals with how assembly language maps to hardware, and basic hardware techniques implemented in computers. Topics include logic design of arithmetic units, data control path processor logic, pipelining, memory systems, and input-output units. The emphasis is on logic structure rather than electronic circuitry. Students must know basic control logic design and be familiar with an assembly language before taking this course. Prereq: CSCI 2525 or ELEC 2651. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

- CSCI 4761 - Introduction To Computer Networks

Summer 2010 Registration **C SC 4761**

Introduction and overview of computer networks. Topics include protocols, quality of services and performance issues. Prereq: CSCI 2421. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CSE Tech Elective. Semester Hours: 3

Core Curriculum Elective Semester Hours: 3 (see note 1)

Total: 15 Hours

Program Total: 128 Hours

In addition to planning for sequences of courses based on prerequisites, students should plan to complete sophomore-level courses before taking junior-level courses.

1. Downtown Campus core curriculum: core requirements of the College of Engineering and Applied Science are outlined in the section titled "[Undergraduate Core Curriculum in Engineering](#)" or at www.ucdenver.edu/cse. In the communication area, students must pass ENGL 1020-3, Core Composition I, with a C- or better prior to taking either CSCI 2421 or CSCI 4739.
2. Computer science and engineering technical electives: The student must take five courses (15 semester hours) chosen from any CSCI 3000 or 4000-level courses that are not part of the required bachelor of science in computer science and engineering curriculum. The 2000-level CSCI "Practical Systems Administration" course will be counted as one CSCI elective. ELEC 4000-level computer engineering courses may be taken to satisfy a CSE tech elective with prior approval of a CSE academic advisor.

Criminal Justice BA

Program Director: Mary Dodge, PhD

Prospective Students: 303-315-2227

Current Students and Advising: 303-315-2227

Faculty

Professors:

Mark Pogrebin, PhD, University of Iowa

Eric Poole, PhD, Washington State University

Associate Professors:

Mary Dodge, PhD, University of California, Irvine

Angela Gover, PhD, University of Maryland

Callie Rennison, PhD, University of Houston

Paul Stretesky, PhD Florida State University

Assistant Professor:

Deanna Perez, PhD, University of Maryland

Associate Research Professor:

Jerry Williams, DPA, University of Colorado

The School of Public Affairs is excited to offer a new bachelor of arts program in criminal justice. It is an interdisciplinary program that combines specific course work in criminal justice with a liberal arts focus. The criminal justice degree offers training for specific occupations within criminal justice agencies and provides students with the critical thinking, writing and presentation skills necessary for career advancement and graduate study. The course work explores the complex nature of crime causation, criminal justice organizations and the implications of public policies that allow graduates to adapt to the evolving nature of the field.

As with all undergraduate degrees, students are required to complete the requirements of the Downtown Campus core curriculum, providing an education that draws heavily on social and natural sciences as well as liberal arts. The program will not only provide a direct line to employment in the growing field of criminal justice, but will also facilitate the movement of outstanding students into SPA's MCJ and PhD graduate programs. Junior and senior criminal justice students may be permitted to enroll in a graduate level MCJ course by advisement. Students will be well prepared to pursue additional advanced degrees in fields where critical thinking and analytical skills are required.

Admissions Requirements

Entering freshmen, current UC Denver students and transfer students are eligible for admission to the program. All students must meet the admission requirements described in the [Information for Undergraduate Students](#) chapter of this catalog.

Transfer Students

Students who have attended another college or university are expected to meet general requirements for admission of transfer students as described in the [Information for Undergraduate Students](#) chapter. A maximum of 15 semester credits of criminal justice coursework can be accepted and applied to the criminal justice major. The BACJ Program Director has the final discretionary authority to accept or reject criminal justice transfer credits. Transfer students with at least 30 semester hours of transferable credit who have been denied admission to the college by the Downtown Campus Office of Admissions, and who have special circumstances not covered by the regular admission policies, may petition the SPA Academic Standards for provisional admission. The Academic Standards Committee requires evidence of academic performance before provisional admission is granted. Policies and procedures for the SPA Academic Standards Committee are available through the SPA Advising Office.

Advising and Student Services

Upon matriculation into the criminal justice program, students will receive advising from the undergraduate academic advisor. The academic advisor will assist students with registration, clarify university and department policy and facilitate the graduation checkout. Advising will ensure that students take appropriate courses in the core curriculum to provide a foundation for their course work in the program. Students will also be assigned a faculty advisor who will assist them with questions about their majors, concentrations and career directions.

Grading and Policies

Dean's List Criteria

UC Denver will use a fixed criterion across all colleges for determining eligibility for the Dean's List. This policy applies to undergraduate students.

For fall and spring semesters, students must successfully complete 9 hours in the semester upon which to determine grade point. These courses can be both within and outside of the School of Public Affairs. MSCD Pooled courses will not be included in the calculation nor will they count towards the 9 hours required for consideration. The GPA set for inclusion in the Dean's List is 3.75. In the summer semesters, students must complete 6 hours as a basis for inclusion in the Dean's List. Course inclusion will be the same as in fall and spring semesters. The GPA for Dean's List in summer will also be 3.75. Colleges will collect data each semester on the number of students making the Dean's List and report the number and percentage of total students in the college. Students who make the Dean's List for both fall and spring semesters may be eligible of a Dean's List scholarship award. Dean's List Scholarship awards vary in amount each semester depending on funding and the number of BACJ students who achieve Dean's List status. The Registrar's Office will calculate the semester GPAs for all students two weeks prior to the due date for semester grades. Those GPAs will be the basis for determining the Dean's List. Incompletes will not be considered in the calculation of minimum number of hours. The Dean's List will not be recalculated to include completed incompletes.

Academic Probation and Suspension

Students at the university are expected to maintain progress in their degree program, as defined by being in "good academic standing." Good academic standing requires minimally a cumulative grade point average (GPA) of 2.0 on all University of Colorado course work.

Academic Probation

- Academic probation is a warning to students that they are not progressing toward completion of their degree in a satisfactory manner.

- Students are placed on academic probation when their cumulative CU GPA falls below a 2.0 at the end of any academic term.
- Students are informed in writing (via University-assigned email and postal letter) of their academic probation status.
- Students on Academic Probation will be required to complete the Academic Success Plan during their first semester on Academic Probation.
- Students will be required to schedule an appointment and meet with their academic advisor to discuss the completed Academic Success Plan before they will be allowed to register for the subsequent term.
- Students on Academic Probation will be required to schedule an appointment and meet with their academic advisor every semester that they are on Academic Probation before they will be allowed to register.
- Academic Probation requires that students achieve a minimum 2.3 semester GPA each subsequent term until their cumulative CU GPA is at least a 2.0 to return to good academic standing. Students must achieve a minimum 2.0 cumulative CU GPA to meet graduation requirements.
- Students who fail to earn the 2.3 semester GPA during any semester of Academic Probation will be placed on Restricted Academic Probation.
- Students have five semesters or 30 credits (whichever happens sooner) to raise their cumulative GPA to above a 2.0, or they will be placed on Academic Suspension.
- Once a student has raised his/her cumulative CU GPA to at least a 2.0, s/he will be removed from Academic Probation and notified via University-assigned email that s/he is in Academic Good Standing.

Restricted Academic Probation

- Students who fail to earn the 2.3 semester GPA during any semester of Academic Probation will be placed on Restricted Academic Probation.
- Students are informed in writing (via University-assigned email and postal letter) of Restricted Academic Probation status.
- Students on Restricted Academic Probation will be allowed to enroll for a maximum of 6 credits/2 classes per semester (whichever is more). A course and its attached lab are considered to be one course in this case.
- Students on Restricted Academic Probation will be required to schedule an appointment and meet with their academic advisor in order to register for courses.
- Students on Restricted Academic Probation will not be able to register online; they will need to register for courses using a Schedule Adjustment Form, which must be submitted to the Service Center (North Classroom #1003) for processing.
- Restricted Academic Probation requires that students achieve a minimum 2.3 semester GPA each subsequent term until their cumulative CU GPA is at least a 2.0. Students must achieve a minimum 2.0 cumulative CU GPA to return to good academic standing and to meet graduation requirements.

- Students on Restricted Academic Probation who do not meet the 2.3 minimum semester GPA will be placed on Academic Suspension.
- Students who fail to raise their cumulative GPA to 2.0 or above in five semesters or 30 credit hours on Academic Probation and Restricted Academic Probation will be placed on Academic Suspension.

Academic Suspension

- Students on Restricted Academic Probation who do not meet the 2.3 minimum semester GPA will be placed on Academic Suspension.
- Students are informed in writing via certified/registered letter of their Academic Suspension status.
- The minimum duration of Academic Suspension is for a period of one year (three semesters, including summer term). Students placed on Academic Suspension will be unable to take courses from any CU campus during this time.
- Should a student be placed on Academic Suspension while registered for the next semester, s/he will be administratively dropped from their courses by the University.
- A student's Academic Suspension status is permanently indicated on his/her official University of Colorado transcript. During the one-year Academic Suspension period, students who wish to return to the University should consider one (or both) of the following actions:
 - Attend another regionally-accredited college/university.
Students who choose to attend another institution while on Academic Suspension can take as many or as few credits as they choose, but must earn a 2.75 cumulative GPA in all transferable course work. Students should consult their academic advisor to discuss appropriate course work.
 - Use the time off to directly address and resolve the factors that contributed to the academic difficulty.
- After the one-year suspension period has elapsed, students must petition the appellate committee (of the school or college they wish to enter) for readmission and meet and document at least one of the following criteria:
 - Attendance at another regionally accredited college/university where they earned a minimum cumulative GPA of 2.75 in transferable credit.
 - Explanation of their previous academic difficulty, demonstration of what has changed, and how this will allow them to now achieve and maintain Good Academic Standing (including a semester GPA of at least 2.3 and a cumulative GPA of at least a 2.0).
- Students who choose to petition the School of Public Affairs appellate committee for readmission must submit their petitions by the following deadlines:
 - For fall admission: June 1
 - For spring admission: December 1
 - For Maymester/summer admission: April 1
- If a student is granted readmission and his/her CU GPA is below a 2.0, s/he will be readmitted on Restricted Academic Probation. These students must meet the

condition of Restricted Academic Probation every semester until their cumulative CU GPA is at least a 2.0.

Second Suspension

- Students who are readmitted after their first Academic Suspension and fail to meet the conditions of Restricted Academic Probation for a second time are placed on a second suspension for an indefinite period of time.
- Students on a second suspension may be readmitted to the University only by petition to the college's appellate committee.
- Students will not be considered for readmission unless they have demonstrated significant improvement in academic performance at the college/university level, and/or considerable and positive change in personal circumstances.

Grade Policy

The University of Colorado Grading System is based on a 4.0 absolute scale.

Incomplete Grades

An incomplete grade of "I" can be issued at faculty discretion when there are special circumstances that preclude course completion. Incomplete grades are only issued when a small portion of the course remains. At minimum, 75% of the work in the course must be completed. Students are allowed up to 12 months to complete the unfinished portion of the course. After 12 months an "I" grade that has not been completed will become an "F."

Pass/Fail Grades

Core knowledge area and general electives are the only courses that can be completed pass/fail. Grades of "D-" or better is translated by the Records Office to a P (pass) grade. P grades do not affect students' GPA. F grades do affect students' GPA. Students interested in completing a course as pass/fail must submit a Schedule Adjustment Form during the add/drop during the respective semester to the BACJ Academic Advisor. Students need to consult the academic calendar posted on the Office of the Registrar's webpage for add/drop dates. Up to 16 credits may be completed as pass/fail and credited toward the bachelor degree. Students can complete a maximum of 6 credits as pass/fail in any one semester.

The Internship Program

Undergraduate students without experience in the field will be expected to complete an internship for credit under the direction of a faculty sponsor. Internships are helpful for career exploration early in a student's academic career or for job experience after developing academic content in the major. Students must have a minimum 2.0

cumulative GPA and a minimum of 15 semester hours completed at UC Denver before registering for the internship. A maximum of 3 semester hours of internship per semester and 6 semester hours total may be counted toward the 120 semester hours necessary for graduation.

Undergraduate students should contact the [Experiential Learning Center](#) for details on internship placements, paperwork and requirements.

Program Requirements

Students completing a BA in criminal justice at UC Denver will complete a minimum of 120 semester hours including:

- 34–36 general education core curriculum semester hours
- 21 undergraduate criminal justice semester hours, including 18 upper-division semester hours
- 15 elective semester hours in criminal justice and ancillary fields for the selected area of concentration (including an internship)
- 46–48 elective semester hours, an optional CLAS or language minor (15-21 hours), optional electives or internship
- students without experience in the field of criminal justice must complete a 3-semester-hour internship

Students must receive a minimum of a C (2.0) in each undergraduate course applied to satisfy major or minor degree requirements.

Required Criminal Justice Courses

- CRJU 1001 - Introduction to Criminal Justice
*Summer 2010 Registration **C J 1001***

This course is designed to provide an overview of the criminal justice process and the criminal justice system in general. Concepts of crime, deviance and justice are discussed and general theories of crime causality are examined. Special emphasis is placed on the components of the criminal justice system: the police, the prosecutorial and defense functions, the judiciary and the field of corrections. **Semester Hours:** 3 to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

- CRJU 2041 - Crime Theory and Causes
*Summer 2010 Registration **C J 2041***

This course provides a general survey of the nature and causes of crime and efforts of the criminal justice system to predict, prevent, modify and correct this behavior. This course involves a critical appraisal of various theories of crime causation, including an examination of biological, psychological, economic and sociological

perspectives that explain crime and deviance. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

- CRJU 3100 - Criminal Justice Research Methods

Summer 2010 Registration **C J 3100**

This course introduces students to the formulation of research questions covering crime and justice, research designs, data collection and the interpretation and reporting of these data in criminological and justice-system settings. Course content also includes experimental and non- experimental research designs, probability and non- probability sampling techniques and construction of scales and indexes for research purposes. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

- CRJU 3150 - Statistics for Criminal Justice

Summer 2010 Registration **C J 3150**

This course serves as an introduction to descriptive and inferential statistics and the computer analysis of criminology and criminal justice data. Course content includes basic procedures of hypothesis testing, correlation and regression analysis and the analysis of continuous and binary dependent variables. Emphasis is placed on the examination of research problems and issues in the field of criminology and criminal justice. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

- CRJU 4042 - Corrections

Summer 2010 Registration **C J 4042**

This course consists of an overview of the field of penology and corrections. Attention is paid to conflicting philosophies of punishment, criminological theory as it applies to the field of corrections, the selectivity of the process through which offenders move prior to their involvement in correctional programs, alternative correctional placements and empirical assessments of the short and long-term consequences of one's involvement in correctional programs. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

- CRJU 4043 - Law Enforcement

Summer 2010 Registration **C J 4043**

This course presents an overview of the role of police in the United States. Attention is placed on the origins of policing, the nature of police organizations and police work, patterns of relations between the police and the public, discretion and police role in a sociolegal context. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

- CRJU 4044 - Courts and Judicial Process

Summer 2010 Registration **C J 4044**

This course examines the basic functions, structure and organization of the federal and state court system, with special attention on the criminal court system. This course also focuses on the influence of judicial behavior on the court process by examining judges' policy preferences, legal considerations, group processes within courts and courts' political and social environments. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 21

Criminal Justice Electives

Criminal Justice Electives—15 semester hours, with 9 hours from the Department of Criminal Justice and 6 from other departments

- CRJU 2110 - Drugs, Alcohol and Crime
Summer 2010 Registration **C J 2110**
This course looks at the socially constructed nature of drugs and drug policy. The course explores the connection between drugs and crime within the socio- historical context of contemporary U.S. drug policy. Special emphasis is placed on the relationships between drugs and alcohol abuse and criminal offending, including the historical and contemporary criminal justice system responses to illegal substances. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.
- CRJU 2210 - Probation and Parole
Summer 2010 Registration **C J 2210**
This course is appropriate for students who have a specific interest in the role of probation and parole as correctional sanctions in community settings. Particular attention is paid to evaluations research evidence on the success of probation and parole, factors that contribute to the successful completions of probation and parole and the role that the community and citizens play in the community corrections process. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.
- CRJU 2320 - Police-Community Relations
Summer 2010 Registration **C J 2320**
This course focuses on the police and community response to crime. Course content includes an overview of the major concepts and issues involved in what many consider to be a major fundamental shift in the approach and operations of modern policing. The origins, meaning, development and experiences of community policing and various assessments of the advantages and disadvantages of community

policing are emphasized. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

- CRJU 2510 - Juvenile Justice Administration

Summer 2010 Registration C J 2510

This course examines the development, change and operation of the American juvenile justice system and the social factors that shape the identification and treatment of juvenile offenders. Special emphasis is placed on the nature of juvenile law and methods of dealing with youthful offenders. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

- CRJU 3160 - White-Collar Crime

Summer 2010 Registration C J 3160

This course introduces students to a variety of topics and issues in white-collar crime including types, causes and the measurement of white-collar crime. The class examines the debate surrounding the definition of white-collar crime, provides an overview of the costs of white-collar crime and corporate crime to society, considers competing theories that explain white-collar criminality and explores the use of criminal sanctions to deter misconduct involving corporations and elite offenders. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

- CRJU 3220 - Community-Based Corrections

Summer 2010 Registration C J 3220

This course focuses on innovative community-based strategies for dealing with criminal offenders. Correctional alternatives to imprisonment discussed in this course include probation and parole and various community programs such as day reporting centers, electronic monitoring, half-way houses and boot camp programs. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

- CRJU 3250 - Violence in Society

Summer 2010 Registration C J 3250

This course examines various aspects of violence including distribution over time and space, situations and circumstances associated with violent victimization and offending and how social institutions, community structure and cultural factors shape violent events. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

- CRJU 3252 - Violent Offenders

Summer 2010 Registration C J 3252

This course consists of a historical overview of violence in American society. Course content includes an examination of violent crime rates over time, societal explanations for changes in rates and an examination of the theoretical causes and

preventative strategies for acts of violence. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

- CRJU 3310 - Police in Contemporary Society
Summer 2010 Registration C J 3310
This course examines law enforcement's role in contemporary society and the impact of police interaction on other segments of the criminal justice system. Special attention is paid to controversies related to police training and education, career development and community relations. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.
- CRJU 3420 - Pleas, Trials and Sentences
Summer 2010 Registration C J 3420
This course focuses on analysis of case materials involving pleas, trials and sentences. Course content includes an examination of the basic dimensions of criminality, the specific elements of major crimes, the use of confessions, fair trial procedures and the nature of criminal sanctions including cruel and unusual punishments. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.
- CRJU 3540 - Crime and Delinquency Prevention
Summer 2010 Registration C J 3540
This course provides students with an overview of issues related to crime and delinquency prevention, both from criminological and criminal justice points of view. Crime prevention programs that encompass both the individual and community levels are examined. Responses to juvenile offenders-ranging from prevention and diversion to institutional corrections and after care are explored in context of youth policy generally. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.
- CRJU 4120 - Race, Class and Crime
Summer 2010 Registration C J 4120
This course examines the relationships between race, social class and crime. Attention is given to theoretical explanations, empirical research and patterns of criminal behavior and focuses on historical frameworks that are relevant to current perspectives on the impact and interactions of race, class and crime in the field. Prereq: CRJU 3041. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.
- CRJU 4130 - Poverty and Crime
Summer 2010 Registration C J 4130
This course involves an economic analysis of crime and the criminal justice system. Topics include empirical and theoretical analysis of the economic causes of criminal behavior, the social costs of crime and its prevention and the design of crime

enforcement policies. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

- CRJU 4140 - Domestic Violence and Crime

Summer 2010 Registration **C J 4140**

This course examines the criminal justice systems response to intimate partner violence by focusing on the interactions between victims, offenders and the individual components of the criminal justice system (law enforcement and the judiciary). By exploring the dynamics of intimate partner violence this course addresses the theory, history, research, legislation and policy implications related to the criminal justice system's response to violence against women. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

- CRJU 4170 - Victim Studies

Summer 2010 Registration **C J 4170**

This course involves the scientific study of crime victims and focuses on the physical, emotional and financial harm people suffer at the hands of criminals. Focus is placed on the victim-offender relationships, interactions between victims and the criminal justice system and connections between victims and other social groups and institutions. The theory, history, research, legislation and policy implications related to the social construction of "The victim" are explored. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

- CRJU 4180 - Comparative Study of Criminal Justice Systems

Summer 2010 Registration **C J 4180**

This course analyzes the dynamics of criminality and the social response to criminality across countries. Special emphasis is placed on the methods of comparative legal analysis utilized to examine international differences in crime and justice, international cooperation in criminal justice and crime and development.

Prereq: CRJU 1001. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

- CRJU 4230 - Corrections and Treatment

Summer 2010 Registration **C J 4230**

This course examines the origins and historical development of prisons and jails in America. Particular attention is given to the impact of reform movements, the rise of centralized correctional systems and regional variations in the practice of punishment. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

- CRJU 4410 - Criminal Law and Constitutional Procedures

Summer 2010 Registration **C J 4410**

This course focuses on substantive criminal law and constitutional rights of the accused in criminal proceedings. Course content includes legal aspects of the

investigation and arrest processes as well as the rules governing the admissibility of evidence in court. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

- CRJU 4430 - Law and Society

Summer 2010 Registration C J 4430

This course introduces students to the scholarly study of law. Students will have an opportunity to become familiar with social science perspectives of the law, legal institutions, the legal process and the impact of law on behavior, with particular emphasis on the study of criminal behavior and the criminal justice process in American society. Additional topics include theories of law and legality, comparative legal systems, lawyers, judges and juries and the use of social science in the courts. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

- CRJU 4440 - Courts and Social Policy

Summer 2010 Registration C J 4440

This course involves the study of emerging trends and issues in the administration of the courts, the emerging role of the judiciary in the administration of programs in the public and private sectors and the implications of court administration on social policy. Course content includes the history of the judicial approaches to the criminal justice administrative process and substantive social policy. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

- CRJU 4520 - Gangs and Criminal Organizations

Summer 2010 Registration C J 4520

This course traces the origins and historical development of the activities known as "Organized Crime." These crimes are some of the most dangerous to American society and range from the commonly known offenses of gambling and narcotics to the more subtle and sophisticated, less understood but equally serious, crimes of extortion, commercial bribery and political corruption. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

- CRJU 4530 - Families and Intergenerational Crime

Summer 2010 Registration C J 4530

This course focuses on the family as the primary institutional mechanism of social control. The course is structured around social learning theory and explores the relationships between exposure to childhood violence and violence in dating relationships during adolescence and later violent marital relationships. The "Cycle of Violence" is also discussed in terms of the impact on early childhood violence on juvenile delinquency, adult criminality and violent behavior in general. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

- CRJU 4600 - Special Topics in Criminal Justice

Summer 2010 Registration **C J 4600**

This highly specialized seminar addresses cutting-edge and emerging developments in the field of criminal justice and provides students and faculty with the opportunity to explore significant themes, issues and problems from a broad interdisciplinary perspective. Topics vary from semester to semester. Prereq: CRJU 1001 and CRJU 2041 or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 9 hours

++Prerequisite

Other Department Electives**

- COMM 4265 - Gender and Communication

Summer 2010 Registration **CMMU 4265**

Explores the relationship between gender and communication, including how language treats women and men differently and verbal and nonverbal differences in women's and men's communication. Cross-listed with COMM 5265. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

- ECON 3300 - Economics of Crime and Punishment

Summer 2010 Registration **ECON 3300**

Presents the economic approach to crime. Teaches economic reasoning in the analysis of the determinants of criminal activity, provides an in-depth analysis of the importance of socioeconomic factors in determining crime. Investigates the relative importance of labor market conditions, deterrence, and other factors in the level of criminal activity. Also covers topics to reduce crime such as, the death penalty, issues around victimless crime and public choices. Prereq: ECON 2022. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

- PSCI 3034 - Race, Gender, Law and Public Policy

Summer 2010 Registration **P SC 3034**

Historical overview of race and gender relations in the U.S. and an examination of the treatment of issues of race and gender in the judicial system and public policy. Cross-listed with WGST 3034. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

- PSCI 4124 - Denver Politics

Summer 2010 Registration **P SC 4124**

Surveys Denver's dominant political and economic forces and community agendas

that compete with the downtown growth machine. Examines urban renewal strategies, gentrification and grass-roots resistance, and the role of officials in shaping Denver's distribution of wealth and life-opportunities. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

- PSCI 4185 - Corruption in the U.S. and Abroad
Summer 2010 Registration P SC 4185
Explores the causes and consequences of administrative and political corruption in developed and developing countries, and evaluates various anti-corruption strategies. Prereq: PSCI 1001 or 3022. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.
- PSCI 4427 - Law, Politics and Justice
Summer 2010 Registration P SC 4427
Analysis of the relationship of politics, law, and justice, particularly the degree to which moral norms and political concerns should and do influence legal standards and their perceived legitimacy. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.
- PSCI 4477 - Constitutional Law I
Summer 2010 Registration P SC 4477
Nature and scope of the following American constitutional principles as developed by the U.S. Supreme Court: federalism, jurisdiction of the federal courts, separation of powers, the taxing power, and the commerce power. Case method. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.
- PSCI 4487 - Constitutional Law II
Summer 2010 Registration P SC 4487
Continuation of PSCI 4477, with emphasis on the war powers of the president, citizenship, the Bill of Rights, and the Civil War amendments. (Case method.) Note: PSCI 4477 is not a prerequisite for PSCI 4487. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.
- PSCI 4545 - Immigration Politics
Summer 2010 Registration P SC 4545
Introduces students to central theories of migration and a survey of immigration law and policy in the 20th century. Highlights experiences of Mexican and Latin American immigrants and related topics, including: U.S.-Mexican foreign relations, bilingual education, undocumented immigration and globalization. Cross-listed with PSCI 5545. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.
- PSCI 4837 - Contemporary Issues in Civil Liberties
Summer 2010 Registration P SC 4837
Conflicting rights of individuals and groups in several areas of civil liberties, including

religious groups, free speech, sexual freedom, racial quotas, and anti-governmental actions and publications. This course includes case law, readings, guest speakers and case discussions. Cross-listed with PSCI 5837. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

- PSYC 3135 - Organizational Psychology
Summer 2010 Registration PSY 3135
Surveys the behavior of individuals in organizations. Topics include leadership and motivation theories; group dynamics; measuring, understanding, and explaining job attitudes; analyzing and designing jobs; training and organizational development. Prereq: PSYC 1000, 1005 and 2090 or permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.
- PSYC 3205 - Human Development I: Child Psychology
Summer 2010 Registration PSY 3205
Studies human development covering birth, infancy, toddler, preschool and school-aged child. Covers biological, cognitive and social processes. Prereq: PSYC 1000 or 1005. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.
- PSYC 3215 - Human Development II: Adolescence and Adulthood
Summer 2010 Registration PSY 3215
Study of human development from adolescence through adulthood and aging. Covers biological, cognitive, and social processes. Prereq: PSYC 1000 or 1005. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.
- PSYC 3265 - Drugs, Brain and Behavior
Summer 2010 Registration PSY 3265
Explores the pharmacological, biological, and behavioral basis of drug effects. Topics include mechanisms of drug action, brain reward pathways, role of environment and history on drug effects, and the impact of science on drug abuse and medication development. Prereq: PSYC 1000, 2090 and 2220 or permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.
- PSYC 3305 - Abnormal Psychology
Summer 2010 Registration PSY 3305
Borderline disorders as extreme variations of the normal personality. Major functional and organic disorders. Theories of mental disorders and methods of psychotherapy. Prereq: PSYC 1000. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.
- PSYC 3612 - Domestic Abuse

Summer 2010 Registration **PSY 3612**

Examines the nature and extent of domestic violence. Personal characteristics and dynamics that contribute to spouse abuse are reviewed. Theories and research in the general field of family violence, victims' and perpetrators' treatment, and child abuse are discussed. Prereq: PSYC 1000, 1005 and 2090 or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

- SOCY 2462 - Introduction to Social Psychology

Summer 2010 Registration **SOC 2462**

Studies the development and functioning of persons, especially within a group context, and the dynamics of small groups. Emphasis is on import of symbols for human behavior, development of self-concepts, and the processes of competition and cooperation in group dynamics. **Semester Hours:** 3to 3 **GT Pathways Category Key:** GT-SS3

Registration is changing. Visit our website for details ucdenver.edu/registration.

- SOCY 3020 - Race and Ethnicity in the U.S.

Summer 2010 Registration **SOC 3020**

A sociological examination of race and ethnicity in contemporary U.S. society. Includes a focus on the nature and causes of prejudice and discrimination. Dominant-minority relations are examined, with an emphasis on current status of minority groups and issues. Prereq: Six hours of social science. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

- SOCY 3600 - Social Relations

Summer 2010 Registration **SOC 3600**

The course has two aims: first, to improve the student's abilities to observe, analyze, and understand his own behavior and that of others in everyday interpersonal situations; and second, to improve his ability to see the small group as a social system. The student is expected to demonstrate his abilities by effective participation in his group as well as in periodic written analyses. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

- SOCY 3700 - Sociology of the Family

Summer 2010 Registration **SOC 3700**

The family as a social institution. Historical development and contemporary cross-cultural analysis, with emphasis on the contemporary American family. Cross-listed with WGST 3700. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

- SOCY 4340 - Juvenile Delinquency

Summer 2010 Registration **SOC 4340**

Factors involved in delinquent behavior. Problems of adjustment of delinquents, and

factors in treatment and post-treatment adjustment. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

- SOCY 4440 - Social Stratification
Summer 2010 Registration **SOC 4440**
The relations among the concentration of income and wealth, economic organization and power, power and class phenomena in the United States. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.
- SOCY 4460 - Hate Groups and Group Violence
Summer 2010 Registration **SOC 4460**
Social sciences help us understand the phenomena of hate groups and group violence and contribute toward their elimination. Examples are examined using theoretical perspectives on different levels of analysis and within different areas of research. Cross-listed with SOCY 5680. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.
- SOCY 4770 - Advanced Topics in Sociology
Summer 2010 Registration **SOC 4770**
Advanced study of special topics in sociology to be selected by the instructor. Note: May be repeated for credit when topics vary. Cross-listed with SOCY 5770. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 6 hours

**Students must comply with departmental prerequisites.

Examples for Areas of Concentration

Juvenile Justice

- CRJU 2510 - Juvenile Justice Administration
Summer 2010 Registration **C J 2510**
This course examines the development, change and operation of the American juvenile justice system and the social factors that shape the identification and treatment of juvenile offenders. Special emphasis is placed on the nature of juvenile law and methods of dealing with youthful offenders. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.
- CRJU 3540 - Crime and Delinquency Prevention
Summer 2010 Registration **C J 3540**
This course provides students with an overview of issues related to crime and

delinquency prevention, both from criminological and criminal justice points of view. Crime prevention programs that encompass both the individual and community levels are examined. Responses to juvenile offenders-ranging from prevention and diversion to institutional corrections and after care are explored in context of youth policy generally. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

- CRJU 4520 - Gangs and Criminal Organizations

Summer 2010 Registration **C J 4520**

This course traces the origins and historical development of the activities known as "Organized Crime." These crimes are some of the most dangerous to American society and range from the commonly known offenses of gambling and narcotics to the more subtle and sophisticated, less understood but equally serious, crimes of extortion, commercial bribery and political corruption. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

- SOCY 3700 - Sociology of the Family

Summer 2010 Registration **SOC 3700**

The family as a social institution. Historical development and contemporary cross-cultural analysis, with emphasis on the contemporary American family. Cross-listed with WGST 3700. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

- SOCY 4340 - Juvenile Delinquency

Summer 2010 Registration **SOC 4340**

Factors involved in delinquent behavior. Problems of adjustment of delinquents, and factors in treatment and post-treatment adjustment. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 15 hours

Law and Society

- CRJU 3420 - Pleas, Trials and Sentences

Summer 2010 Registration **C J 3420**

This course focuses on analysis of case materials involving pleas, trials and sentences. Course content includes an examination of the basic dimensions of criminality, the specific elements of major crimes, the use of confessions, fair trial procedures and the nature of criminal sanctions including cruel and unusual punishments. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

- CRJU 4430 - Law and Society

Summer 2010 Registration **C J 4430**

This course introduces students to the scholarly study of law. Students will have an

opportunity to become familiar with social science perspectives of the law, legal institutions, the legal process and the impact of law on behavior, with particular emphasis on the study of criminal behavior and the criminal justice process in American society. Additional topics include theories of law and legality, comparative legal systems, lawyers, judges and juries and the use of social science in the courts. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

- CRJU 4440 - Courts and Social Policy

Summer 2010 Registration **C J 4440**

This course involves the study of emerging trends and issues in the administration of the courts, the emerging role of the judiciary in the administration of programs in the public and private sectors and the implications of court administration on social policy. Course content includes the history of the judicial approaches to the criminal justice administrative process and substantive social policy. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

- PSCI 4427 - Law, Politics and Justice

Summer 2010 Registration **P SC 4427**

Analysis of the relationship of politics, law, and justice, particularly the degree to which moral norms and political concerns should and do influence legal standards and their perceived legitimacy. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

- PSCI 3034 - Race, Gender, Law and Public Policy

Summer 2010 Registration **P SC 3034**

Historical overview of race and gender relations in the U.S. and an examination of the treatment of issues of race and gender in the judicial system and public policy. Cross-listed with WGST 3034. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 15 hours

Domestic Violence

- CRJU 4140 - Domestic Violence and Crime

Summer 2010 Registration **C J 4140**

This course examines the criminal justice systems response to intimate partner violence by focusing on the interactions between victims, offenders and the individual components of the criminal justice system (law enforcement and the judiciary). By exploring the dynamics of intimate partner violence this course addresses the theory, history, research, legislation and policy implications related to the criminal justice system's response to violence against women. **Semester Hours:**

3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

- CRJU 4170 - Victim Studies

Summer 2010 Registration **C J 4170**

This course involves the scientific study of crime victims and focuses on the physical, emotional and financial harm people suffer at the hands of criminals. Focus is placed on the victim-offender relationships, interactions between victims and the criminal justice system and connections between victims and other social groups and institutions. The theory, history, research, legislation and policy implications related to the social construction of "The victim" are explored. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

- CRJU 4530 - Families and Intergenerational Crime

Summer 2010 Registration **C J 4530**

This course focuses on the family as the primary institutional mechanism of social control. The course is structured around social learning theory and explores the relationships between exposure to childhood violence and violence in dating relationships during adolescence and later violent marital relationships. The "Cycle of Violence" is also discussed in terms of the impact on early childhood violence on juvenile delinquency, adult criminality and violent behavior in general. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

- COMM 4265 - Gender and Communication

Summer 2010 Registration **CMMU 4265**

Explores the relationship between gender and communication, including how language treats women and men differently and verbal and nonverbal differences in women's and men's communication. Cross-listed with COMM 5265. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

- PSYC 3612 - Domestic Abuse

Summer 2010 Registration **PSY 3612**

Examines the nature and extent of domestic violence. Personal characteristics and dynamics that contribute to spouse abuse are reviewed. Theories and research in the general field of family violence, victims' and perpetrators' treatment, and child abuse are discussed. Prereq: PSYC 1000, 1005 and 2090 or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 15 hours

Economics BA

Requirements for Major

Students majoring in economics for the BA degree must declare such by the time they have completed 60 semester hours and complete a minimum of 40 semester hours in economics. The minimum grade in each UC Denver economics course is a C- (1.7), except that one D- in one economics elective is allowed. A GPA of 2.5 in economics courses taken at UC Denver is required to graduate. No pass/fail grades may count toward the major.

Program Requirements

Required Economics Courses

- ECON 2012 - Principles of Economics: Macroeconomics
Summer 2010 Registration **ECON 2012**
Covers topics of inflation, unemployment, national income, growth and problems of the national economy, stabilization policy, plus others at the discretion of the instructor. Purpose is to teach fundamental principles, to open the field of economics in the way most helpful to further a more detailed study of special problems, and to give those not intending to specialize in the subject an outline of the general principles of economics. **Semester Hours:** 3to 3 **GT Pathways Category Key:** GT-SS1
Registration is changing. Visit our website for details ucdenver.edu/registration.
- ECON 2022 - Principles of Economics: Microeconomics
Summer 2010 Registration **ECON 2022**
Topics include price determination in a market system composed of households and firms: resource allocation and efficiency of various market structures, plus others at the discretion of the instructor. Note: Complementary to and normally taken following ECON 2012. ECON 2012 is not a prerequisite for ECON 2022. **Semester Hours:** 3to 3 **GT Pathways Category Key:** GT-SS1
Registration is changing. Visit our website for details ucdenver.edu/registration.
- ECON 3801 - Introduction to Mathematical Economics
Summer 2010 Registration **ECON 3801**
Introduces the use of mathematics in micro- and macro-economic analysis. Emphasis on model-building techniques, solution methods, and economic interpretations. Prereq: MATH 1070, 1080 (or equivalent), ECON 2012 and 2022. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

- ECON 3811 - Statistics with Computer Applications
*Summer 2010 Registration **ECON 3811***
 Introduces statistical methods and their application to quantitative problems in economics and social sciences. Note: Recitation is required. Prereq: College algebra, ECON 2012 and 2022. **Semester Hours:** 4to 4
 Registration is changing. Visit our website for details ucdenver.edu/registration.
- ECON 4071 - Intermediate Microeconomic Theory
*Summer 2010 Registration **ECON 4071***
 Production, price and distribution theory. Study of value and distribution theories under conditions of varying market structures, with special references to the contribution of modern theorists. Prereq: ECON 2012, 2022 and 3801. **Semester Hours:** 3to 3
 Registration is changing. Visit our website for details ucdenver.edu/registration.
- ECON 4081 - Intermediate Macroeconomic Theory
*Summer 2010 Registration **ECON 4081***
 National income and employment theory. Primary emphasis placed on determination of employment and prices. Problems of unemployment and inflation analyzed and appropriate policies considered. Prereq: ECON 2012, 2022 and 3801. **Semester Hours:** 3to 3
 Registration is changing. Visit our website for details ucdenver.edu/registration.
- ECON 4091 - History of Economic Thought
*Summer 2010 Registration **ECON 4091***
 Traces the development of economic thought from ancient times to the 20th century. Considers the context in which these ideas were developed and their relationship to modern economic thought and contemporary economic problems. Prereq: ECON 2012 and ECON 2022. Cross-listed with ECON 5090. **Semester Hours:** 3to 3
 Registration is changing. Visit our website for details ucdenver.edu/registration.
- ECON 4811 - Introduction to Econometrics
*Summer 2010 Registration **ECON 4811***
 Introduces econometric methods and their applications to quantitative economic problems. Simple and multiple regression models and problems encountered in their applications are developed in lectures and applied computer projects. Prereq: ECON 3811 or equivalent. **Semester Hours:** 3to 3
 Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 25 Hours

Electives

Economics Courses

Any five 3-semester-hour courses taken in economics may satisfy this requirement, other than internships and independent studies which require the approval of the department chair.

Political Science Course

One political science course. Suggested courses include but are not limited to PSC 1101, American Political System, and PSC 3022, Introduction to Comparative Politics.

Electives Total: 18 Hours

Major Total: 43 Hours

Graduating seniors must submit the three best papers that the student wrote in any three separate courses taken in the Department of Economics at UC Denver for the outcomes assessment of the economics program. The three papers should be handed in at one time in a folder to the economics office, before the first day of the month in which the student plans to graduate.

At least six of the major courses (18 semester hours), including at least three courses out of ECON 3801, 4071, 4081, 4091 and 4811, must be taken from economics faculty on the Downtown Campus.

Once a student has enrolled at UC Denver, no courses in the major may be taken outside the Downtown Campus economics department without permission from the undergraduate advisor. No math is formally required, except for the college algebra prerequisite for ECON 3801. Students desiring a recommendation to a graduate school in economics, however, should consult with economics faculty regarding additional mathematics courses.

Electrical Engineering BS

Undergraduate Program Objectives

Objectives of the bachelor of science in electrical engineering are to develop graduates:

- who are immediately productive engineers and can advance their careers on different professional tracks in the engineering industry

- who can pursue graduate education in engineering or other fields such as business, medicine and law

These objectives are consistent with the mission of the University of Colorado Denver, congruent with the goals of the College of Engineering and Applied Science and reflective of the mission of the Department of Electrical Engineering.

Typical Curriculum for BS (Electrical Engineering)

Freshman Year

First Semester

- CHEM 1130 - Engineering General Chemistry
*Summer 2010 Registration **CHEM 1130***
A one-semester non-laboratory version of general chemistry for engineers and those science majors who do not require laboratory credit and do not plan to take a second semester of chemistry. Prereq: One year of high school chemistry or Chem 1000 and Math 1110 (or high school equivalent). **Semester Hours:** 5 to 5
Registration is changing. Visit our website for details ucdenver.edu/registration.
- ELEC 1201 - Introduction to Electrical Engineering
*Summer 2010 Registration **E E 1201***
Introduces the field of electrical engineering and the computer -- its primary tool. ELEC faculty members explain the various specialties within the field by demonstration. Word processors, spreadsheets, and engineering software are introduced. Note: This course is not available to students who have taken ELEC 2142. ENGR 1000 cannot be substituted for ELEC 1201. Prereq: High School Trigonometry. **Semester Hours:** 1 to 1
Registration is changing. Visit our website for details ucdenver.edu/registration.
- ELEC 1510 - Logic Design
*Summer 2010 Registration **E E 1510***
The design of combinatorial and sequential switching circuits. Topics include Boolean algebra, Boolean function minimization technique, combinatorial circuit analysis and synthesis, synchronous sequential circuit analysis and synthesis, algorithmic state machine design, asynchronous sequential circuit analysis and synthesis. **Semester Hours:** 3 to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.
- ENGL 1020 - Core Composition I
*Summer 2010 Registration **ENGL 1020***
Provides opportunities to write for different purposes and audiences, with an emphasis on learning how to respond to various rhetorical situations; improving critical thinking, reading, and writing abilities; understanding various writing processes; and gaining a deeper knowledge of language conventions. **Semester**

Hours: 3to 3**GT Pathways Category Key:** GT-C01

Registration is changing. Visit our website for details ucdenver.edu/registration.

- MATH 1401 - Calculus I

Summer 2010 Registration **MATH 1401**

First course of a three-semester sequence (MATH 1401, 2411, 2421) in calculus.

Topics covered include limits, derivatives, applications of derivatives, and the definite integral. Note: Students cannot receive credit for both MATH 1080 and 1401. Prereq: MATH 1120 or 1130 and satisfactory score on the placement exam.

Semester Hours: 4to 4**GT Pathways Category Key:** GT-MA1

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 16 Hours

Second Semester

- ELEC 1520 - Embedded Systems Engineering I

Summer 2010 Registration **E E 1520**

Programming concepts are introduced from a hardware design standpoint. Assembly language and the "C" language are used to interface and manipulate hardware.

Microcontroller programming for electrical engineering applications is studied.

Prereq: ELEC 1510.

Semester Hours: 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

- ELEC 2531 - Logic Laboratory

Summer 2010 Registration **E E 2531**

Experiments in digital logic utilizing both computer simulation and actual analysis using integrated circuits. Initially, combinational logic circuits are studied, including circuits such as binary adders and multipliers, followed by sequential circuits, including counters. Meters and oscilloscopes are introduced. Use of computer-aided design tools facilitating design, simulation, and implementation of digital systems using field-programmable logic devices are an integral part of the entire course.

Prereq/Coreq: ELEC 1510. Cross-listed with CSCI 2531.

Semester Hours: 1to 1
Registration is changing. Visit our website for details ucdenver.edu/registration.

- MATH 2411 - Calculus II

Summer 2010 Registration **MATH 2411**

The second of a three-semester sequence (MATH 1401, 2411, 2421) in calculus.

Topics covered include exponential, logarithmic, and trigonometric functions, techniques of integration, indeterminate forms, improper integrals and infinite series.

Prereq: MATH 1401.

Semester Hours: 4to 4**GT Pathways Category Key:** GT-MA1
Registration is changing. Visit our website for details ucdenver.edu/registration.

- PHYS 2311 - General Physics I: Calculus-Based

Summer 2010 Registration **PHYS 2311**

Covers vector displacement, uniform and accelerated motion, force, momentum, energy, rotating systems, oscillations, and an introduction to thermodynamics.

Emphasis is on basic principles. Coreq: MATH 1401. **Semester Hours:** 4to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

- PHYS 2321 - General Physics Lab I

Summer 2010 Registration **PHYS 2321**

Semester Hours: 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

Core Curriculum Elective (see note 1) (3 semester hours)

Total: 16 Hours

Sophomore Year

First Semester

- ELEC 2132 - Circuit Analysis I

Summer 2010 Registration **E E 2132**

Introduces circuit analysis: basic principles, operational amplifier circuits, first-order and second-order circuits, steady-state sinusoidal analysis with phasor mathematics.

Prereq: MATH 2411 and PHYS 2311. Cross-listed with CSCI 2132. **Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

- ENGL 2030 - Core Composition II

Summer 2010 Registration **ENGL 2030**

Focuses on academic and other types of research-based writing and builds on the work completed in ENGL 1020. Focuses on critical thinking, reading and writing as well as working with primary and secondary source material to produce a variety of research-based essays. Emphasis on using both print-based and electronic-based information. Prereq: ENGL 1020. **Semester Hours:** 3to 3

GT Pathways Category

Key: GT-C02

Registration is changing. Visit our website for details ucdenver.edu/registration.

- MATH 2421 - Calculus III

Summer 2010 Registration **MATH 2421**

The third of a three-semester sequence in calculus (MATH 1401, 2411 and 2421).

Topics include vectors, vector-valued functions, partial differentiation, differentiation, multiple integration, and vector calculus. Prereq: MATH 2411. **Semester Hours:** 4to 4

GT Pathways Category Key: GT-MA1

Registration is changing. Visit our website for details ucdenver.edu/registration.

- MATH 3195 - Linear Algebra and Differential Equations

Summer 2010 Registration **MATH 3195**

Presents the essential ideas and methods of linear algebra and differential equations, emphasizing the connections between and the applications of both subjects. The course is designed for students in the sciences and engineering. Note: No co-credit with MATH 3200 and MATH 3191. Prereq: MATH 2411. **Semester Hours:** 4to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

- PHYS 2331 - General Physics II: Calculus-Based

Summer 2010 Registration **PHYS 2331**

Covers electrostatics, magnetic fields, electromagnetic waves (including light), and optics. Prereq: PHYS 2311. Coreq: MATH 2411. **Semester Hours:** 4to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 18 Hours

Second Semester

- ELEC 2142 - Circuit Analysis II

Summer 2010 Registration **E E 2142**

Sequential course after ELEC 2132. Topics include: Solution of circuits using Laplace transforms, frequency domain analysis, additional steady-state solutions, Bode plots, active filters, pulses, impulses, and computer-aided analysis. Prereq: ELEC 2132, MATH 2421, PHYS 2331. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

- ELEC 2552 - Sophomore Circuits Laboratory

Summer 2010 Registration **E E 2552**

Conduct experiments in circuit measurement using oscilloscopes, power supplies, and function generators. Verify basic circuitry, basic circuit theorems such as Ohm's Law, Kirchhoff's Law, and Thevenin's theorem and Norton's theorem. Learn by experiments: impedance functions, transfer functions, resonance, Fourier series and analog filters. Prereq/coreq: ELEC 2142. **Semester Hours:** 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

- ELEC 2520 - Embedded Systems Engineering 2

Summer 2010 Registration **E E 2520**

A second semester computer engineering course covering basic computer architecture including CPU's, memory, peripherals, and operating systems including development tools, Kernel selection, file systems, and storage device manipulation, boot loaders, USB, networking, device drivers, and real-time operating system usage. Prereq: ELEC 1520. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 13 Hours

Junior Year

First Semester

- ELEC 3133 - Electromagnetic Fields
*Summer 2010 Registration **E E 3133***
Basic material is covered, including: vector analysis in generalized coordinates, Maxwell's equations postulated for free space and extended to material regions and boundary conditions, uniform plane waves for free space and for materials, and static and quasi-static electric and magnetic fields. Prereq: ELEC 2132, MATH 3195, 2421 and PHYS 2331. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.
- ELEC 3215 - Electronics I
*Summer 2010 Registration **E E 3215***
The learning objective is fundamental semiconductor theory as applied to electronic circuits. Topics include: semiconductor theory, P-N junctions and diode applications, power supply design, transistor (BJT) theory and applications, low-frequency amplifiers, FET and MOSFET devices. Prereq: ELEC 2132, PHYS 2331 and CHEM 1130. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.
- ELEC 3316 - Linear Systems Theory
*Summer 2010 Registration **E E 3316***
Introduces the fundamentals of signals and systems analysis. Topics include: time domain analysis of continuous and discrete time systems, frequency domain (Laplace and z-transform) analysis, applications to filters and feedback systems, Fourier transform for both continuous and discrete time signals, sampling and signal reconstruction, applications to communication systems and state space representation. Learning experience is enhanced by using MATLAB-based examples and experiments. Prereq: ELEC 2142. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.
- ELEC 3651 - Digital Hardware Design
*Summer 2010 Registration **E E 3651***
The specification and design of large digital hardware systems. Applications include using a hardware description language and simple digital control circuits. Prereq: ELEC 2531 and ELEC 2520. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.
- ELEC 3715 - Electronics Laboratory
*Summer 2010 Registration **E E 3715***
Design and experimental verification of the operation of filter circuits, power supply circuits, transistor amplifier circuits and FET circuits. Prereq: ELEC 2552.

Prereq/Coreq: ELEC 3215 **Semester Hours:** 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

Core Curriculum Elective (see note 1) (3 semester hours)

Total: 16 Hours

Second Semester

- ELEC 3164 - Energy Conversion

Summer 2010 Registration **E E 3164**

Theory of transformers. Energy conversion concepts. Basic rotating energy converters, including direct current, synchronous and induction machines and applications. Prereq: ELEC 2142. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

- ELEC 3225 - Electronics II

Summer 2010 Registration **E E 3225**

BJT and FET transistor models at high frequencies, multi-stage amplifiers, frequency response of amplifiers. Feedback, operational amplifiers, oscillators, power amplifiers, and introduction to power electronics. Prereq: ELEC 2142 and 3215. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

- ELEC 3724 - Energy Conversion Laboratory

Summer 2010 Registration **E E 3724**

Basic electro-mechanical energy conversion concepts as applied to the synchronous machine, induction machine, and DC machine; the transformer; applications. Prereq: ELEC 2142. Prereq or Coreq: ELEC 3164. **Semester Hours:** 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

- ELEC 3735 - Junior Laboratory

Summer 2010 Registration **E E 3735**

Design and measure: several nonlinear op-amp circuits, a multi-stage amplifier, and a complementary-symmetry output stage. Oral presentations on experiments to be given. Prereq: ELEC 3715. Prereq/Coreq: ELEC 3225. **Semester Hours:** 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

- ELEC 3817 - Engineering Probability and Statistics

Summer 2010 Registration **E E 3817**

Topics include: definition of probability, conditional probability, independence, combined experiments and Bernoulli trials, random variables, joint distribution and density functions, correlations, sample mean and variance. Also, introduction to random processes, auto and cross correlation functions, spectral density of random

signals, responses of a linear system to random inputs. Prereq: MATH 3195 and 2421. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Core Curriculum Elective (see note 1) (3 semester hours)

Total: 17 Hours

Senior Year

First Semester

- ELEC 4309 - Senior Design Project I

Summer 2010 Registration **E E 4309**

Design methodology and tools, project planning and team building, ethics in engineering and research, career planning and portfolio building. Project designs are completed and presented to the class. Prereq: Students must complete their Senior/30 hour check prior to enrollment. Prereq/Coreq: all required ELEC 3000-level classes and labs. ELEC 4309 and ELEC 4319 must be completed in subsequent academic semesters. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Engineering Science Elective (see note 4) (3 semester hours)

ELEC Specialty and Laboratory (see note 5) (4 semester hours)

ELEC Specialty Course (3 semester hours)

Total: 16 Hours

Second Semester

- ELEC 4319 - Senior Design Project II

Summer 2010 Registration **E E 4319**

Project designs completed in ELEC 4309 are constructed and tested. Oral and written presentations of the completed project performance are required. Prereq: ELEC 4309. All required ELEC 3000-level classes and labs. Students must complete their Graduation Agreement prior to enrollment. ELEC 4309 and ELEC 4319 must be completed in subsequent academic semesters. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Professional Elective (see note 3) (3 semester hours)

ELEC Specialty and Laboratory (see note 6) (4 semester hours)

ELEC Specialty (see note 6) (3 semester hours)

Core Curriculum Elective (see note 1) (3 semester hours)

Total: 16 Hours

Program Total: 128 Hours

The particular curriculum to be satisfied by each student is the one published in the catalog current at the time of his/her 30-hour senior checkout. A graduation agreement should be requested by each student after completing registration for his/her last semester. Additional information is contained in the "E E Advisement Guide." Students should also refer to the section in this catalog on "Academic Policies of the College of Engineering and Applied Science."

1. Common core requirements of the College of Engineering and Applied Science are outlined in the section titled "Undergraduate Core Curriculum in Engineering" in this catalog or in the "E E Advisement Guide."
2. All electrical engineering students must satisfactorily complete ELEC 4309, Senior Design Project I, and ELEC 4319, Senior Design Project II, in consecutive semesters.
3. Professional electives may be selected from an approved list of upper-division or graduate-level courses or cooperative education. The electrical engineering advisor must be consulted prior to the selection of these electives.
4. The engineering science elective may be satisfied by taking ENGR 3012, Thermodynamics.
5. Seventeen semester hours of electrical engineering elective and specialty courses in association with the laboratories are required.

Laboratory Requirements

Students are required to take at least two laboratories out of the following six groups. Theory components are either prerequisites or corequisites to the laboratory components. The theory component may be taken as a specialty course.

- ELEC 4136 - Control Systems Analysis
Summer 2010 Registration **E E 4136**

Introduces students to the fundamentals of analysis and design of feedback systems. Topics include: mathematical models of linear continuous-time systems applied to modeling physical systems in the time and frequency domain, control system characteristics, Routh's stability and transient response analysis, Nyquist stability and polar plots, analysis and design of linear control systems by root locus and frequency response, methods, compensator implementation, finite-precision numerical effects, round-off errors, and computer-based design applications. Prereq: ELEC 3316; Prereq/Coreq: ELEC 3817. **Semester Hours:** 3 to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

- ELEC 4276 - Digital Control Systems
*Summer 2010 Registration **E E 4276***
 Topics to be covered include: discrete-time systems and the z-transform, characteristics of open-loop and closed-loop discrete-time systems, time-response characteristics and stability analysis, design of digital and hybrid control systems using z-transform, root locus, frequency domain, and state variable compensation techniques, compensator on, implementation, and computer-based design applications. Prereq: ELEC 3316; Prereq or Coreq: ELEC 3817. **Semester Hours:** 3to 3
 Registration is changing. Visit our website for details ucdenver.edu/registration.
- ELEC 4406 - Control Systems Laboratory
*Summer 2010 Registration **E E 4406***
 This lab includes system identification, design of velocity control systems, design of PID controllers and control systems using state variable feedback. Prereq: ELEC 3225, 3316, 3735 and 3817. **Semester Hours:** 1to 1
 Registration is changing. Visit our website for details ucdenver.edu/registration.
- ELEC 4225 - Advanced Electronics
*Summer 2010 Registration **E E 4225***
 Switching state models of discrete components and integrated circuits, including logic gates, comparators, and operational amplifiers. Input, output, and transfer characteristics. Non-ideal properties. Analog-digital and digital-analog conversion. Mos-integrated circuits. Prereq: ELEC 3215, 3225, 3735. **Semester Hours:** 3to 3
 Registration is changing. Visit our website for details ucdenver.edu/registration.
- ELEC 4435 - Advanced Electronics Laboratory
*Summer 2010 Registration **E E 4435***
 Projects related to digital logic, analog and digital switches, A/D and D/A converters, and design of signal filters. Prereq: ELEC 3225 and 3735; Prereq or Coreq: ELEC 4225. **Semester Hours:** 1to 1
 Registration is changing. Visit our website for details ucdenver.edu/registration.
- ELEC 4247 - Communication Theory
*Summer 2010 Registration **E E 4247***
 Introduces the principles of analog and digital communication systems. Series expansion and Fourier Series and transforms. The sampling theorem. Stochastic principles and noise. Linear systems and Fourier analysis. Design of transmitters and receivers: modulation and demodulation schemes. Some information theoretic concepts: source coding, channel coding, channel capacity and performance

measures. Prereq: ELEC 3316 and 3817. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

- ELEC 4248 - Digital Communication Systems
Summer 2010 Registration E E 4248
Introduces digital communication systems covering elements of information theory; mathematical representation of signals and systems; modulation and demodulation for the additive Gaussian noise channel; performance analysis of various transmission formats; synchronization; coded waveforms; decoding algorithms; and other related topics. Prereq: ELEC 3316, 3817; recommended ELEC 4247. Cross-listed with ELEC 5248. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.
- ELEC 4467 - Communications Laboratory
Summer 2010 Registration E E 4467
Analysis and design in three main areas: traditional analog communications at low and medium frequencies, digital communications, and microwave communications systems. Extensive use of spectrum analysis from low frequencies up to microwave range. Projects include noise, AM, FM, PM, PLL, sampling, quantizing, encoding, TDM, FSK, QPSK, 16QAM, receivers, and satellite communications systems. Prereq: ELEC 3735; Prereq or Coreq: ELEC 4247 or ELEC 4248. **Semester Hours:** 1to 1
Registration is changing. Visit our website for details ucdenver.edu/registration.
- ELEC 4133 - Advanced Electromagnetic Fields
Summer 2010 Registration E E 4133
Topics include: Poynting's power theorem, reflection and transmission of uniform plane waves in layered media, two-conductor transmission lines, rectangular wave guides, Smith Chart elements of radiation and antenna theory. Prereq: ELEC 3133. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.
- ELEC 4423 - Microwave Laboratory
Summer 2010 Registration E E 4423
Microwave design and matching of coaxial and waveguide devices, transmission lines and systems. Devices include attenuators, directional couplers, antennas, ferrites, detectors, mixers, oscillators and amplifiers. Systems are represented by modern X-band transceivers and multi-band satellite systems. Project in microwave computer-aided design of microwave transistor amplifiers. Prereq: ELEC 3225, 3735 and 3133. **Semester Hours:** 1to 1
Registration is changing. Visit our website for details ucdenver.edu/registration.
- ELEC 4501 - Microprocessor Based Design

Summer 2010 Registration **E E 4501**

Covers advanced treatment of embedded system design using microprocessors. Analog input circuitry is interfaced to a microprocessor, and a PC board layout is created to develop a complete system design. Software/Operating System is implemented for real time I/O. Prereq: ELEC 3225, ELEC 3133 and ELEC 3735. Coreq: ELEC 3651. Cross-listed with ELEC 5501. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

- ELEC 4521 - Microprocessor Laboratory

Summer 2010 Registration **E E 4521**

Provides support for the projects assigned in ELEC 4501 - a complete embedded system is designed, built and tested. Coreq: ELEC 4501. **Semester Hours:** 1to 1
Registration is changing. Visit our website for details ucdenver.edu/registration.

- ELEC 4511 - Hardware-Software Interface

Summer 2010 Registration **E E 4511**

Computer engineering methods in hardware and software design applied to problems drawn from the mini- and micro-computer systems field. Hardware and software techniques for the design of combined hardware or software are developed. Interface and real-time programming techniques are considered. Graduate level requires additional projects and homework. Prereq: ELEC 3651 and ELEC 3735. Cross-listed with ELEC 5511. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

- ELEC 4561 - Hardware-Software Lab

Summer 2010 Registration **E E 4561**

Projects related to the software interface of a processor to external devices. Topics include A/D converters, serial and parallel interfaces. Coreq: ELEC 4511. **Semester Hours:** 1to 1
Registration is changing. Visit our website for details ucdenver.edu/registration.

Other courses available (without any laboratory component) as electrical engineering specialty courses include the following:

- ELEC 4174 - Power Electronic Systems

Summer 2010 Registration **E E 4174**

Topics to be covered include: power electronics fundamentals and applications in power systems; uncontrolled, semi-controlled and fully controlled power semiconductors; converters design and control. Prereq: ELEC 3164. Cross-listed with ELEC 5174. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

- ELEC 4184 - Power Systems Analysis

Summer 2010 Registration **E E 4184**

Topics to be covered include: complex power; per-unit quantities; modeling of generators, transformers and transmission lines; power flow problem; economic dispatch; faults and sequence networks; and an introduction to power system protection and dynamics. Prereq: ELEC 3164. Cross-listed with ELEC 5184.

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

- ELEC 4025 - Device Electronics

Summer 2010 Registration **E E 4025**

A course relating performance and limitations of solid state devices to their structures and technology. For both advanced circuit and device engineers. Semiconductor physics and technology, pn-junction and MOS devices used in modern integrated circuits. Prereq: ELEC 3225 and senior standing. Cross-listed with ELEC 5025.

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

- ELEC 4555 - Vlsi Circuit Simulation

Summer 2010 Registration **E E 4555**

Computer methods for large integrated circuits. Theory and practice of VLSI circuit simulation. Nodal formulations of networks. Computer generation of sensitivities. Modeling active devices. DC solution of nonlinear networks. Prereq: ELEC 3225.

Cross-listed with ELEC 5555.

Semester Hours: 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

Computer Engineering Option

Students can add a computer engineering emphasis to their electrical engineering degree program by making the following changes in the curriculum described above:

Junior Year

First Semester

Substitute ELEC 3651, Digital Hardware Design, for ELEC 3817, Engineering Probability and Statistics.

- ELEC 3651 - Digital Hardware Design

Summer 2010 Registration **E E 3651**

The specification and design of large digital hardware systems. Applications include using a hardware description language and simple digital control circuits. Prereq: ELEC 2531 and ELEC 2520.

Semester Hours: 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

Second Semester

Substitute ELEC 3817, Engineering Probability and Statistics, ELEC 3701, Professional Elective, for ELEC 3651, Digital Hardware Design, ELEC 3724, Power Laboratory, and a humanities and social sciences course.

- ELEC 3817 - Engineering Probability and Statistics

*Summer 2010 Registration **E E 3817***

Topics include: definition of probability, conditional probability, independence, combined experiments and Bernoulli trials, random variables, joint distribution and density functions, correlations, sample mean and variance. Also, introduction to random processes, auto and cross correlation functions, spectral density of random signals, responses of a linear system to random inputs. Prereq: MATH 3195 and 2421. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Senior Year

First Semester

Choose ELEC 4501, Microprocessor-based Design, and ELEC 4521, Microprocessor Laboratory, as one electrical engineering specialty and laboratory selection.

- ELEC 4501 - Microprocessor Based Design

*Summer 2010 Registration **E E 4501***

Covers advanced treatment of embedded system design using microprocessors. Analog input circuitry is interfaced to a microprocessor, and a PC board layout is created to develop a complete system design. Software/Operating System is implemented for real time I/O. Prereq: ELEC 3225, ELEC 3133 and ELEC 3735. Coreq: ELEC 3651. Cross-listed with ELEC 5501. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

- ELEC 4521 - Microprocessor Laboratory

*Summer 2010 Registration **E E 4521***

Provides support for the projects assigned in ELEC 4501 - a complete embedded system is designed, built and tested. Coreq: ELEC 4501. **Semester Hours:** 1to 1
Registration is changing. Visit our website for details ucdenver.edu/registration.

Second Semester

Choose ELEC 4511, Hardware-Software Interface Design, ELEC 4561, Hardware-Software Laboratory, and a humanities and social sciences elective as professional elective and electrical engineering specialty and laboratory selections.

- ELEC 4511 - Hardware-Software Interface

Summer 2010 Registration **E E 4511**

Computer engineering methods in hardware and software design applied to problems drawn from the mini- and micro-computer systems field. Hardware and software techniques for the design of combined hardware or software are developed. Interface and real-time programming techniques are considered. Graduate level requires additional projects and homework. Prereq: ELEC 3651 and ELEC 3735. Cross-listed with ELEC 5511. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

- ELEC 4561 - Hardware-Software Lab

Summer 2010 Registration **E E 4561**

Projects related to the software interface of a processor to external devices. Topics include A/D converters, serial and parallel interfaces. Coreq: ELEC 4511. **Semester Hours:** 1to 1
Registration is changing. Visit our website for details ucdenver.edu/registration.

English BA

The course of study offered by the Department of English is designed to develop a student's ability to read literature responsibly and imaginatively, to foster an understanding and appreciation of our literary inheritance and to provide the historical perspective from which to evaluate contemporary writing. Careful study of the use of the English language also should help a student to resist the misuse and corruption of language in politics, the media and elsewhere. Students who complete the program in English are expected to have mastered the ability to express their ideas in clear and succinct prose.

Requirements for the English Major

Students majoring in English must present a total of 39 hours in the literature, film and/or creative writing options (excluding ENGL 1010, 1020 and 2030), of which 27 hours must be earned in upper-division courses. None of the required 39 hours may be taken on a pass/fail basis. Only courses completed with a grade of C (2.0) or above may be counted toward the major. At least 15 upper-division hours of the student's work in English must be taken from English faculty on the Downtown Campus. Students planning to major in English must consult with an advisor as soon as possible. Students must choose one of the three options.

LITERATURE OPTION

REQUIRED COURSES

- ENGL 1400 - Introduction to Literary Studies

Summer 2010 Registration **ENGL 1400**

Helps students develop a sense of literary techniques and issues so they can bring an improved critical sensibility to their reading and writing. Note: Designed for students who plan to major in English or who are seriously interested in literature.

Prereq or Coreq: ENGL 1020. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 1400 will be replaced during 2010-11 by ENGL 2450 when it becomes available

- ENGL 3001 - Critical Writing

Summer 2010 Registration **ENGL 3001**

Introduces literary theory, which provides extensive practice in writing about literature. Note: Required for literature majors, and should be taken in the sophomore or junior year. Prereq: ENGL 1400 and two literature courses. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

- ENGL 4999 - Literary Studies Senior Seminar

Summer 2010 Registration **ENGL 4999**

Allows students to pursue, learn, and apply advanced methodologies such as bibliographical, archival/historical, or cultural and ideological, and apply them to a single author, genre, or period of text. Students engage in research under the tutelage of their instructor. Note: Senior capstone course for literature majors in the literary studies track. Prereq: Senior standing and ENGL 3001 previously completed or concurrent. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 9 Hours

OPTION-SPECIFIC DISTRIBUTION REQUIREMENTS

Choose one course from each of the six areas below. No course is repeatable.

Historical Survey

- ENGL 4080 - History of the English Language

Summer 2010 Registration **ENGL 4080**

Examines how English has changed since A.D. 800 through examples of writing from different periods, with attention to the way various groups have enriched our vocabulary and altered our syntax. Prereq: ENGL 2070 or one year of a college foreign language. Cross-listed with ENGL 5080. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

- ENGL 4166 - History of American Poetry

Summer 2010 Registration **ENGL 4166**

Examines major American poets and poetic trends from the colonial period to the present, with attention to cultural contexts and to development of distinctively American practices. Prereq: Must have 30 semester hours or permission of the instructor. Cross-listed with ENGL 5166. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

- ENGL 4200 - History of the English Novel I

Summer 2010 Registration **ENGL 4200**

Rise and development of the English novel from its beginnings in the 18th century through the mid-19th century, including such writers as Defoe, Fielding, Austen and Shelley. Prereq: Must have 30 semester hours or permission of the instructor. Cross-listed with ENGL 5200. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

- ENGL 4210 - History of the English Novel II

Summer 2010 Registration **ENGL 4210**

Overview of the English novel from mid-19th century to World War II, emphasizing the important developments which the form underwent in the hands of notable novelists, including Charles Dickens, the Brontes, George Eliot, Henry James, Joseph Conrad, D.H. Lawrence and Virginia Woolf. Prereq: Must have 30 semester hours or permission of the instructor. Cross-listed with ENGL 5210. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

- ENGL 4230 - The American Novel

Summer 2010 Registration **ENGL 4230**

Surveys major developments in the American novel from the 18th century to the 21st century. Prereq: Must have 30 semester hours or permission of the instructor. Cross-listed with ENGL 5230. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

- ENGL 4236 - The American Short Story

Summer 2010 Registration **ENGL 4236**

Traces the development of the short story in the United States, from its beginnings in colonial tales to its contemporary renaissance as a dominant literary form. Prereq: Must have 30 semester hours or permission of the instructor. Cross-listed with ENGL 5236. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

- ENGL 4300 - History of British Drama

Summer 2010 Registration **ENGL 4300**

Intended as a survey of British drama from the miracle plays of the medieval period, through the Renaissance and Restoration, to the "kitchen sink" realists of the 1960s.

Prereq: Must have 30 semester hours or permission of the instructor. Cross-listed with ENGL 5300.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

- ENGL 4320 - History of Poetry in English
Summer 2010 Registration **ENGL 4320**
Studies the major schools and eras of English prosody, including the poetry of Great Britain and the United States, from the medieval period to the present. Prereq: Must have 30 semester hours or permission of the instructor. Cross-listed with ENGL 5320.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.
- ENGL 4350 - History of American Drama
Summer 2010 Registration **ENGL 4350**
Studies American drama from its foundations in the 18th century through movements including realism, expressionism, symbolism, agit-prop, black nationalism, feminism, and performance art. Drama read as both text and performance, as sometimes supporting the status quo and as sometimes subverting it. Prereq: Must have 30 semester hours or permission of the instructor. Cross-listed with ENGL 5350.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

Old English, Medieval Language and Literature

- ENGL 4400 - Old English I
Summer 2010 Registration **ENGL 4400**
Instruction in the Old English language. Prereq: Must have 30 semester hours or permission of the instructor. One year of college foreign language or ENGL 2070 recommended. Cross-listed with ENGL 5400.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.
- ENGL 4500 - Medieval Literature
Summer 2010 Registration **ENGL 4500**
Introduces representative writers from the Norman Conquest to about 1550. Emphasis on a variety of genres, including religious poetry, Arthurian romance, dream vision and drama. Prereq: Must have 30 semester hours or permission of the instructor. Cross-listed with ENGL 5500.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.
- ENGL 4510 - Whores and Saints: Medieval Women
Summer 2010 Registration **ENGL 4510**
Studies how women are presented in texts, as well as works by women. Investigates the roles open to women and societal attitudes toward women, who were considered seductresses, saints, scholars and warriors in the middle ages. Prereq: Nine hours of

literature courses or instructor permission. Cross-listed with ENGL 5510, RLST 4730 and RLST 5730, WGST 4510. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

- ENGL 4730 - Chaucer's Canterbury Tales
Summer 2010 Registration **ENGL 4730**
An intensive study of Chaucer's Canterbury Tales, as an introduction to the historical, ideological, and literary genres of the period. Learn to read Middle English by studying Chaucer's text. Prereq: Must have 30 semester hours or permission of the instructor. Cross-listed with ENGL 5730. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.
- ENGL 4731 - Chaucer's Early Poetry
Summer 2010 Registration **ENGL 4731**
Examines Chaucer's dream visions and Troilus and Criseyde through sources and historical and ideological factors influencing the texts. Learn to read Middle English by reading Chaucer's texts. Prereq: Must have 30 semester hours or permission of the instructor. Cross-listed with ENGL 5731. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

Renaissance, Restoration and 18th Century British Literature

- ENGL 3661 - Shakespeare
Summer 2010 Registration **ENGL 3661**
Introduces some of Shakespeare's major plays and poems, which usually includes Richard II, Romeo and Juliet, Measure for Measure, Othello, King Lear, Anthony and Cleopatra and The Tempest. Prereq: Must have 30 semester hours or permission of the instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.
- ENGL 4520 - English Renaissance
Summer 2010 Registration **ENGL 4520**
Introduces some of the important writers in this major period of English literature (1500-1660). Special attention to the works of Sidney, Milton, Spenser, Shakespeare, Donne, Herbert and Johnson. Prereq: Must have 30 semester hours or permission of the instructor. Cross-listed with ENGL 5520. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.
- ENGL 4530 - Milton
Summer 2010 Registration **ENGL 4530**
Extensive reading in John Milton's poetry (Lycidas, Paradise Lost, Paradise Regained, Samson Agonistes) as well as his political, social and theological writings. Prereq: Must have 30 semester hours or permission of the instructor. Cross-listed

with ENGL 5530. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

- ENGL 4540 - Restoration and the 18th Century
Summer 2010 Registration **ENGL 4540**
Introduces some of the important writers of the "Age of Reason." Emphasis on such figures as Bunyan, Burke, Dryden, Johnson, Pope and Swift. Prereq: Must have 30 semester hours or permission of the instructor. Cross-listed with ENGL 5540. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

Eighteenth- and Nineteenth-Century British Literature

- ENGL 4200 - History of the English Novel I
Summer 2010 Registration **ENGL 4200**
Rise and development of the English novel from its beginnings in the 18th century through the mid-19th century, including such writers as Defoe, Fielding, Austen and Shelley. Prereq: Must have 30 semester hours or permission of the instructor. Cross-listed with ENGL 5200. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.
- ENGL 4210 - History of the English Novel II
Summer 2010 Registration **ENGL 4210**
Overview of the English novel from mid-19th century to World War II, emphasizing the important developments which the form underwent in the hands of notable novelists, including Charles Dickens, the Brontes, George Eliot, Henry James, Joseph Conrad, D.H. Lawrence and Virginia Woolf. Prereq: Must have 30 semester hours or permission of the instructor. Cross-listed with ENGL 5210. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.
- ENGL 4560 - English Romanticism
Summer 2010 Registration **ENGL 4560**
Studies major works of the chief English writers of the first part of the 19th century, with emphasis on such representative figures as Wollstonecraft, Godwin, Blake, Wordsworth, Coleridge, Hazlitt, Byron, Keats and Shelley. Prereq: Must have 30 semester hours or permission of the instructor. Cross-listed with ENGL 5560. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.
- ENGL 4580 - The Victorian Age
Summer 2010 Registration **ENGL 4580**
Examines the main currents of Victorian thought in prose and poetry from about 1830 to the end of the century, including such writers as Browning, Carlyle, Mill, Newman, Ruskin, Swinburne and Tennyson. Prereq: Must have 30 semester hours

or permission of the instructor. Cross-listed with ENGL 5580. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

American Literature

- ENGL 3700 - American Literature to the Civil War
Summer 2010 Registration **ENGL 3700**
Surveys American literature from the colonial era to the Civil War. Prereq: ENGL 1020. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.
- ENGL 3750 - American Literature from the Civil War
Summer 2010 Registration **ENGL 3750**
Surveys American literature from the Civil War to the contemporary era. Prereq: ENGL 1020. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.
- ENGL 4166 - History of American Poetry
Summer 2010 Registration **ENGL 4166**
Examines major American poets and poetic trends from the colonial period to the present, with attention to cultural contexts and to development of distinctively American practices. Prereq: Must have 30 semester hours or permission of the instructor. Cross-listed with ENGL 5166. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.
- ENGL 4220 - African-American Literature
Summer 2010 Registration **ENGL 4220**
Surveys African-American literature with special emphasis on post-Civil War writing. Prereq: Must have 30 semester hours or permission of the instructor. Cross-listed with ENGL 5220, ETST 4220. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.
- ENGL 4230 - The American Novel
Summer 2010 Registration **ENGL 4230**
Surveys major developments in the American novel from the 18th century to the 21st century. Prereq: Must have 30 semester hours or permission of the instructor. Cross-listed with ENGL 5230. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.
- ENGL 4236 - The American Short Story
Summer 2010 Registration **ENGL 4236**
Traces the development of the short story in the United States, from its beginnings in colonial tales to its contemporary renaissance as a dominant literary form. Prereq: Must have 30 semester hours or permission of the instructor. Cross-listed with ENGL

5236.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

- ENGL 4350 - History of American Drama

Summer 2010 Registration **ENGL 4350**

Studies American drama from its foundations in the 18th century through movements including realism, expressionism, symbolism, agit-prop, black nationalism, feminism, and performance art. Drama read as both text and performance, as sometimes supporting the status quo and as sometimes subverting it. Prereq: Must have 30 semester hours or permission of the instructor. Cross-listed with ENGL

5350.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Modern and Contemporary Literature

- ENGL 3450 - Twentieth Century Women Writers

Summer 2010 Registration **ENGL 3450**

Examines how women write about a specific theme, such as home, work, family, the "Other," as well as how women's writing may differ from men's. Theme and genre vary. Prereq: Must have 30 semester hours or permission of the instructor. Cross-listed with WGST 3450.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

- ENGL 3480 - Modern Drama

Summer 2010 Registration **ENGL 3480**

How does drama change from the pioneering realism of Ibsen and Chekhov to the absurdism of Ionesco and Pinter and beyond? The course covers plays in English and translation from the late nineteenth to the twenty-first century, with attention to performance as well as literary texts. Prereq: Must have 30 hours or the permission of the instructor.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

- ENGL 4250 - Twentieth Century Fiction

Summer 2010 Registration **ENGL 4250**

Deals with novels originating in a variety of countries in an effort to see the similarities and differences that varying nationalities bring to the genre. Prereq: Must have 30 semester hours or permission of the instructor. Cross-listed with ENGL

5250.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

- ENGL 4460 - Contemporary World Literature

Summer 2010 Registration **ENGL 4460**

Surveys literature written by world writers since World War II. Prereq: Must have 30 semester hours or permission of the instructor. Note: Texts read in English. Cross-

listed with ENGL 5460. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

- ENGL 4600 - Modernism

Summer 2010 Registration **ENGL 4600**

Modernist literature from the beginning of the 20th century through World War II, including such writers as Eliot, Joyce, Forester, Ford, Yeats, Woolf and Barnes.

Examines the social-political influences as well as the aesthetic and stylistic elements which define modernist writing. Prereq: Must have 30 semester hours or permission of the instructor. Cross-listed with ENGL 5600. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 18 Hours

REQUIRED ELECTIVES

Choose four English courses (literature, film or creative writing); two at the 3000 or 4000 level, and two at any level.

Total: 12 Hours

Literature Option Total: 39 Hours

Additional courses, total not to exceed 48 hours (any level).

CREATIVE WRITING OPTION

Students interested in pursuing careers or graduate work in creative writing should choose the creative writing option in literature.

OPTION-SPECIFIC REQUIREMENTS

- ENGL 1400 - Introduction to Literary Studies

Summer 2010 Registration **ENGL 1400**

Helps students develop a sense of literary techniques and issues so they can bring an improved critical sensibility to their reading and writing. Note: Designed for students who plan to major in English or who are seriously interested in literature.

Prereq or Coreq: ENGL 1020. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 1400 will be replaced during 2010-11 by ENGL 2450 when it becomes available

- ENGL 1601 - Telling Tales: Narrative Art in Literature and Film

Summer 2010 Registration **ENGL 1601**

Asks students to explore how stories determine who we are. Everything people do fits into a narrative pattern, evident everywhere from TV news to memory to daily schedules. We tell ourselves stories about ourselves and others--how do these stories shape who we are as cultural beings? Prereq or Coreq: ENGL

1020.**Semester Hours:** 3to 3**GT Pathways Category Key:** GT-AH2

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

- ENGL 2250 - Introduction to Film

Summer 2010 Registration **ENGL 2250**

Introduces students to the critical study of cinema as an art form and a cultural phenomenon. Topics include cinematography, editing, mise-en-scene and sound; the connections between cinema and related art forms; film genres; the social dimensions of film production and reception; and films by such key filmmakers as Alfred Hitchcock, Maya Deren and Spike Lee.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

- ENGL 2154 - Introduction to Creative Writing

Summer 2010 Registration **ENGL 2154**

Reading, discussing, writing short fiction and poetry in a workshop setting. Prereq: ENGL 1020.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

- ENGL 3001 - Critical Writing

Summer 2010 Registration **ENGL 3001**

Introduces literary theory, which provides extensive practice in writing about literature. Note: Required for literature majors, and should be taken in the sophomore or junior year. Prereq: ENGL 1400 and two literature courses.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 12 Hours

ADVANCED COURSE WORK

Complete all courses in either poetry or fiction.

Poetry

- ENGL 3020 - Poetry Workshop

Summer 2010 Registration **ENGL 3020**

Practical workshop for developing poetic craft, focusing on writing process and specialized topics. Prereq: ENGL 2154 for English majors and minors only; all others

must obtain permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

- ENGL 4025 - Advanced Poetry Workshop

Summer 2010 Registration **ENGL 4025**

Focuses on the development of poetic craft. Prereq: ENGL 2154 and 3020 for English majors and minors only; all others must obtain permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

- ENGL 4080 - History of the English Language

Summer 2010 Registration **ENGL 4080**

Examines how English has changed since A.D. 800 through examples of writing from different periods, with attention to the way various groups have enriched our vocabulary and altered our syntax. Prereq: ENGL 2070 or one year of a college foreign language. Cross-listed with ENGL 5080. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

- ENGL 4160 - Poetics

Summer 2010 Registration **ENGL 4160**

"Mechanics" of poetry in English, including meter, rhythm, rhyme, line, and other systems of measurement and logic. Emphasis is on historical development of poetic art in English. Prereq: ENGL 1400 or permission of instructor. Cross-listed with ENGL 5160. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

- ENGL 4166 - History of American Poetry

Summer 2010 Registration **ENGL 4166**

Examines major American poets and poetic trends from the colonial period to the present, with attention to cultural contexts and to development of distinctively American practices. Prereq: Must have 30 semester hours or permission of the instructor. Cross-listed with ENGL 5166. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

- ENGL 4320 - History of Poetry in English

Summer 2010 Registration **ENGL 4320**

Studies the major schools and eras of English prosody, including the poetry of Great Britain and the United States, from the medieval period to the present. Prereq: Must have 30 semester hours or permission of the instructor. Cross-listed with ENGL 5320. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 12 Hours

Fiction

- ENGL 3050 - Fiction Workshop
Summer 2010 Registration **ENGL 3050**
Practical workshop for developing narrative craft, focusing on writing process and specialized topics. Prereq: ENGL 2154 for English majors and minors only; all others must obtain permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.
- ENGL 4055 - Advanced Fiction Workshop
Summer 2010 Registration **ENGL 4055**
Focuses on the development of narrative craft. Prereq: ENGL 2154 and 3050 for English majors and minors only; all others must obtain permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.
- ENGL 4200 - History of the English Novel I
Summer 2010 Registration **ENGL 4200**
Rise and development of the English novel from its beginnings in the 18th century through the mid-19th century, including such writers as Defoe, Fielding, Austen and Shelley. Prereq: Must have 30 semester hours or permission of the instructor. Cross-listed with ENGL 5200. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.
-OR-
- ENGL 4210 - History of the English Novel II
Summer 2010 Registration **ENGL 4210**
Overview of the English novel from mid-19th century to World War II, emphasizing the important developments which the form underwent in the hands of notable novelists, including Charles Dickens, the Brontes, George Eliot, Henry James, Joseph Conrad, D.H. Lawrence and Virginia Woolf. Prereq: Must have 30 semester hours or permission of the instructor. Cross-listed with ENGL 5210. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.
- ENGL 4230 - The American Novel
Summer 2010 Registration **ENGL 4230**
Surveys major developments in the American novel from the 18th century to the 21st century. Prereq: Must have 30 semester hours or permission of the instructor. Cross-listed with ENGL 5230. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.
-OR-
- ENGL 4236 - The American Short Story

Summer 2010 Registration **ENGL 4236**

Traces the development of the short story in the United States, from its beginnings in colonial tales to its contemporary renaissance as a dominant literary form. Prereq:

Must have 30 semester hours or permission of the instructor. Cross-listed with ENGL 5236. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 12 Hours

REQUIRED AREA ELECTIVES

Choose three:

- ENGL 3160 - Language Theory

Summer 2010 Registration **ENGL 3160**

Provides a basic introduction to linguistics and language theory for undergraduates, including phonetics, grammar, semantics, pragmatics, sociolinguistics, cognitive processing, and language acquisition. Includes practical applications of the theories and methodologies presented. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

- ENGL 4080 - History of the English Language

Summer 2010 Registration **ENGL 4080**

Examines how English has changed since A.D. 800 through examples of writing from different periods, with attention to the way various groups have enriched our vocabulary and altered our syntax. Prereq: ENGL 2070 or one year of a college foreign language. Cross-listed with ENGL 5080. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

- ENGL 3520 - Religious Narratives

Summer 2010 Registration **ENGL 3520**

Investigates the language and structure of religious discourse in Western literature. Welcomes interdisciplinary and comparative perspectives with a focus on cultural constructions of the sacred. Prereq: Must have 30 semester hours or permission of the instructor. Cross-listed with RLST 3720. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

- ENGL 3661 - Shakespeare

Summer 2010 Registration **ENGL 3661**

Introduces some of Shakespeare's major plays and poems, which usually includes Richard II, Romeo and Juliet, Measure for Measure, Othello, King Lear, Anthony and Cleopatra and The Tempest. Prereq: Must have 30 semester hours or permission of the instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

- ENGL 3700 - American Literature to the Civil War

Summer 2010 Registration **ENGL 3700**

Surveys American literature from the colonial era to the Civil War. Prereq: ENGL 1020. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

- ENGL 3750 - American Literature from the Civil War

Summer 2010 Registration **ENGL 3750**

Surveys American literature from the Civil War to the contemporary era. Prereq: ENGL 1020. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

- * ENGL 4000 - Studies of Major Authors

Summer 2010 Registration **ENGL 4000**

An intensive study of works of one major British or American author. Examples: Dickens, Woolf or James. Prereq: Must have 30 semester hours or permission of the instructor. Cross-listed with ENGL 5000. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

- ENGL 4166 - History of American Poetry

Summer 2010 Registration **ENGL 4166**

Examines major American poets and poetic trends from the colonial period to the present, with attention to cultural contexts and to development of distinctively American practices. Prereq: Must have 30 semester hours or permission of the instructor. Cross-listed with ENGL 5166. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

- ENGL 4200 - History of the English Novel I

Summer 2010 Registration **ENGL 4200**

Rise and development of the English novel from its beginnings in the 18th century through the mid-19th century, including such writers as Defoe, Fielding, Austen and Shelley. Prereq: Must have 30 semester hours or permission of the instructor. Cross-listed with ENGL 5200. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

- ENGL 4210 - History of the English Novel II

Summer 2010 Registration **ENGL 4210**

Overview of the English novel from mid-19th century to World War II, emphasizing the important developments which the form underwent in the hands of notable

novelists, including Charles Dickens, the Brontes, George Eliot, Henry James, Joseph Conrad, D.H. Lawrence and Virginia Woolf. Prereq: Must have 30 semester hours or permission of the instructor. Cross-listed with ENGL 5210. **Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

- ENGL 4220 - African-American Literature
Summer 2010 Registration **ENGL 4220**
Surveys African-American literature with special emphasis on post-Civil War writing. Prereq: Must have 30 semester hours or permission of the instructor. Cross-listed with ENGL 5220, ETST 4220. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.
 - ENGL 4230 - The American Novel
Summer 2010 Registration **ENGL 4230**
Surveys major developments in the American novel from the 18th century to the 21st century. Prereq: Must have 30 semester hours or permission of the instructor. Cross-listed with ENGL 5230. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.
 - ENGL 4235 - Faulkner
Summer 2010 Registration **ENGL 4235**
Studies the works of Faulkner's high period with special attention to southern themes and Faulkner's experimentation with narrative form. Prereq: Must have 30 semester hours or permission of the instructor. Cross-listed with ENGL 5235. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.
 - ENGL 4236 - The American Short Story
Summer 2010 Registration **ENGL 4236**
Traces the development of the short story in the United States, from its beginnings in colonial tales to its contemporary renaissance as a dominant literary form. Prereq: Must have 30 semester hours or permission of the instructor. Cross-listed with ENGL 5236. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.
 - ENGL 4250 - Twentieth Century Fiction
Summer 2010 Registration **ENGL 4250**
Deals with novels originating in a variety of countries in an effort to see the similarities and differences that varying nationalities bring to the genre. Prereq: Must have 30 semester hours or permission of the instructor. Cross-listed with ENGL 5250. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.
- OR-
- ENGL 4460 - Contemporary World Literature

Summer 2010 Registration **ENGL 4460**

Surveys literature written by world writers since World War II. Prereq: Must have 30 semester hours or permission of the instructor. Note: Texts read in English. Cross-listed with ENGL 5460. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

- ENGL 4600 - Modernism

Summer 2010 Registration **ENGL 4600**

Modernist literature from the beginning of the 20th century through World War II, including such writers as Eliot, Joyce, Forester, Ford, Yeats, Woolf and Barnes. Examines the social-political influences as well as the aesthetic and stylistic elements which define modernist writing. Prereq: Must have 30 semester hours or permission of the instructor. Cross-listed with ENGL 5600. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

- ENGL 4300 - History of British Drama

Summer 2010 Registration **ENGL 4300**

Intended as a survey of British drama from the miracle plays of the medieval period, through the Renaissance and Restoration, to the "kitchen sink" realists of the 1960s. Prereq: Must have 30 semester hours or permission of the instructor. Cross-listed with ENGL 5300. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

- ENGL 4350 - History of American Drama

Summer 2010 Registration **ENGL 4350**

Studies American drama from its foundations in the 18th century through movements including realism, expressionism, symbolism, agit-prop, black nationalism, feminism, and performance art. Drama read as both text and performance, as sometimes supporting the status quo and as sometimes subverting it. Prereq: Must have 30 semester hours or permission of the instructor. Cross-listed with ENGL 5350. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

- ENGL 4320 - History of Poetry in English

Summer 2010 Registration **ENGL 4320**

Studies the major schools and eras of English prosody, including the poetry of Great Britain and the United States, from the medieval period to the present. Prereq: Must have 30 semester hours or permission of the instructor. Cross-listed with ENGL 5320. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

- ENGL 4500 - Medieval Literature

Summer 2010 Registration **ENGL 4500**

Introduces representative writers from the Norman Conquest to about 1550. Emphasis on a variety of genres, including religious poetry, Arthurian romance, dream vision and drama. Prereq: Must have 30 semester hours or permission of the instructor. Cross-listed with ENGL 5500. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

- ENGL 4510 - Whores and Saints: Medieval Women

Summer 2010 Registration **ENGL 4510**

Studies how women are presented in texts, as well as works by women. Investigates the roles open to women and societal attitudes toward women, who were considered seductresses, saints, scholars and warriors in the middle ages. Prereq: Nine hours of literature courses or instructor permission. Cross-listed with ENGL 5510, RLST 4730 and RLST 5730, WGST 4510. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

- ENGL 4520 - English Renaissance

Summer 2010 Registration **ENGL 4520**

Introduces some of the important writers in this major period of English literature (1500-1660). Special attention to the works of Sidney, Milton, Spenser, Shakespeare, Donne, Herbert and Johnson. Prereq: Must have 30 semester hours or permission of the instructor. Cross-listed with ENGL 5520. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

- ENGL 4530 - Milton

Summer 2010 Registration **ENGL 4530**

Extensive reading in John Milton's poetry (Lycidas, Paradise Lost, Paradise Regained, Samson Agonistes) as well as his political, social and theological writings. Prereq: Must have 30 semester hours or permission of the instructor. Cross-listed with ENGL 5530. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

- ENGL 4540 - Restoration and the 18th Century

Summer 2010 Registration **ENGL 4540**

Introduces some of the important writers of the "Age of Reason." Emphasis on such figures as Bunyan, Burke, Dryden, Johnson, Pope and Swift. Prereq: Must have 30 semester hours or permission of the instructor. Cross-listed with ENGL 5540. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

- ENGL 4560 - English Romanticism

Summer 2010 Registration **ENGL 4560**

Studies major works of the chief English writers of the first part of the 19th century, with emphasis on such representative figures as Wollstonecraft, Godwin, Blake,

Wordsworth, Coleridge, Hazlitt, Byron, Keats and Shelley. Prereq: Must have 30 semester hours or permission of the instructor. Cross-listed with ENGL 5560.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

- ENGL 4580 - The Victorian Age

Summer 2010 Registration **ENGL 4580**

Examines the main currents of Victorian thought in prose and poetry from about 1830 to the end of the century, including such writers as Browning, Carlyle, Mill, Newman, Ruskin, Swinburne and Tennyson. Prereq: Must have 30 semester hours or permission of the instructor. Cross-listed with ENGL 5580.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

- ENGL 4730 - Chaucer's Canterbury Tales

Summer 2010 Registration **ENGL 4730**

An intensive study of Chaucer's Canterbury Tales, as an introduction to the historical, ideological, and literary genres of the period. Learn to read Middle English by studying Chaucer's text. Prereq: Must have 30 semester hours or permission of the instructor. Cross-listed with ENGL 5730.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

- ENGL 4731 - Chaucer's Early Poetry

Summer 2010 Registration **ENGL 4731**

Examines Chaucer's dream visions and Troilus and Criseyde through sources and historical and ideological factors influencing the texts. Learn to read Middle English by reading Chaucer's texts. Prereq: Must have 30 semester hours or permission of the instructor. Cross-listed with ENGL 5731.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 9 Hours

* Repeatable if topics differ

Choose one:

ENGL 2390 - Writing the Short Script

Summer 2010 Registration **ENGL 2390**

Examines narrative screenwriting elements--premise, theme, conflict, protagonist/antagonist, setting/situation, dialogue, plot structure, imagery--required to create a strong narrative short film. Prereq: ENGL 1020.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 2415 - Introduction to Movie Writing

Summer 2010 Registration **ENGL 2415**

Examines structural and dramatic elements required to write a feature-length screenplay. Students conceptualize, plan, write and then re-write to complete the first ten pages of their own feature-length screenplay. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 3020 - Poetry Workshop

Summer 2010 Registration **ENGL 3020**

Practical workshop for developing poetic craft, focusing on writing process and specialized topics. Prereq: ENGL 2154 for English majors and minors only; all others must obtain permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 3050 - Fiction Workshop

Summer 2010 Registration **ENGL 3050**

Practical workshop for developing narrative craft, focusing on writing process and specialized topics. Prereq: ENGL 2154 for English majors and minors only; all others must obtain permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 3084 - Advanced Composition

Summer 2010 Registration **ENGL 3084**

Focuses on the rhetorical examination and production of visual and textual documents in such areas as politics, education, art, culture and advertising. Equal focus on developing individual student writing skills at advanced levels. Prereq: ENGL 2030. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 3154 - Technical Writing

Summer 2010 Registration **ENGL 3154**

Introduces the study and writing of technical documents. Emphasizes the processes, style, structure, and forms of technical writing. Attention is paid to audience analysis, organization, clarity and precision. Prereq: ENGL 1020. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 3170 - Business Writing

Summer 2010 Registration **ENGL 3170**

Focuses on the strategies and techniques of business writing, with emphasis on reader, message and form. Prereq: ENGL 1020. ENGL 2030 highly recommended. **Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 3416 - Magazine Writing

Summer 2010 Registration **ENGL 3416**

An intensive, practical course in writing non-fiction with an emphasis on journalistic approaches for daily, weekly, and monthly publications. Prereq: ENGL 1020. **Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 4180 - Argumentation and Logic

Summer 2010 Registration **ENGL 4180**

Explores the history of logic and its role in argumentation, studies various types of logical structures, and analyzes current uses of argumentation, with attention to writing arguments on current public issues. Prereq: ENGL 1020, 2030 and 2070. **Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 4190 - Special Topics in Rhetoric and Writing

Summer 2010 Registration **ENGL 4190**

Focuses on particular issues in rhetoric and writing as they pertain to reading and writing, including language and gender, language and culture, and language of political action. Prereq: Must have 30 semester hours or permission of the instructor. Cross-listed with ENGL 5190. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 4701 - Multimedia in the Community

Summer 2010 Registration **ENGL 4701**

Produce dossier-quality multimedia shorts by researching and writing digital compositions for selected community organizations. Topics for research range across numerous social issues and involve all disciplines. Prereq: ENGL 2030, 3154, and 3170 or permission of instructor. Cross-listed with ENGL 5701. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 3 Hours

INTERNSHIP OR SENIOR WRITING PROJECT IN CREATIVE WRITING OR FILM STUDIES

ENGL 3939 - Internship/Cooperative Education

Summer 2010 Registration **ENGL 3939**

Employment situations designed and supervised by members of the faculty; concepts and skills developed in the classroom are used in business and public service contexts. Prereq: Junior standing and 2.75 grade-point average. Before enrolling, students should contact the Career Center. Note: Up to six hours may be counted toward the major. **Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

ENGL 4990 - Senior Writing Project in Creative Writing or Film Studies

Summer 2010 Registration **ENGL 4990**

Individual writing project consisting of a creative manuscript or critical study. Manuscript must be 30 pages of high quality text. Note: Available only to students in the creative writing and film tracks. Prereq: Senior standing. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 3 Hours

Creative Writing Option Total: 39 Hours

Additional courses, total not to exceed 48 hours (any level).

FILM STUDIES OPTION

The film studies option within the English major is designed to prepare students for a range of professional careers in areas such as screenwriting, film criticism, video production and the teaching of film, as well as those students who plan to pursue graduate programs in film studies. Required courses give students a strong grounding in film history, verbal and visual narrative, and the critical terms and techniques used in both film and literary analysis. Electives give students the option of emphasizing either the creative approach or the critical approach to moving-image media, or a combination of the two. The film studies option also affords students the opportunity to create video productions using state-of-the-art digital video and editing equipment and the possibility of airing their productions on cable TV. Offered in cooperation with the College of Arts & Media (CAM) , the film studies option can be completed entirely on the Auraria Campus.

OPTION-SPECIFIC REQUIREMENTS

ENGL 2250 - Introduction to Film

Summer 2010 Registration **ENGL 2250**

Introduces students to the critical study of cinema as an art form and a cultural phenomenon. Topics include cinematography, editing, mise-en-scene and sound; the connections between cinema and related art forms; film genres; the social dimensions of film production and reception; and films by such key filmmakers as Alfred Hitchcock, Maya Deren and Spike Lee. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 3070 - Film History I

Summer 2010 Registration **ENGL 3070**

Examines the history of cinema from its 19th-century origins until the early sound era. Explores important developments and influences in American and international cinema, including the origins of Hollywood narrative, avant-garde cinema, German Expressionism, and Soviet Cinema. Prereq: Must have 30 semester hours or permission of the instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 3080 - Film History II

Summer 2010 Registration **ENGL 3080**

Examines world cinema from 1938 to the present, with examples from major movements and directors--such as Film Noir, Italian Neo-Realism, the French New Wave, Jean Renoir, Agnes Varda, John Ford, Alfred Hitchcock and Werner Herzog. Prereq: Must have 30 semester hours or permission of the instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 4420 - Film Theory and Criticism

Summer 2010 Registration **ENGL 4420**

(1) Familiarizes students with some of the central concepts and debates in film theory and criticism, both classic and contemporary, (2) enables students to develop advanced analytic and interpretive skills, and (3) guides students toward discovering and articulating original critical and theoretical perspectives. Prereq: ENGL 2250 and 3070, 3080 or permission of instructor. Cross-listed with ENGL 5420. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 12 Hours

REQUIRED AREA ELECTIVES

Nine elective courses are required, and may be taken in all areas listed below. Fifteen of the 27-hour minimum must be at the 3000/4000 level. Production courses must be taken through the College of Arts & Media (CAM). Equivalent screenwriting courses may also be taken through CAM.

A. Critical Studies

ENGL 1400 - Introduction to Literary Studies

Summer 2010 Registration **ENGL 1400**

Helps students develop a sense of literary techniques and issues so they can bring an improved critical sensibility to their reading and writing. Note: Designed for students who plan to major in English or who are seriously interested in literature. Prereq or Coreq: ENGL 1020. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 1400 will be replaced during 2010-11 by ENGL 2450 when it becomes available

ENGL 1601 - Telling Tales: Narrative Art in Literature and Film

Summer 2010 Registration **ENGL 1601**

Asks students to explore how stories determine who we are. Everything people do fits into a narrative pattern, evident everywhere from TV news to memory to daily schedules. We tell ourselves stories about ourselves and others--how do these stories shape who we are as cultural beings? Prereq or Coreq: ENGL 1020. **Semester Hours:** 3to 3GT

Pathways Category Key: GT-AH2

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 3001 - Critical Writing

Summer 2010 Registration **ENGL 3001**

Introduces literary theory, which provides extensive practice in writing about literature.

Note: Required for literature majors, and should be taken in the sophomore or junior year. Prereq: ENGL 1400 and two literature courses. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 3075 - Film Genres

Summer 2010 Registration **ENGL 3075**

An intensive study of films of one or more significant genres, such as comedy, film noir, science fiction. Prereq: Must have 30 semester hours or permission of the instructor.

Note: May be taken more than once when genres vary. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 3085 - Film Directors

Summer 2010 Registration **ENGL 3085**

An intensive study of the films of one or more major directors, such as Chaplin, Keaton, Hitchcock, Welles, Coen Brothers. Prereq: Must have 30 semester hours or permission of the instructor. Note: May be taken more than once when directors vary. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 3200 - From Literature to Film

Summer 2010 Registration **ENGL 3200**

Explores the relationship between literature and cinema; the process of adapting and transforming a novel into a feature-length film; and the historical, cultural, and commercial influences that shaped the creation of each novel and film studied. Prereq: Must have 30 semester hours or permission of the instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 4190 - Special Topics in Rhetoric and Writing

Summer 2010 Registration **ENGL 4190**

Focuses on particular issues in rhetoric and writing as they pertain to reading and writing, including language and gender, language and culture, and language of political action. Prereq: Must have 30 semester hours or permission of the instructor. Cross-listed with ENGL 5190. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

(film and media-focused only; e.g., Film and Rhetoric)

ENGL 4701 - Multimedia in the Community

Summer 2010 Registration **ENGL 4701**

Produce dossier-quality multimedia shorts by researching and writing digital compositions for selected community organizations. Topics for research range across numerous social issues and involve all disciplines. Prereq: ENGL 2030, 3154, and 3170 or permission of instructor. Cross-listed with ENGL 5701. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 4770 - Topics in English: Film and Literature

Summer 2010 Registration **ENGL 4770**

May look at specific genres, aesthetic approaches to literature, ideological or socio-political agendas, or other special topics in literature and/or film. Prereq: Must have 30 semester hours or permission of the instructor. Cross-listed with ENGL 5770. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.
(film and media-focused only)

ENGL 4990 - Senior Writing Project in Creative Writing or Film Studies

Summer 2010 Registration **ENGL 4990**

Individual writing project consisting of a creative manuscript or critical study. Manuscript must be 30 pages of high quality text. Note: Available only to students in the creative writing and film tracks. Prereq: Senior standing. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.
(can be taken under B or C)

May also choose from any single approved film course offered through another department or a single 3000/4000-level literature course (3 semester hours)

B. Screenwriting

ENGL 2390 - Writing the Short Script

Summer 2010 Registration **ENGL 2390**

Examines narrative screenwriting elements--premise, theme, conflict, protagonist/antagonist, setting/situation, dialogue, plot structure, imagery--required to create a strong narrative short film. Prereq: ENGL 1020. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 2415 - Introduction to Movie Writing

Summer 2010 Registration **ENGL 2415**

Examines structural and dramatic elements required to write a feature-length screenplay. Students conceptualize, plan, write and then re-write to complete the first ten pages of their own feature-length screenplay. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 3415 - Screenwriting Workshop

Summer 2010 Registration **ENGL 3415**

Continues and expands ENGL 2415. By the end of ENGL 3415, students have completed the first two acts of their screenplay. Note: May be repeated a second time in

a different semester to complete entire screenplay. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

C. Production

FILM 2000 - Film/Video Production II

Summer 2010 Registration **FILM 2000**

Students work in teams to create productions using three chip digital cameras and advanced techniques. Preproduction planning, working with actors and maximizing production values are stressed. Studio and exterior location shoots are included. Prereq: FILM 1050, 2060, BA TFVP majors, minors. Concurrently. Coreq: FILM 2150. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FILM 2150 - Film and Video Postproduction II

Summer 2010 Registration **FILM 2150**

Students edit the projects filmed in FILM 2000. Cutting for narrative and storytelling are stressed. Importation of sound and visual effects files are covered. Students use professional non-linear digital editing software. Prereq: FILM 1050, THTR/FILM 1100, Theatre/Film majors and minors or permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 27 Hours

* Repeatable if a different genre/director/topic.

Film Studies Option Total: 39 Hours

Additional courses, total not to exceed 48 hours (any level).

College Core Courses for English Majors

Students must complete the College of Liberal Arts and Sciences core curriculum requirements as specified in the CLAS Core Curriculum/Graduation Requirements chart . Check the schedule planner for specific course offerings.

Electives

Elective hours may be selected at the student's discretion, but students are urged to work with their advisor in outlining a program in which electives and requirements

support each other. Six hours earned in the internship/cooperative education program may be counted toward the major.

Return to Department of English

English Writing BA

Especially designed for future writers, the writing major offers a wide range of intensive writing experiences combining such areas as rhetoric, professional, general and creative writing.

Requirements for the English Writing Major

Students majoring in writing must present a total of 39 hours for the major (excluding ENGL 1010, 1020 and 2030), of which 27 hours must be earned in upper-division courses. None of the required 39 hours may be taken on a pass/fail basis. Only courses completed with a grade of C (2.0) or above may be counted toward the major. At least 15 upper-division hours of the student's work in writing must be taken from English faculty on the Downtown Campus. Students planning to major in writing should consult with an advisor as soon as possible. This major is also available online.

Required Courses

ENGL 2070 - Grammar, Rhetoric and Style

Summer 2010 Registration **ENGL 2070**

Teaches the basics of English grammar in order to develop a rhetorical and stylistic confidence in reading and writing, using an approach that is more descriptive than prescriptive. Teaches students how to evaluate the grammatical choices of established writers and how to develop flexibility in the grammatical choices they make in their own writing. Prereq: ENGL 1020 or equivalent. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 2154 - Introduction to Creative Writing

Summer 2010 Registration **ENGL 2154**

Reading, discussing, writing short fiction and poetry in a workshop setting. Prereq: ENGL 1020. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 3084 - Advanced Composition

Summer 2010 Registration **ENGL 3084**

Focuses on the rhetorical examination and production of visual and textual documents in such areas as politics, education, art, culture and advertising. Equal focus on developing individual student writing skills at advanced levels. Prereq: ENGL 2030. **Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 3154 - Technical Writing

Summer 2010 Registration **ENGL 3154**

Introduces the study and writing of technical documents. Emphasizes the processes, style, structure, and forms of technical writing. Attention is paid to audience analysis, organization, clarity and precision. Prereq: ENGL 1020. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

ENGL 3170 - Business Writing

Summer 2010 Registration **ENGL 3170**

Focuses on the strategies and techniques of business writing, with emphasis on reader, message and form. Prereq: ENGL 1020. ENGL 2030 highly recommended. **Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 3160 - Language Theory

Summer 2010 Registration **ENGL 3160**

Provides a basic introduction to linguistics and language theory for undergraduates, including phonetics, grammar, semantics, pragmatics, sociolinguistics, cognitive processing, and language acquisition. Includes practical applications of the theories and methodologies presented. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

ENGL 4080 - History of the English Language

Summer 2010 Registration **ENGL 4080**

Examines how English has changed since A.D. 800 through examples of writing from different periods, with attention to the way various groups have enriched our vocabulary and altered our syntax. Prereq: ENGL 2070 or one year of a college foreign language. Cross-listed with ENGL 5080. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 4180 - Argumentation and Logic

Summer 2010 Registration **ENGL 4180**

Explores the history of logic and its role in argumentation, studies various types of logical structures, and analyzes current uses of argumentation, with attention to writing arguments on current public issues. Prereq: ENGL 1020, 2030 and 2070. **Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 4190 - Special Topics in Rhetoric and Writing

Summer 2010 Registration **ENGL 4190**

Focuses on particular issues in rhetoric and writing as they pertain to reading and writing, including language and gender, language and culture, and language of political action. Prereq: Must have 30 semester hours or permission of the instructor. Cross-listed with ENGL 5190. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 21 Hours

Advanced Course Work

Students pursuing a general writing degree may choose from all writing courses listed. Students pursuing a concentration in professional writing or teaching English as a second language must complete at least 9 hours in those areas.

Professional Writing Concentration

Choose at least three:

ENGL 3154 - Technical Writing

Summer 2010 Registration **ENGL 3154**

Introduces the study and writing of technical documents. Emphasizes the processes, style, structure, and forms of technical writing. Attention is paid to audience analysis, organization, clarity and precision. Prereq: ENGL 1020. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 3170 - Business Writing

Summer 2010 Registration **ENGL 3170**

Focuses on the strategies and techniques of business writing, with emphasis on reader, message and form. Prereq: ENGL 1020. ENGL 2030 highly recommended. **Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 3416 - Magazine Writing

Summer 2010 Registration **ENGL 3416**

An intensive, practical course in writing non-fiction with an emphasis on journalistic approaches for daily, weekly, and monthly publications. Prereq: ENGL 1020. **Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 3939 - Internship/Cooperative Education

Summer 2010 Registration **ENGL 3939**

Employment situations designed and supervised by members of the faculty; concepts and skills developed in the classroom are used in business and public service contexts. Prereq: Junior standing and 2.75 grade-point average. Before enrolling, students should contact the Career Center. Note: Up to six hours may be counted toward the major. **Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 4190 - Special Topics in Rhetoric and Writing

Summer 2010 Registration **ENGL 4190**

Focuses on particular issues in rhetoric and writing as they pertain to reading and writing, including language and gender, language and culture, and language of political action. Prereq: Must have 30 semester hours or permission of the instructor. Cross-listed with ENGL 5190. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.
(professional writing topic)

ENGL 4280 - Proposal and Grant Writing

Summer 2010 Registration **ENGL 4280**

Focuses on research, design, composition, and editing original proposals. Includes idea development, identification of funding sources, and the creation of persuasive documents. Prereq: ENGL 1020. Cross-listed with ENGL 5280. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 4701 - Multimedia in the Community

Summer 2010 Registration **ENGL 4701**

Produce dossier-quality multimedia shorts by researching and writing digital compositions for selected community organizations. Topics for research range across

numerous social issues and involve all disciplines. Prereq: ENGL 2030, 3154, and 3170 or permission of instructor. Cross-listed with ENGL 5701. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 4995 - Senior Writing Project

Summer 2010 Registration **ENGL 4995**

Individual writing project in any genre and any discipline upon approval of faculty advisor. Manuscript must be 30 pages of high quality text. Prereq: Senior standing. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

* Repeatable when title/content differ.

Teaching English as a Second Language Concentration

Choose at least three:

ENGL 3160 - Language Theory

Summer 2010 Registration **ENGL 3160**

Provides a basic introduction to linguistics and language theory for undergraduates, including phonetics, grammar, semantics, pragmatics, sociolinguistics, cognitive processing, and language acquisition. Includes practical applications of the theories and methodologies presented. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 4601 - Principles and Practices of Second Language Acquisition

Summer 2010 Registration **ENGL 4601**

Overview of basic principles and practices in the learning and teaching of English as a second language. Prereq: Must have 30 semester hours or permission of the instructor. Cross-listed with ENGL 5601. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 3939 - Internship/Cooperative Education

Summer 2010 Registration **ENGL 3939**

Employment situations designed and supervised by members of the faculty; concepts and skills developed in the classroom are used in business and public service contexts. Prereq: Junior standing and 2.75 grade-point average. Before enrolling, students should contact the Career Center. Note: Up to six hours may be counted toward the major. **Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

ENGL 4190 - Special Topics in Rhetoric and Writing

Summer 2010 Registration **ENGL 4190**

Focuses on particular issues in rhetoric and writing as they pertain to reading and writing, including language and gender, language and culture, and language of political action. Prereq: Must have 30 semester hours or permission of the instructor. Cross-listed with ENGL 5190. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

ENGL 4995 - Senior Writing Project

Summer 2010 Registration **ENGL 4995**

Individual writing project in any genre and any discipline upon approval of faculty advisor. Manuscript must be 30 pages of high quality text. Prereq: Senior standing. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

* TESOL topics only

General Writing Courses

ENGL 3020 - Poetry Workshop

Summer 2010 Registration **ENGL 3020**

Practical workshop for developing poetic craft, focusing on writing process and specialized topics. Prereq: ENGL 2154 for English majors and minors only; all others must obtain permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 3050 - Fiction Workshop

Summer 2010 Registration **ENGL 3050**

Practical workshop for developing narrative craft, focusing on writing process and specialized topics. Prereq: ENGL 2154 for English majors and minors only; all others

must obtain permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 3415 - Screenwriting Workshop

Summer 2010 Registration **ENGL 3415**

Continues and expands ENGL 2415. By the end of ENGL 3415, students have completed the first two acts of their screenplay. Note: May be repeated a second time in a different semester to complete entire screenplay. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 3939 - Internship/Cooperative Education

Summer 2010 Registration **ENGL 3939**

Employment situations designed and supervised by members of the faculty; concepts and skills developed in the classroom are used in business and public service contexts. Prereq: Junior standing and 2.75 grade-point average. Before enrolling, students should contact the Career Center. Note: Up to six hours may be counted toward the major. **Semester Hours:** 1to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 4025 - Advanced Poetry Workshop

Summer 2010 Registration **ENGL 4025**

Focuses on the development of poetic craft. Prereq: ENGL 2154 and 3020 for English majors and minors only; all others must obtain permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 4055 - Advanced Fiction Workshop

Summer 2010 Registration **ENGL 4055**

Focuses on the development of narrative craft. Prereq: ENGL 2154 and 3050 for English majors and minors only; all others must obtain permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 4190 - Special Topics in Rhetoric and Writing

Summer 2010 Registration **ENGL 4190**

Focuses on particular issues in rhetoric and writing as they pertain to reading and writing, including language and gender, language and culture, and language of political action. Prereq: Must have 30 semester hours or permission of the instructor. Cross-listed

with ENGL 5190. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 4990 - Senior Writing Project in Creative Writing or Film Studies

Summer 2010 Registration **ENGL 4990**

Individual writing project consisting of a creative manuscript or critical study. Manuscript must be 30 pages of high quality text. Note: Available only to students in the creative writing and film tracks. Prereq: Senior standing. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 4995 - Senior Writing Project

Summer 2010 Registration **ENGL 4995**

Individual writing project in any genre and any discipline upon approval of faculty advisor. Manuscript must be 30 pages of high quality text. Prereq: Senior standing. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total Advanced Course Work: 9-15 Hours

* Repeatable when title/content differ.

Electives

Students may opt to replace two of the five required “advanced course work” courses with other English 3000-4000 level courses (writing, literature, film, creative writing) and/or approved writing courses from other departments.

Total: 0-6 Hours

Senior Seminar in Writing

ENGL 4991 - Senior Seminar in Writing

Summer 2010 Registration **ENGL 4991**

Students focus on rhetorical studies through extensive reading, writing, discussion, and reflection upon their own literacy practices. Students produce individual and collaborative writing projects for a final portfolio. Prereq: ENGL 3084 and senior

standing. **Semester Hours:** 3 to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 3 Hours

Major Total: 39 Hours

Additional courses, total not to exceed 48 hours (any level).

College Core Courses for English Writing Majors

Students must complete the College of Liberal Arts and Sciences core curriculum requirements as specified in the CLAS Core Curriculum/Graduation Requirements chart. Check the Web Schedule Planner for specific course offerings.

Electives

Elective hours may be selected at the student's discretion, but students are urged to work with their advisor in outlining a program in which electives and requirements support each other. Up to 6 hours earned in the cooperative education program may be counted toward the major.

[Return to Department of English](#)

Financial Management and Information Systems Emphasis—BS in Business Administration

The financial management and information systems emphasis provides students with skills that they need to succeed in careers that bridge the fields of finance and information systems.

The financial management and information systems specialty incorporates knowledge of financial management and markets, accounting and information systems and technology. This specialization provides the manager with knowledge of financial information systems, databases, risk management and accounting systems.

Job opportunities include positions that require knowledge of both financial management and business information systems and databases. The specialization provides a solid

accounting/finance and information systems background for other finance specialist and business analyst positions as well.

Required Courses

Finance

FNCE 3500 - Management of Business Capital

Summer 2010 Registration **FNCE 3500**

Students learn the basic principles of managing capital in the business firm. Topics include financial statement analysis, management of working capital, theory and management of capital structure and cost of capital. A grade of 'C' or better must be earned to receive credit for this course and to take subsequent courses for which it is a prerequisite. Prereq: MATH 1080, DSCI 2010, ACCT 2220, FNCE 3000 with a grade of 'C' or better. **Semester Hours:** 3to 3**When Offered:** *FASPRSUM*

Registration is changing. Visit our website for details ucdenver.edu/registration.

FNCE 4330 - Investment and Portfolio Management

Summer 2010 Registration **FNCE 4330**

In this course students learn about the different types of investment vehicles, including methods to estimate their value and analyze their risk. They will also be introduced to portfolio management, including the identification of objectives and constraints and the analysis and use of investment information. Topics include the functioning of security markets, asset allocation, security valuation, and portfolio analysis. A grade of 'C' or better must be earned to receive credit for the course, and to take subsequent courses for which it is a prerequisite. Prereq: FNCE 3500 (and its prerequisites) and FNCE 4330, FNCE 4350 (which may be taken concurrently). **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FNCE 4350 - Financial Markets and Institutions

Summer 2010 Registration **FNCE 4350**

Focuses on the supply and demand for loanable funds, the process of money creation, the structure of interest rates, and the role of banks and the Federal Reserve in the financial system. Special attention is devoted to the impact of monetary and fiscal policies on interest rates, the flow of funds and economic activity; and the operation of financial markets and institutions. A grade of 'C' or better must be earned in this course to receive credit for the area of emphasis and to take subsequent courses for which it is

a prerequisite. Prereq: FNCE 3000. **Semester Hours:** 3to 3 **When Offered:** FALL SPR
Registration is changing. Visit our website for details ucdenver.edu/registration.

FNCE 4500 - Corporate Financial Decisions

Summer 2010 Registration **FNCE 4500**

This is a required capstone course for the financial management emphasis. It uses the case method to develop the analytical and decision making skills of students. Students are required to apply theories and concepts learned in previous finance and accounting classes to real world scenarios. Topical coverage includes financial analysis, planning, control, working capital management, long-term investment and financing decisions and corporate valuation. A grade of 'C' or better must be earned to receive credit towards graduation. Prereq: FNCE 3000, FNCE 3500 and FNCE 4330 all with a grade of 'C' or better and senior standing. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

Accounting

ACCT 3054 - Accounting Systems and Data Processing

Summer 2010 Registration **ACCT 3054**

The design and analysis of accounting information systems, with special emphasis on computers and computer programming, and the role of accounting in the role of accounting in the management process. Must earn a grade of 'C' or better to qualify for graduation. Prereq: Completion of ACCT 2220 and ISMG 2050 with a grade of 'C' or better (Strictly enforced). **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ACCT 3220 - Intermediate Financial Accounting I

Summer 2010 Registration **ACCT 3220**

An intensive analysis of generally accepted accounting principles, accounting theory and preparation of annual financial statements for public corporations. Must complete course with a 'C' to qualify in graduation requirements. Prereq: Completion of ACCT 2220 with a grade of 'C' or better. Strictly enforced. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ACCT 3320 - Intermediate Cost Accounting

Summer 2010 Registration **ACCT 3320**

Cost analysis for purposes of control and decision making. Analysis of cost behavior, role of accounting in planning and control, and managerial uses of cost accounting data. Includes use of computer assisted decision models. Must receive a 'C' grade to qualify in graduation requirements. Prereq: ACCT 2220, and DSCI 2010 completed with a grade

of 'C' or better. Strictly enforced. **Semester Hours:** 3to 3 **When Offered:** FASPRSUM
Registration is changing. Visit our website for details ucdenver.edu/registration.

ACCT 4780 - Accounting and Information Systems Processes and Controls

Summer 2010 Registration **ACCT 4780**

The course is designed to develop knowledge and skills used to understand and evaluate corporate accounting processes and systems. It focuses on financial and information system internal controls and the flow of corporate information through an accounting system. A financial system objective and risk assessment approach is used to present concepts and techniques for evaluating the adequacy of system processes and controls. Prereq: Completion of ACCT 2200, ACCT 2220 and ACCT 3054 with a grade of 'C' or better (strictly enforced). Cross-listed with ACCT 6510, ISMG 4780, and ISMG 6510. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 4780 - Accounting and Information Systems Processes and Controls

Summer 2010 Registration **ISMG 4780**

The course is designed to develop knowledge and skills used to understand and evaluate corporate accounting processes and systems. It focuses on financial and information system internal controls and the flow of corporate information through accounting system. A financial system objective and risk assessment approach is used to present concepts and techniques for evaluating the adequacy of system processes and controls. Prereq: Completion of ACCT 2200 and 2220 with a grade of 'C' or better. Strictly enforced. Cross-listed with ACCT 4780, 6510 and ISMG 6510. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG

ISMG 4500 - Database Management and Applications

Summer 2010 Registration **ISMG 4500**

The success of today's business often hinges on the ability to turn mountains of data into critical information and to utilize the critical information to make the right decisions quickly and efficiently. This course introduces students to the basic principles of data management and utilization. Topics include data modeling, normalization and database design, query formulation using SQL and QBE and interface design. Actual database

management systems products (e.g. Oracle and Access) are utilized to demonstrate the design of database applications in management, marketing, finance, accounting and other business areas. Each student will also design a working database system as a project. Prereq: ISMG 3000. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 4600 - Systems Analysis and Design

Summer 2010 Registration **ISMG 4600**

Provides an understanding of the system development and maintenance process. It enables students to evaluate and choose a system development methodology. Topics include: systems development life cycle phases, structured analysis and design, object-oriented analysis and design; prototyping, joint application development (JAD) and structured walk-through; communication, interviewing, interpersonal and presentation skills; risk and feasibility analysis, project management, systems operations and support.

Prereq: ISMG 3000. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 4900 - Project Management and Practice

Summer 2010 Registration **ISMG 4900**

Covers the factors necessary for successful management of enhancement projects. Both technical and behavioral aspects of project management are discussed. The focus is on management of development for enterprise-level systems. Topics include: managing the system lifecycle; requirements determination, logical design, physical design, testing, implementation; metrics for project management; managing expectations: superiors, users, team members and others related to the project; determining skill requirement and staffing the project; cost-effectiveness analysis; reporting and presentation techniques; effective management of both behavioral and technical aspects of the project; change management. Note: Successful completion of this course meets the educational requirements to sit for both the PMP and CAPM exams. Prereq: ISMG 2200. Cross-listed with CSCI 4900 and MGMT 4900. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 33 Hours

In addition, students must complete FNCE 4370, International Finance, to fulfill the international studies requirement.

Financial Management Emphasis— BS in Business Administration

The financial management emphasis provides students with the skills needed to succeed in careers in financial management. The business community has affirmed that students need skills in both the accounting and finance areas. The financial management specialty incorporates knowledge of corporate financial management, financial institutions and markets, investments, financial accounting and managerial accounting, accounting information systems and information technology. Career opportunities include corporate financial management, finance/accounting positions with financial institutions and accounting positions that are not CPA-track. The specialization provides a solid finance and accounting background for other business positions as well.

Required Courses

FNCE 3500 - Management of Business Capital

Summer 2010 Registration **FNCE 3500**

Students learn the basic principles of managing capital in the business firm. Topics include financial statement analysis, management of working capital, theory and management of capital structure and cost of capital. A grade of 'C' or better must be earned to receive credit for this course and to take subsequent courses for which it is a prerequisite. Prereq: MATH 1080, DSCI 2010, ACCT 2220, FNCE 3000 with a grade of 'C' or better. **Semester Hours:** 3to 3 **When Offered:** FASPRSUM

Registration is changing. Visit our website for details ucdenver.edu/registration.

FNCE 4330 - Investment and Portfolio Management

Summer 2010 Registration **FNCE 4330**

In this course students learn about the different types of investment vehicles, including methods to estimate their value and analyze their risk. They will also be introduced to portfolio management, including the identification of objectives and constraints and the analysis and use of investment information. Topics include the functioning of security markets, asset allocation, security valuation, and portfolio analysis. A grade of 'C' or better must be earned to receive credit for the course, and to take subsequent courses for which it is a prerequisite. Prereq: FNCE 3500 (and its prerequisites) and FNCE 4330, FNCE 4350 (which may be taken concurrently). **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FNCE 4350 - Financial Markets and Institutions

Summer 2010 Registration **FNCE 4350**

Focuses on the supply and demand for loanable funds, the process of money creation, the structure of interest rates, and the role of banks and the Federal Reserve in the financial system. Special attention is devoted to the impact of monetary and fiscal policies on interest rates, the flow of funds and economic activity; and the operation of financial markets and institutions. A grade of 'C' or better must be earned in this course to receive credit for the area of emphasis and to take subsequent courses for which it is a prerequisite. Prereq: FNCE 3000. **Semester Hours:** 3to 3**When Offered:** FALL SPR
Registration is changing. Visit our website for details ucdenver.edu/registration.

FNCE 4500 - Corporate Financial Decisions

Summer 2010 Registration **FNCE 4500**

This is a required capstone course for the financial management emphasis. It uses the case method to develop the analytical and decision making skills of students. Students are required to apply theories and concepts learned in previous finance and accounting classes to real world scenarios. Topical coverage includes financial analysis, planning, control, working capital management, long-term investment and financing decisions and corporate valuation. A grade of 'C' or better must be earned to receive credit towards graduation. Prereq: FNCE 3000, FNCE 3500 and FNCE 4330 all with a grade of 'C' or better and senior standing. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ACCT 3054 - Accounting Systems and Data Processing

Summer 2010 Registration **ACCT 3054**

The design and analysis of accounting information systems, with special emphasis on computers and computer programming, and the role of accounting in the role of accounting in the management process. Must earn a grade of 'C' or better to qualify for graduation. Prereq: Completion of ACCT 2220 and ISMG 2050 with a grade of 'C' or better (Strictly enforced). **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ACCT 3220 - Intermediate Financial Accounting I

Summer 2010 Registration **ACCT 3220**

An intensive analysis of generally accepted accounting principles, accounting theory and preparation of annual financial statements for public corporations. Must complete course with a 'C' to qualify in graduation requirements. Prereq: Completion of ACCT 2220 with a grade of 'C' or better. Strictly enforced. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ACCT 3320 - Intermediate Cost Accounting

Summer 2010 Registration **ACCT 3320**

Cost analysis for purposes of control and decision making. Analysis of cost behavior, role of accounting in planning and control, and managerial uses of cost accounting data. Includes use of computer assisted decision models. Must receive a 'C' grade to qualify in graduation requirements. Prereq: ACCT 2220, and DSCI 2010 completed with a grade of 'C' or better. Strictly enforced. **Semester Hours:** 3 to 3 **When Offered:** FASPRSUM
Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 24 Hours

In addition, financial management students must complete FNCE 4370, International Finance, to fulfill the international studies requirement.

* Students should note that all finance and accounting courses are not offered every semester. Students should take the ACCT 2200 and ACCT 2220 courses as soon as possible to avoid future problems in their schedules, since these are prerequisites for all courses in the specialization.

Fine Arts BA — Art History

All students pursuing a BA in fine arts with an emphasis in art history must complete the 12 semester hours of visual arts foundation courses, the 18 semester hours of required art history emphasis courses and 15 semester hours of upper-division art history electives.

General Requirements

- All major courses within the major must be completed with a C (2.0) or better.
- All upper-division visual arts courses must be taken at UC Denver unless approved otherwise by visual arts faculty.
- 21 semester hours of all visual arts credits (at any level) must be taken at UC Denver.
- 18 semester hours of total visual arts courses must be upper-division.

Students must also follow the College of Arts and Media's general degree requirements.

Visual Arts Foundation Courses

FINE 1100 - Drawing I

Summer 2010 Registration **F A 1100**

This course explores the act of drawing as a process of visual thought as an initial step to artistic expression. Students will develop an understanding of the basic principles of drawing as a way of learning to see. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 1150 - Introduction to Photography

Summer 2010 Registration **F A 1150**

Students learn traditional, film-based photographic practice. Topics such as camera functions, film processing, black and white darkroom printing, color theory and alternative darkroom techniques are explored through demonstrations, critiques, readings and discussions of historical and contemporary photography. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 1400 - Two Dimensional Design

Summer 2010 Registration **F A 1400**

Focuses on the concepts and visual elements of all forms of two-dimensional art. Students gain an understanding of basic design principles as they analyze and visually articulate formal concerns in viewing contemporary and historical artworks as applied to studio problems. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 2015 - Intermedia Foundations

Summer 2010 Registration **F A 2015**

Students will develop techniques, strategies and methodologies for investigating contemporary ideas informed by theories of visual culture while implementing critical concepts into creative production centered in digital media. Course work includes creative projects, research assignments, critiques and presentations. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

or

FINE 2155 - Introduction to Digital Photography

Summer 2010 Registration **F A 2155**

Students learn digital image manipulation, input and output strategies, and digital camera functions through assignments that emphasize conceptual development. Presentations, readings, projects and class discussions help students gain an understanding of the role of digital imaging in contemporary photography. Prereqs: FINE

1150. Priority given to Photography Majors and Minors. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 12 Hours

Art History Required Emphasis Courses

FINE 2600 - History of Art I (Survey)

Summer 2010 Registration F A 2600

(This course is an approved Colorado Statewide Guaranteed Transfer Course).
Overview of various cultures of humankind from cave painting to the Renaissance. **Semester Hours:** 3to 3 **GT Pathways Category Key:** GT-AH1
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 2610 - History of Art II (Survey)

Summer 2010 Registration F A 2610

Survey of various cultures of humankind from the Renaissance to the present. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3600 - Art History Survey III: Non-Western Art

Summer 2010 Registration F A 3600

Introduces the art of non-western cultures through a survey of diverse cultures. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 4790 - Methods in Art History

Summer 2010 Registration F A 4790

Seminar in the nature and purpose of the study of the history of art, in which the student is introduced to basic approaches and various research methodologies in the history of art. Prereq: FINE 2600 or FINE 2610. Cross-listed with FINE 5790. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 4951 - Bachelor of Art Thesis

Summer 2010 Registration F A 4951

Prepares students for creative and original thinking demonstrated through the production of a thesis focused on a selected researched topic in Art History. Prereq: Senior status in art history. **Semester Hours:** 3 to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Nonwestern Cultural Experience (**select one of the six options listed below***)

Total: 18 Hours

***Nonwestern Cultural Experience Options:**

1. Study abroad course that focuses on the art history or the language of host culture (consult art history faculty).
2. Any upper-division art history course in African, Latin American, Asian or African-American art. This cannot be used to fulfill any other degree requirement.
3. Third-semester study of a foreign language (consult the Department of Modern Languages if placement is needed).
4. Visual arts internship for credit in the College of Arts and Media. Project must focus on cultures outside of mainstream United States; e.g., Native American, Latin American, women studies, gay/lesbian studies, etc. Consult art history faculty.
5. FINE 4840 - Independent Study: FINE. Project/research must focus on cultures outside of mainstream United States; e.g., Native American, Latin American, women studies, gay/lesbian studies, etc. Consult art history faculty.
6. Cultural course: CNST 1000 - China and the Chinese or FREN 1000 - Introduction to Cultures of the French-Speaking World or GRMN 1000 - Germany and the Germans or SPAN 1000 - Introduction to Cultures of the Spanish Speaking World

Upper-Division Art History Electives

Students must complete five upper-division (3000/4000 level) art history courses. (Contact an advisor in the College of Arts and Media at CAMadvising@ucdenver.edu for a complete list.)

Total: 15 Hours

Fine Arts BA — Drawing, Painting, Photography, Sculpture

All students pursuing a BA in studio fine arts must complete 27 semester hours of visual arts courses and also select a emphasis area, consisting of 21 additional semester hours. Students interested in pursuing a double emphases (e.g., emphases in drawing and painting) are encouraged to consult a College of Arts and Media advisor to discuss required courses.

General Requirements

- All major courses in the major must be completed with a C (2.0) or better.
- All upper-division visual arts courses must be taken at UC Denver unless approved otherwise by visual arts faculty.
- 21 semester hours of visual arts credits (at any level) must be taken at UC Denver.
- 18 semester hours of total visual arts courses must be upper-division.

Students must also follow the College of Arts and Media's general degree requirements.

Required Visual Arts Courses

To be completed by all BA-seeking students:

FINE 1015 - Interdisciplinary Foundations

Summer 2010 Registration F A 1015

Students will work across 2-D, 3-D, and 4-D media to develop interdisciplinary skills, strategies and methodologies for investigating contemporary ideas informed by theories of visual culture. Critical concepts are integrated into creative production through projects, research assignments, critiques and presentations. Note: Students missing the first 2 classes of this course may be administratively dropped. Students will not be allowed to add course if they have missed the first 2 classes. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 1100 - Drawing I

Summer 2010 Registration F A 1100

This course explores the act of drawing as a process of visual thought as an initial step to artistic expression. Students will develop an understanding of the basic principles of

drawing as a way of learning to see. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 1400 - Two Dimensional Design

Summer 2010 Registration F A 1400

Focuses on the concepts and visual elements of all forms of two-dimensional art. Students gain an understanding of basic design principles as they analyze and visually articulate formal concerns in viewing contemporary and historical artworks as applied to studio problems. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 1500 - Three-Dimensional Design

Summer 2010 Registration F A 1500

Students explore the elements of art and the principles of design applied to three-dimensional design while developing an understanding of material properties, techniques, processes and tools. Creative practice is accompanied by written, theoretical and verbal critical thinking skills. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 2015 - Intermedia Foundations

Summer 2010 Registration F A 2015

Students will develop techniques, strategies and methodologies for investigating contemporary ideas informed by theories of visual culture while implementing critical concepts into creative production centered in digital media. Course work includes creative projects, research assignments, critiques and presentations. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 2600 - History of Art I (Survey)

Summer 2010 Registration F A 2600

(This course is an approved Colorado Statewide Guaranteed Transfer Course). Overview of various cultures of humankind from cave painting to the Renaissance. **Semester Hours:** 3to 3 **GT Pathways Category Key:** GT-AH1
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 2610 - History of Art II (Survey)

Summer 2010 Registration F A 2610

Survey of various cultures of humankind from the Renaissance to the present. **Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 4990 - Contemporary Art - 1945 To the Present

Summer 2010 Registration **F A 4990**

A lecture for students involving viewing, reading, and discussion of conventions of post 1945 art including painting, photography, sculpture, installation, multi-media and other.

Prereq: FINE 2600 and FINE 2610. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 4800 - Senior Art Seminar

Summer 2010 Registration **F A 4800**

Required of Fine Arts majors in the B.F.A. and B.A. studio degree tracks majoring in Painting/Drawing, Photography or Sculpture. Course work covers research into professional practices, business practices, creative practice and career development.

Note: Students missing the first 2 classes of this course may be administratively dropped. Students will not be allowed to add course if they have missed the first 2 classes. Prereq: 90 credits completed, 45 credits in fine arts; open to UCD Fine Arts Majors only. Cross-listed with FINE 5800. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 27 Hours

Drawing Emphasis Courses

FINE 2000 - Life Drawing

Summer 2010 Registration **F A 2000**

This course introduces the student to the human figure, addressing anatomy, movement and proportion. Discussion of historic and contemporary critical methods supplement studio practice. Exploring a variety of drawing media, students expand their drawing skills and relate the principles of composition and design to figure drawing. Note:

Students missing the first 2 classes of this course may be administratively dropped.

Students will not be allowed to add course if they have missed the first 2 classes.

Prereq: FINE 1100, 1400. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3000 - Intermediate Drawing

Summer 2010 Registration **F A 3000**

In this course students develop an artistic voice through the creation of a series of work that stretch a chosen concept. Students will explore complex approaches to the picture

plane and search our unique motifs, juxtapositions and frames of reference. Note: Students missing the first 2 classes of this course may be administratively dropped. Students will not be allowed to add course if they have missed the first 2 classes.

Prereq: FINE 1015, 1100, 1400, 1500, 1600, 2000, 2020, 2015, 2100, 2600,

2610. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3310 - Drawing and the Printed Image

Summer 2010 Registration F A 3310

Relationships between history of drawing and technology will be explored in this course. Students will produce mixed media drawings that utilize different types of technology as a tool in the creation of or as inspiration for fine art drawings. Note: Students missing the first 2 classes of this course may be administratively dropped. Students will not be allowed to add course if they have missed the first 2 classes. Prereq: FINE 1015, 1100, 1400, 1500, 1600, 2000, 2015, 2600, 2610. **Semester Hours:** 3to 3 **When Offered:**

FALL

Registration is changing. Visit our website for details ucdenver.edu/registration.

or

FINE 4020 - Anatomy for the Artist

Summer 2010 Registration F A 4020

An intensive study of the human figure, focusing on its structure, movement and proportions. Skeletal and muscular systems are explored in depth using the classic texts of artistic anatomy to enhance students' drawings from observation. Note: Students missing the first 2 classes of this course may be administratively dropped. Students will not be allowed to add course if they have missed the first 2 classes. Prereq: FINE 1015, 1100, 1400, 1500, 1600, 2000, 2015, 2020, 2100, 2600, 2610, 3000, 3310. Cross-listed with FINE 5020. **Semester Hours:** 3to 3 **When Offered:** *SPRING*

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 4000 - Advanced Drawing I

Summer 2010 Registration F A 4000

This course is the first advanced level study of drawing. Students will explore techniques and develop a rigorous body of drawings that express their concepts and theories through various processes needed in creating an independent body of work. Note: Students missing the first 2 classes of this course may be administratively dropped. Students will not be allowed to add course if they have missed the first 2 classes.

Prereq: FINE 1015, 1100, 1400, 1500, 1600, 2000, 2015, 2020, 2100, 2600, 2610, 3000, 3230, 3310. Cross-listed with FINE 5000. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

_____ - Upper-division Art History Elective (3 semester hours)

_____ - Visual Arts Electives (6 semester hours) *May include studio, lecture, internship or art history*

Total: 21 Hours

Painting Emphasis Courses

FINE 2200 - Painting I

Summer 2010 Registration F A 2200

This course is an introduction to the language of painting. Students will learn to develop composition in layers, working from value to color and from direct observation to abstraction while exploring the range of visual possibilities that painting offers. Note: Students missing the first 2 classes of this course may be administratively dropped. Students will not be allowed to add course if they have missed the first 2 classes.

Prereq: FINE 1015, 1100, 1400, 1600. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 2210 - Painting II: Figure Painting

Summer 2010 Registration F A 2210

This course is an exploration of representing the human form in pictorial space. Students will gain a knowledge of figural color, proportion, scale and space; and will understand the conceptual and visual weight carried by expressive gesture and figural form. Note: Students missing the first 2 classes of this course may be administratively dropped. Students will not be allowed to add course if they have missed the first 2 classes.

Prereq: FINE 1015, 1100, 1400, 1600, 2000, 2200, 2600. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3200 - Intermediate Painting I

Summer 2010 Registration F A 3200

In this course, students develop an awareness of historical and contemporary artistic practice. Students create works that stretch a chosen concept, with focus on the study of painterly "Space - deep", shallow, foreshortened, ambiguous, fragmented and in dialog with actual space. Note: Students missing the first 2 classes of this course may be administratively dropped. Students will not be allowed to add course if they have missed the first 2 classes. Prereq: FINE 1015, 1100, 1400, 1500, 1600, 2000, 2015, 2200, 2210, 2600, 2610. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3210 - Intermediate Painting II

Summer 2010 Registration **F A 3210**

In this course, students develop an awareness of historical and contemporary artistic practice. Students will create works that stretch a chosen concept, with focus on a study of narrative "Approaches - including" symbolism, metaphor, juxtaposition, allegory, drama and stilled time. Note: Students missing the first 2 classes of this course may be administratively dropped. Students will not be allowed to add course if they have missed the first 2 classes. Prereq: FINE 1015, 1100, 1400, 1500, 1600, 2000, 2015, 200, 2210, 2600, 2610, 3200. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 4200 - Advanced Painting I

Summer 2010 Registration **F A 4200**

This course is the advanced level study of painting where students are to create an independent body of work that expresses an individual vision and direction based on the cumulative experiences and knowledge gained from previous painting and drawing courses. Note: Students missing the first 2 classes of this course may be administratively dropped. Students will not be allowed to add course if they have missed the first 2 classes. Prereq: FINE 1015, 1100, 1400, 1500, 1600 Painting Methods and Materials, 2000 Life Drawing, 2015 Intermedia, 2200 Painting I, 2210 Painting II: Figure, 2600-2610, Art Survey I & II, 3200 Intermediate Painting I, 3210 Intermediate Painting II, 3240 Abstract Painting, 3300 Painting and the Printed Image, 4100 Painting and Drawing Theory & Practice. Cross-listed with FINE 5200. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

_____ - Upper-division Art History Elective (3 semester hours)

_____ - Visual Arts Elective (3 semester hours) *May include studio, lecture, internship or art history*

Total: 21 Hours

Photography Emphasis Courses

FINE 1150 - Introduction to Photography

Summer 2010 Registration **F A 1150**

Students learn traditional, film-based photographic practice. Topics such as camera functions, film processing, black and white darkroom printing, color theory and alternative darkroom techniques are explored through demonstrations, critiques, readings and discussions of historical and contemporary photography. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 2155 - Introduction to Digital Photography

Summer 2010 Registration F A 2155

Students learn digital image manipulation, input and output strategies, and digital camera functions through assignments that emphasize conceptual development. Presentations, readings, projects and class discussions help students gain an understanding of the role of digital imaging in contemporary photography. Prereqs: FINE 1150. Priority given to Photography Majors and Minors. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3160 - Color and Studio Lighting

Summer 2010 Registration F A 3160

Students explore traditional color photography, studio lighting, concept development, critical thinking, and expressive uses of the medium. Topics include chromogenic printing, color theory, 4x5 technique and studio lighting. Students gain insight into the creative impact of color on photographic representation. FINE 1150, FINE 2155. Photography majors must also have completed the Fine Arts Foundation Core including: FINE 1015, FINE 1100, FINE 1400, FINE 1500, FINE 2015, FINE 2600, FINE 2610. Photography majors and minors must apply to the program to enroll in this class. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3161 - The Silver Fine Print

Summer 2010 Registration F A 3161

Students learn advanced black and white darkroom techniques while translating ideas into photographic form. Techniques include the zone system, split filter printing, toning, montage printing, and film/paper choices. Students gain insight into photographic artists, techniques, and movements. Prereq: FINE 1150, FINE 2155. Photography majors must also have completed the Fine Arts Foundation Core including: FINE 1015, FINE 1100, FINE 1400, FINE 1500, FINE 2015, FINE 2600, FINE 2610. Photography majors and minors must apply to the program to enroll in this class. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

Note: must be completed before 3171

FINE 3162 - The Digital Fine Print

Summer 2010 Registration F A 3162

Students learn the fine art of digital printing as it relates to photographic practice and theory. Assignments focus on conceptual development, advanced image manipulation, workflow, and color management. Students gain insight into the role of digital imaging in contemporary photography. Prereq: FINE 1150, FINE 2155. Photography majors must also have completed the Fine Arts Foundation Core including: FINE 1015, FINE 1100,

FINE 1400, FINE 1500, FINE 2015, FINE 2600, FINE 2610. Photography majors and minors must apply to the program to enroll in this class. **Semester Hours:** 3to 3**When Offered:** FALL

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3171 - Concepts and Processes in Photography

Summer 2010 Registration F A 3171

Students develop skills in alternative photographic techniques. Processes covered include cameraless and pinhole photography, reticulation, non-silver printing, enlarged negatives, liquid emulsions and digital/traditional cross-manipulation. Students gain insights into the relationship between ideas and experimental ways of creating images.

Prereq: FINE 1150, FINE 2155, FINE 3161. Photography majors must also have completed the Fine Arts Foundation Core including: FINE 1015, FINE 1100, FINE 1400, FINE 1500, FINE 2015, FINE 2600, FINE 2610. Photography majors and minors must apply to the program to enroll in this class. **Semester Hours:** 3to 3**When Offered:**

SPRING

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3630 - History of Photography

Summer 2010 Registration F A 3630

Students examine the history of photography from its origins to the present. Emphasis is placed on photography as an artistic medium. Topics covered include important movements, photographers, and technical innovations, as well as photographer's broader role in visual culture. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 21 Hours

Sculpture Emphasis Courses

FINE 2500 - Bronze Casting and Metal Sculpture

Summer 2010 Registration F A 2500

Students learn lost wax casting with ceramic shell investment and bonded sand. Modeling, foundry work, centrifugal casting and welding for cast metal is introduced, as is steel fabrication and mixed media. Individual vocabularies are explored and design skills required. Prereq: FINE 1500. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3500 - Modeling and Casting the Figure

Summer 2010 Registration F A 3500

Study of the human figure from life and imagination directs visual vocabulary towards expression three dimensionally. Mold making using rubber, alginate and plaster is introduced for casting in metal, resin, synthetics, plastic, paper and biodegradable materials. Drawing is included. Prereq: FINE 1015, FINE 1100, FINE 1400, FINE 1500, FINE 2015, FINE 2600, FINE 2610, FINE 2500, FINE 2510. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3510 - Installation Art

Summer 2010 Registration F A 3510

Students learn to modify the way a particular space is experienced through material intervention in everyday public or private spaces. Material use ranges from everyday and natural materials to new media such as video, sound, performance, computers and the Internet. Prereq: FINE 1015, FINE 1100, FINE 1400, FINE 1500, FINE 2015, FINE 2500, FINE 2510, FINE 2600, FINE 2610. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 4500 - Kinetic Sculpture

Summer 2010 Registration F A 4500

Students explore movement and balance in sculptural work using pivot points and motors. Sound, projection, sensors and mechanics provide cause and effect scenarios in conjunction with knowledge, materials, and techniques acquired to date in the program. Prereq: FINE 1015, FINE 1100, FINE 1400, FINE 1500, FINE 2015, FINE 2500, FINE 2510, FINE 2600, FINE 2610. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

_____ - Upper-division Art History Elective (3 semester hours)

_____ - Visual Arts Electives (6 semester hours) *May include studio, lecture, internship or art history*

Total: 21 Hours

Fine Arts BFA — 3D Graphics and Animation, Digital Design, Drawing,

Painting, Photography, Sculpture, Transmedia

All students pursuing a BFA in fine arts must complete 28 semester hours of visual arts courses and also select an emphasis area, consisting of 54 additional semester hours. Students interested in pursuing a double emphases (e.g., emphases in drawing and painting) are encouraged to consult a College of Arts & Media advisor to discuss required courses.

General Requirements

- All major courses within the major must be completed with a C (2.0) or better.
- All upper-division visual arts courses must be taken at UC Denver unless approved otherwise by visual arts faculty.
- 27 semester hours of visual arts credits (at any level) must be taken at UC Denver.
- 25 semester hours of total visual arts courses must be upper-division.

Students must also follow the College of Arts and Media's general degree requirements.

Required Visual Arts Courses

To be completed by all BFA-seeking students:

FINE 1015 - Interdisciplinary Foundations

Summer 2010 Registration F A 1015

Students will work across 2-D, 3-D, and 4-D media to develop interdisciplinary skills, strategies and methodologies for investigating contemporary ideas informed by theories of visual culture. Critical concepts are integrated into creative production through projects, research assignments, critiques and presentations. Note: Students missing the first 2 classes of this course may be administratively dropped. Students will not be allowed to add course if they have missed the first 2 classes. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 1100 - Drawing I

Summer 2010 Registration F A 1100

This course explores the act of drawing as a process of visual thought as an initial step to artistic expression. Students will develop an understanding of the basic principles of

drawing as a way of learning to see. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 1400 - Two Dimensional Design

Summer 2010 Registration F A 1400

Focuses on the concepts and visual elements of all forms of two-dimensional art. Students gain an understanding of basic design principles as they analyze and visually articulate formal concerns in viewing contemporary and historical artworks as applied to studio problems. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 1500 - Three-Dimensional Design

Summer 2010 Registration F A 1500

Students explore the elements of art and the principles of design applied to three-dimensional design while developing an understanding of material properties, techniques, processes and tools. Creative practice is accompanied by written, theoretical and verbal critical thinking skills. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 2015 - Intermedia Foundations

Summer 2010 Registration F A 2015

Students will develop techniques, strategies and methodologies for investigating contemporary ideas informed by theories of visual culture while implementing critical concepts into creative production centered in digital media. Course work includes creative projects, research assignments, critiques and presentations. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 2600 - History of Art I (Survey)

Summer 2010 Registration F A 2600

(This course is an approved Colorado Statewide Guaranteed Transfer Course).

Overview of various cultures of humankind from cave painting to the Renaissance. **Semester Hours:** 3to 3 **GT Pathways Category Key:** GT-AH1

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 2610 - History of Art II (Survey)

Summer 2010 Registration F A 2610

Survey of various cultures of humankind from the Renaissance to the present. **Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3600 - Art History Survey III: Non-Western Art

Summer 2010 Registration F A 3600

Introduces the art of non-western cultures through a survey of diverse cultures.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 4990 - Contemporary Art - 1945 To the Present

Summer 2010 Registration F A 4990

A lecture for students involving viewing, reading, and discussion of conventions of post 1945 art including painting, photography, sculpture, installation, multi-media and other.

Prereq: FINE 2600 and FINE 2610.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 4950 - BFA Thesis

Summer 2010 Registration F A 4950

The BFA thesis course involves the preparation, exhibition and critical faculty response to creative work and self-promotional materials as developed by graduating seniors on the B.F.A. degree track. Note: Students missing the first 2 classes of this course may be administratively dropped. Students will not be allowed to add course if they have missed the first 2 classes. Prereq: 90 credits completed, 45 credit in fine arts; open to UCD Fine Arts Majors only.**Semester Hours:** 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 28 Hours

3D Graphics and Animation Emphasis Courses

The digital animation center (DAC) program at the University of Colorado Denver is a competitive and rigorous four-year curriculum focused on preparing students to work in a wide variety of fields that use animated digital computer graphics (CG), including entertainment, film and television, gaming, medicine and science. Tuition rates in the 13 DAC classes are set higher than most undergraduate UC Denver courses due to the nature of the equipment, computing and software requirements of the program. At the time of this publication, tuition for FINE 1810 and FINE 1820 is \$1533.00 per course. Tuition for the other eleven courses is \$4050.00 per course. Students should refer to the course information listed on the University of Colorado Denver Web site for any changes in the current tuition rate for all DAC courses.

In order to maintain the highest standards of excellence for the UC Denver DAC, acceptance into the DAC core cadre comes at the end of the first year and is competitive by portfolio review. To be considered, students are required to take the first two courses in the DAC curriculum, FINE 1810 and FINE 1820. These two courses are open to all College of Arts & Media and UC Denver students with permission of the DAC. Students wishing to enroll in the DAC's entry level courses must contact DAC faculty member Howard Cook at howard.cook@ucdenver.edu or the College of Arts & Media Advising office at CAMadvising@ucdenver.edu to be able to register.

DAC Entry Courses (open enrollment):

FINE 1810 - Digital Animation Foundations: Producing Animation

Summer 2010 Registration F A 1810

A lecture/lab course that explores the theory, practices and fundamentals of producing 3D animation. Students will explore the foundations of the animation process including the production pipeline, studio organizations, traditional animation techniques, foundational cinematography, storyboarding and character development. Note: Offered through Extended Studies (Continuing and Professional Education) due to separate tuition structure. Acceptance to the Digital Animation Center is competitive by interview/portfolio review with the Area Head for the program. Prereq: A basic knowledge of computer operating systems. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 1820 - Digital Animation Foundations: Introduction to Digital 3D

Summer 2010 Registration F A 1820

A lecture/lab course that explores the foundations of creating digital 3D content. Primary focus is an introduction to current 3D software. Class lectures, demonstrations and hands-on application will expose the student to the expectations for commercial high-end 3D animation production. Note: Offered through Extended Studies (Continuing and Professional Education) due to separate tuition structure. Acceptance to the Digital Animation Center is competitive by interview/portfolio review with the Area Head for the program. Prereq: A basic knowledge of computer operating systems. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

DAC Core Cadre Course Work (acceptance into the DAC Core Cadre is competitive through portfolio review):

FINE 2810 - Digital Animation Techniques: Surface Modeling

Summer 2010 Registration F A 2810

A lecture/lab course focused on the mastery of creating surface models for digital 3D content. Students will develop skills/knowledge about the processes and techniques for building complex 3D objects with an emphasis on artistic excellence through application of current 3D technologies. Note: Offered through Extended Studies (Continuing and Professional Education) due to separate tuition structure. Acceptance to the Digital Animation Center is competitive by interview/portfolio review with the Area Head for the program. Prereq: FINE 1810,1820 and acceptance into the Digital Animation Center Animation Program.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 2820 - Digital Animation Techniques: Surface Properties

Summer 2010 Registration F A 2820

A lecture/lab course focused on mastery of creating surface textures/materials for digital 3D content. Students will develop skills/knowledge about the processes and techniques for creating realistic 3Dtextures/materials with an emphasis on artistic excellence through application of current 3D technologies. Note: Offered through Extended Studies (Continuing and Professional Education) due to separate tuition structure. Acceptance to the Digital Animation Center is competitive by interview/portfolio review with the Area Head for the program. Prereq: FINE 1810, 1820 and acceptance into the Digital Animation Center Animation Program.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 2830 - Digital Animation Techniques: Lighting

Summer 2010 Registration F A 2830

A lecture/lab course focused on mastery of lighting the digital 3D environment. Students will develop skills/knowledge about the processes and techniques for creating realistic 3D lighting/lighting effects with an emphasis on artistic excellence through application of current 3D technologies. Note: Offered through Extended Studies (Continuing and Professional Education) due to separate tuition structure. Acceptance to the Digital Animation Center is competitive by interview/portfolio review with the Area Head for the program. Prereq: FINE 2810, 2820, and acceptance into the Digital Animation Center Animation Program.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 2850 - Digital Animation Techniques: 3D Character Creation

Summer 2010 Registration F A 2850

A lecture/lab course focused on mastery of skills for creating digital 3D characters.

Students will develop skills/knowledge to shape, mold, transform/articulate, deform digital 3D shapes creating digital characters with an emphasis on artistic excellence through application of current 3D technologies. Note: Offered through Extended Studies (Continuing and Professional Education) due to separate tuition structure. Acceptance to the Digital Animation Center is competitive by interview/portfolio review with the Area Head for the program. Prereq: FINE 2810, 2820 and acceptance into the Digital Animation Center Animation Program. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3810 - Digital Animation Studio: Set/Environment Design

Summer 2010 Registration F A 3810

A mid-program capstone studio course focuses on developing a project from preproduction through final product using a standard production pipeline model within a collaborative work environment. Students will design and create high-production value CG set/environment utilizing current 3D technologies. Note: This course is required for all DAC students entering year four of the animation emphasis. It is also open to all visual arts students, subject to course instructor approval, with a sophomore or greater standing. Coreq: FINE 2830, 2850 and Acceptance into the Digital Animation Center Animation Program. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3820 - Digital Animation Techniques: Rigging and Animation

Summer 2010 Registration F A 3820

A lecture/lab course focused on mastery of skills for rigging and animating digital 3D objects/characters. Students explore the processes/techniques of animation rigging, its relationship to the skeletal/muscular system, articulated joints for manipulating character bones, muscle deformations, clothes and facial features Note: Offered through Extended Studies (Continuing and Professional Education) due to separate tuition structure. Acceptance to the Digital Animation Center is competitive by interview/portfolio review with the Area Head for the program. Prereq: FINE 2830, 2840 and acceptance into the Digital Animation Center Animation Program. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3830 - Digital Animation Technique: Character Animation

Summer 2010 Registration F A 3830

A lecture/lab course focused on mastery of skills for animating digital 3D objects/characters. Students explore the process/techniques of key frame/pose-to- pose animating considering character performance, thought, constraints and velocity with an emphasis on artistic excellence through applications of current 3D technologies. Note: Offered through Extended Studies (Continuing and Professional Education) due to separate tuition structure. Acceptance to the Digital Animation Center is competitive by

interview/portfolio review with the Area Head for the program. Prereq: FINE 3810, 3820 and acceptance into the Digital Animation Center Animation Program. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3845 - Digital Animation Discovery and Preproduction Seminar

Summer 2010 Registration F A 3845

A seminar course focused on the development and preproduction phases for the DAC senior thesis short. The principle focus of the course will be story development, preproduction activities and organizing the production team and production pipeline for the thesis short. Note: this course is required for all DAC students entering year four of the animation emphasis. It is also open to all visual arts students, subject to course instructor approval, with a sophomore or greater standing. Coreq: FINE 3830 and 3850 for all DAC thesis students. All other visual arts students, sophomore or greater, with permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3850 - Digital Animation Techniques: Dynamic Simulation

Summer 2010 Registration F A 3850

A lecture/lab course exploring the theory/techniques of dynamic and particle simulations for 3D content. Students explore how to develop effects (smoke, fire, steam, explosions) and dynamic materials (cloth), with an emphasis on artistic excellence through application of current 3D technologies. Note: Offered through Extended Studies (Continuing and Professional Education) due to separate tuition structure. Acceptance to the Digital Animation Center is competitive by interview/portfolio review with the Area Head for the program. Prereq: FINE 3810, 3820 and acceptance into the Digital Animation Center Animation Program. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 4810 - Digital Animation Studio: Animation Production I

Summer 2010 Registration F A 4810

A mid-program capstone studio course focuses on developing a project from reproduction through final product using a standard production pipeline model within a collaborative work environment. Students will design and create high-production value CG set/environment utilizing current 3D technologies. Note: This course is required for all DAC students entering year four of the animation emphasis. It is also open to all visual arts students, subject to course instructor approval, with a sophomore or greater standing. Coreq: FINE 3830, FINE 3845, FINE 3850, and acceptance into the Digital Animation Center Animation Program. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 4820 - Digital Animation Studio: Animation Production II

Summer 2010 Registration **F A 4820**

The continuation of the two-course capstone production experience preparing DAC students for their animation career. Students will work in a one-on-one mentorship environment focused on completion of the BFINE thesis short and their student "Demo Reel" in preparation for graduation. Note: Offered through Extended Studies (Continuing and Professional Education) due to separate tuition structure. Acceptance to the Digital Animation Center is competitive by interview/portfolio review with the Area Head for the program. Prereq: FINE 4810 and acceptance into the Digital Animation Center Animation Program. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

The following courses are required for 3D animation majors, but are offered at the standard UC Denver tuition rates:

ENGL 2250 - Introduction to Film

Summer 2010 Registration **ENGL 2250**

Introduces students to the critical study of cinema as an art form and a cultural phenomenon. Topics include cinematography, editing, mise-en-scene and sound; the connections between cinema and related art forms; film genres; the social dimensions of film production and reception; and films by such key filmmakers as Alfred Hitchcock, Maya Deren and Spike Lee. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 4632 - Media History and Aesthetics

Summer 2010 Registration **F A 4632**

This survey class will present the current and historic impact of media technology on the arts and professional design practice. Through lectures, research and discussion students will become familiar with issues specific to digital media and design. Prereq: Digital Design majors: FINE 3410, portfolio review or permission of instructor. Cross-listed with FINE 5632. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

_____ - Visual Arts Electives (9 semester hours) *May include studio, lecture, internship or art history*

Total: 54 Hours

Digital Design Emphasis Courses

Admission into the BFA digital design program or the digital design minor is by portfolio review. This review process occurs April 1 or November 1 (or on the following business day if the deadline falls on a weekend or holiday) during a student's sophomore year after a student has met the following eligibility criteria:

University of Colorado Denver Students

- You have completed, or are in the process of completing, the following Foundation Studio classes: FINE 1100, FINE 1400, FINE 2015, FINE 2405 and FINE 2415 (FINE 2405 and FINE 2415 should be taken after a student's freshman year and are offered only in fall semester).
- A cumulative fine arts GPA of 2.75.

Transfer Students

- You have completed, and are transferring, a minimum of 24 semester hours from a previous institution.
- You have completed, or are in the process of completing, the equivalents of the following foundation studio classes: FINE 1100, FINE 1400, FINE 2405 and FINE 2415.
- A cumulative fine arts GPA of 2.75.

Students who are applying for entrance into the digital design program or minor are required to submit a portfolio that consists of (1) a written statement, (2) a designed portfolio on CD-ROM or DVD and (3) unofficial transcript(s) from all previous post-secondary education institutions with the understanding that digital design is a fall start program. Upon acceptance into the digital design program, students may register for upper-division digital design classes.

Please contact CAMadvising@ucdenver.edu for program and portfolio information, or contact the Digital Design Area Head Brian DeLevie at brian.delevie@ucdenver.edu.

Note that Digital Design offers FINE 3438, FINE 3441 and FINE 4434 to all majors.

Emphasis Course Requirements:

FINE 2405 - Introduction to Digital Design

Summer 2010 Registration F A 2405

A project-based exploration of the design potentials of vector, raster and motion based digital media. Through project critiques, discussion and demonstration students will create projects that examine technology as an art medium and a design strategy. Note:

Priority seating given to Digital Design and Transmedia majors. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 2415 - Typography Studio

Summer 2010 Registration F A 2415

A studio course that teaches principles of typography and organization that is the foundation of design and artistic practice. Through drawing, editing, arranging and moving typographic forms, students will create projects that examine how typography is used to create meaning. Note: Priority seating given to Digital Design majors. Prereq: FINE 1400 or permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3414 - Motion Design I

Summer 2010 Registration F A 3414

A workshop devoted to understanding time based imagery that focuses on utilizing video and motion graphics as a creative communication tool. Students will create projects that explore topics using video, animation, time and motion using a non-linear digital editing software. Note: Priority seating given to Digital Design and Transmedia majors. Prereq: Digital Design majors: passed portfolio review, FINE 2405 and 2415. Digital Design minors: FINE 2405 and 2415. Transmedia: FINE 2405, 2510, 3505 - can be taken concurrently with 3424 and 3438, or permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3415 - Design Studio I

Summer 2010 Registration F A 3415

In a design laboratory students learn to turn ideas into visual solutions through the application of design principles. Through lectures, writings, readings, discussion and critiques of projects assigned students will build visual literacy in relation to digital design. Note: Priority seating given to digital design majors. Prereq: Digital Design majors: passed portfolio review, FINE 2405, 2415 can be taken concurrently with 3414 and 3424. Digital Design minors: FINE 2405 and 2415 or permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3424 - Interactive Media

Summer 2010 Registration F A 3424

A workshop exploring how interactive media can be used to convey a message and deliver information. Through critiques of projects, discussion and research, students will learn principles of user interface design, aesthetics and structure including their potential cultural impact. Note: priority seating given to Digital Design and Transmedia majors.

Prereq: Digital Design majors: passed portfolio review, FINE 2405 and 2415. Digital Design minors: FINE 2405 and 2415. Transmedia: FINE 2405, 2510, 3505 - can be taken concurrently with 3414 and 3438 or permission of instructor. **Semester Hours:** 3 to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3428 - Design Studio II

Summer 2010 Registration F A 3428

In a studio environment students will develop advanced projects using animation, interactivity and motion graphics to create innovative solutions to design problems. Students will learn to apply design theory to practice through discussion, critiques and assigned projects throughout the semester. Prereq: FINE 3410, 3414, 3424 or permission of instructor. **Semester Hours:** 3 to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3434 - 3D Motion Design

Summer 2010 Registration F A 3434

A workshop devoted to 3D as a medium for creating works of art. Through demonstration, discussion, readings and project based explorations, students will learn to navigate and create in the 3D digital environment. Note: Priority seating given to Digital Design and Transmedia majors. Prereq: Digital Design majors: FINE 3410, FINE 3414 and FINE 3424; Digital Design minors and Transmedia majors: FINE 2405, FINE 3414 or permission of instructor. **Semester Hours:** 3 to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3444 - Interactive Media II

Summer 2010 Registration F A 3444

An intense workshop-laboratory devoted to using interactivity as a medium for communicating ideas and information. Through creative investigations, readings and discussions, students will create projects that explore active viewer participation using vector and raster animation, non-linear editing and viewer interaction. Prereq: Digital Design majors: FINE 3410, FINE 3414, FINE 3424, can be taken concurrently with FINE 3434; Transmedia majors: FINE 3414, FINE 3424 or permission of instructor. **Semester Hours:** 3 to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3454 - Motion Design II

Summer 2010 Registration F A 3454

An intense workshop-laboratory devoted to using time and motion as a medium for communicating ideas and information. Through creative investigations, readings and

discussions students will explore linkages between non-linear editing, animation and 3-dimensional animation as used in motion graphics. Prereq: FINE 3434, 3444, and portfolio review. Can be taken concurrently with FINE 3428/3444/3454. Transmedia: FINE 3414, 3424 or permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 4400 - Design Studio III

Summer 2010 Registration F A 4400

Set up as a collaborative studio course, students learn to identify problems in the cultural and urban environment and design solutions that address those problems. Through discovery and research students will learn how design can be a catalyst for change. Prereq: Digital Design majors: FINE 3428, FINE 3434, FINE 3444, FINE 3454, can be taken concurrently with FINE 4480, portfolio review or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 4480 - The Practice of Design

Summer 2010 Registration F A 4480

Through lectures, studio visits and research, students will engage the profession and examine the role of the artist as a designer. Projects will focus on resume writing, interview techniques, portfolio and general business practices to prepare students for entering profession or post-graduate studies. Note: Priority seating given to Digital Design majors. Prereq: Digital Design majors: FINE 3428, FINE 3434, FINE 3454, and portfolio review. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 4495 - Design Studio IV

Summer 2010 Registration F A 4495

Through critique, research, writing and discussion, students will critically explore a topic and develop professional quality visual solutions. Students will create work that expresses their personal artistic vision in relation to significant contemporary and historical artists and practice. Prereq: Digital Design majors: FINE 4400, FINE 4480, and portfolio review. Prereq/Coreq: FINE 4950 or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 4632 - Media History and Aesthetics

Summer 2010 Registration F A 4632

This survey class will present the current and historic impact of media technology on the

arts and professional design practice. Through lectures, research and discussion students will become familiar with issues specific to digital media and design. Prereq: Digital Design majors: FINE 3410, portfolio review or permission of instructor. Cross-listed with FINE 5632. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

_____ - Studio Arts/Visual Arts Electives (15 semester hours) *Consult advisor about course selection*

Total: 54 Hours

Drawing Emphasis Courses

FINE 1600 - Painting Methods and Materials

Summer 2010 Registration F A 1600

This course introduces students to color theory through an exploration of various painting materials/ techniques including: complex color mixing, preparing surfaces, producing studies utilizing different painting mediums, and writings, lectures, and discussions surrounding the scientific and symbolic nature of color. Note: Students missing the first 2 classes of this course may be administratively dropped. Students will not be allowed to add course if they have missed the first 2 classes. Prereq: FINE 1100 Drawing I, 1400 Two-Dimensional Design. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 2000 - Life Drawing

Summer 2010 Registration F A 2000

This course introduces the student to the human figure, addressing anatomy, movement and proportion. Discussion of historic and contemporary critical methods supplement studio practice. Exploring a variety of drawing media, students expand their drawing skills and relate the principles of composition and design to figure drawing. Note: Students missing the first 2 classes of this course may be administratively dropped. Students will not be allowed to add course if they have missed the first 2 classes. Prereq: FINE 1100, 1400. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 2020 - Drawing II: Spatial Thinking and Visualization

Summer 2010 Registration F A 2020

Building on skills learned in FINE 1100, students explore complex problems in the representation of space. Perceptual and constructed perspective is utilized to create real and invented form. The Golden Mean is studied in master artworks and translated into effective compositions. Note: Students missing the first 2 classes of this course may be

administratively dropped. Students will not be allowed to add course if they have missed the first 2 classes. Prereq: FINE 1100, 1400, 2000. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 2100 - The Media of Drawing

Summer 2010 Registration F A 2100

This course introduces students to the notion of drawing from life through an exploration of drawing methods/materials in the creation of artist's books- including learning various binding techniques and studying movement and juxtaposition as we draw in and from these books. Note: Students missing the first 2 classes of this course may be administratively dropped. Students will not be allowed to add course if they have missed the first 2 classes. Prereq: FINE 1100 Drawing I, 1400 Two-Dimensional Design. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3000 - Intermediate Drawing

Summer 2010 Registration F A 3000

In this course students develop an artistic voice through the creation of a series of work that stretch a chosen concept. Students will explore complex approaches to the picture plane and search our unique motifs, juxtapositions and frames of reference. Note: Students missing the first 2 classes of this course may be administratively dropped. Students will not be allowed to add course if they have missed the first 2 classes. Prereq: FINE 1015, 1100, 1400, 1500, 1600, 2000, 2020, 2015, 2100, 2600, 2610. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3310 - Drawing and the Printed Image

Summer 2010 Registration F A 3310

Relationships between history of drawing and technology will be explored in this course. Students will produce mixed media drawings that utilize different types of technology as a tool in the creation of or as inspiration for fine art drawings. Note: Students missing the first 2 classes of this course may be administratively dropped. Students will not be allowed to add course if they have missed the first 2 classes. Prereq: FINE 1015, 1100, 1400, 1500, 1600, 2000, 2015, 2600, 2610. **Semester Hours:** 3to 3 **When Offered:**
FALL
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3230 - Abstract Drawing

Summer 2010 Registration F A 3230

This course explores abstract drawing as a focus for creative expression through the concept, methods and techniques of abstraction. Students explore strategies in abstract composition, mark-making and expressive use of materials as they develop a complex visual vocabulary of form. Note: Students missing the first 2 classes of this course may be administratively dropped. Students will not be allowed to add course if they have missed the first 2 classes. Prereq: FINE 1015, 1100, 1400, 1500, 1600, 2015, 2600, 2610, 2000, 2020, 2100. **Semester Hours:** 3to 3 **When Offered:** *SPRING*
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 4000 - Advanced Drawing I

Summer 2010 Registration F A 4000

This course is the first advanced level study of drawing. Students will explore techniques and develop a rigorous body of drawings that express their concepts and theories through various processes needed in creating an independent body of work. Note: Students missing the first 2 classes of this course may be administratively dropped. Students will not be allowed to add course if they have missed the first 2 classes. Prereq: FINE 1015, 1100, 1400, 1500, 1600, 2000, 2015, 2020, 2100, 2600, 2610, 3000, 3230, 3310. Cross-listed with FINE 5000. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 4010 - Advanced Drawing II

Summer 2010 Registration F A 4010

This course is the second advanced level study of drawing. Students will create a more rigorous and challenging body of work that emphasizes a stylistic development of critical ideas and methodologies that were developed in the first level of advanced drawing. Note: Students missing the first 2 classes of this course may be administratively dropped. Students will not be allowed to add course if they have missed the first 2 classes. Prereq: FINE 1015, 1100, 1400, 1500, 1600, 2000, 2015, 2020, 2100, 2600, 2610, 3000, 3230, 3310, 4020, 4000, 4100. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 4020 - Anatomy for the Artist

Summer 2010 Registration F A 4020

An intensive study of the human figure, focusing on its structure, movement and proportions. Skeletal and muscular systems are explored in depth using the classic texts of artistic anatomy to enhance students' drawings from observation. Note: Students missing the first 2 classes of this course may be administratively dropped. Students will not be allowed to add course if they have missed the first 2 classes. Prereq: FINE 1015,

1100, 1400, 1500, 1600, 2000, 2015, 2020, 2100, 2600, 2610, 3000, 3310. Cross-listed with FINE 5020. **Semester Hours:** 3to 3**When Offered:** *SPRING*
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 4100 - Painting & Drawing Theory & Practice

Summer 2010 Registration **F A 4100**

This course focuses on a study of critical art theory from 1900 to now and its effects on art practice. Students read, research, discuss writing, and produce artwork while forming connections between published critical theory and their own creative ideas. Note: Students missing the first 2 classes of this course may be administratively dropped. Students will not be allowed to add course if they have missed the first 2 classes. Prereq: FINE 1015, 1100, 1400, 1500, 1600, 2000, 2015, 2600, 2610, must have Junior standing, 90 credits completed. **Semester Hours:** 3to 3**When Offered:** *FALL*
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 4800 - Senior Art Seminar

Summer 2010 Registration **F A 4800**

Required of Fine Arts majors in the B.F.A. and B.A. studio degree tracks majoring in Painting/Drawing, Photography or Sculpture. Course work covers research into professional practices, business practices, creative practice and career development. Note: Students missing the first 2 classes of this course may be administratively dropped. Students will not be allowed to add course if they have missed the first 2 classes. Prereq: 90 credits completed, 45 credits in fine arts; open to UCD Fine Arts Majors only. Cross-listed with FINE 5800. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

- _____ - Upper-division Art History Elective (3 semester hours)
- _____ - Studio Arts Electives (9 semester hours)
- _____ - Visual Arts Electives (6 semester hours) *May include studio, lecture, internship or art history*

Total: 54 Hours

Painting Emphasis Courses

FINE 1600 - Painting Methods and Materials

Summer 2010 Registration **F A 1600**

This course introduces students to color theory through an exploration of various painting materials/ techniques including: complex color mixing, preparing surfaces, producing studies utilizing different painting mediums, and writings, lectures, and discussions surrounding the scientific and symbolic nature of color. Note: Students

missing the first 2 classes of this course may be administratively dropped. Students will not be allowed to add course if they have missed the first 2 classes. Prereq: FINE 1100 Drawing I, 1400 Two-Dimensional Design. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 2000 - Life Drawing

Summer 2010 Registration F A 2000

This course introduces the student to the human figure, addressing anatomy, movement and proportion. Discussion of historic and contemporary critical methods supplement studio practice. Exploring a variety of drawing media, students expand their drawing skills and relate the principles of composition and design to figure drawing. Note: Students missing the first 2 classes of this course may be administratively dropped. Students will not be allowed to add course if they have missed the first 2 classes. Prereq: FINE 1100, 1400. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 2200 - Painting I

Summer 2010 Registration F A 2200

This course is an introduction to the language of painting. Students will learn to develop composition in layers, working from value to color and from direct observation to abstraction while exploring the range of visual possibilities that painting offers. Note: Students missing the first 2 classes of this course may be administratively dropped. Students will not be allowed to add course if they have missed the first 2 classes. Prereq: FINE 1015, 1100, 1400, 1600. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 2210 - Painting II: Figure Painting

Summer 2010 Registration F A 2210

This course is an exploration of representing the human form in pictorial space. Students will gain a knowledge of figural color, proportion, scale and space; and will understand the conceptual and visual weight carried by expressive gesture and figural form. Note: Students missing the first 2 classes of this course may be administratively dropped. Students will not be allowed to add course if they have missed the first 2 classes. Prereq: FINE 1015, 1100, 1400, 1600, 2000, 2200, 2600. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3200 - Intermediate Painting I

Summer 2010 Registration F A 3200

In this course, students develop an awareness of historical and contemporary artistic practice. Students create works that stretch a chosen concept, with focus on the study of

painterly "Space - deep", shallow, foreshortened, ambiguous, fragmented and in dialog with actual space. Note: Students missing the first 2 classes of this course may be administratively dropped. Students will not be allowed to add course if they have missed the first 2 classes. Prereq: FINE 1015, 1100, 1400, 1500, 1600, 2000, 2015, 2200, 2210, 2600, 2610. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3210 - Intermediate Painting II

Summer 2010 Registration F A 3210

In this course, students develop an awareness of historical and contemporary artistic practice. Students will create works that stretch a chosen concept, with focus on a study of narrative "Approaches - including" symbolism, metaphor, juxtaposition, allegory, drama and stilled time. Note: Students missing the first 2 classes of this course may be administratively dropped. Students will not be allowed to add course if they have missed the first 2 classes. Prereq: FINE 1015, 1100, 1400, 1500, 1600, 2000, 2015, 200, 2210, 2600, 2610, 3200. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3240 - Abstract Painting

Summer 2010 Registration F A 3240

This course introduces the practice of abstract painting as a focus for creative expression and inquiry into the concepts, methods and techniques of abstraction. Students will explore various strategies in abstract composition, expressive use of materials and color interaction. Note: Students missing the first 2 classes of this course may be administratively dropped. Students will not be allowed to add course if they have missed the first 2 classes. Prereq: FINE 1015, 1100, 1400, 1500, 1600, 2000, 2015, 2200, 2210, 2600, 2610. **Semester Hours:** 3to 3 **When Offered:** FALL

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3300 - Painting and the Printed Image

Summer 2010 Registration F A 3300

The role of technology in the history of painting will be explored in this course. Students will produce works of art that combine photo-mechanical imagery with the hand painted mark by utilizing different types of technology as a tool in combination with painting. Note: Students missing the first 2 classes of this course may be administratively dropped. Students will not be allowed to add course if they have missed the first 2 classes. Prereq: FINE 1015, 1100, 1400, 1500, 1600, 2000, 2015, 2200, 2600,

2610.Semester Hours: 3to 3**When Offered:** *SPRING*

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 4100 - Painting & Drawing Theory & Practice

Summer 2010 Registration F A 4100

This course focuses on a study of critical art theory from 1900 to now and its effects on art practice. Students read, research, discuss writing, and produce artwork while forming connections between published critical theory and their own creative ideas. Note:

Students missing the first 2 classes of this course may be administratively dropped.

Students will not be allowed to add course if they have missed the first 2 classes.

Prereq: FINE 1015, 1100, 1400, 1500, 1600, 2000, 2015, 2600, 2610, must have Junior standing, 90 credits completed.**Semester Hours:** 3to 3**When Offered:** *FALL*

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 4200 - Advanced Painting I

Summer 2010 Registration F A 4200

This course is the advanced level study of painting where students are to create an independent body of work that expresses an individual vision and direction based on the cumulative experiences and knowledge gained from previous painting and drawing courses. Note: Students missing the first 2 classes of this course may be

administratively dropped. Students will not be allowed to add course if they have missed the first 2 classes. Prereq: FINE 1015, 1100, 1400, 1500, 1600 Painting Methods and

Materials, 2000 Life Drawing, 2015 Intermedia, 2200 Painting I, 2210 Painting II: Figure, 2600-2610, Art Survey I & II, 3200 Intermediate Painting I, 3210 Intermediate Painting II, 3240 Abstract Painting, 3300 Painting and the Printed Image, 4100 Painting and

Drawing Theory & Practice. Cross-listed with FINE 5200.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 4210 - Advanced Painting II

Summer 2010 Registration F A 4210

This course is the second advanced level study of painting where students are to create an independent body of work that expresses an individual vision and direction based on the cumulative experiences and knowledge gained from previous painting and drawing courses. Note: Students missing the first 2 classes of this course may be

administratively dropped. Students will not be allowed to add course if they have missed the first 2 classes. Prereq: FINE 1015, 1100, 1400, 1500, 1600 Painting Methods and

Materials, 2000 Life Drawing, 2015 Intermedia, 2200 Painting I, 2210 Painting II: Figure, 2600-2610, Art Survey I & II, 3200 Intermediate Painting I, 3210 Intermediate Painting II, 3240 Abstract Painting, 3300 Painting and the Printed Image, 4100 Painting and

Drawing Theory & Practice. Cross-listed with FINE 5210.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 4800 - Senior Art Seminar

Summer 2010 Registration F A 4800

Required of Fine Arts majors in the B.F.A. and B.A. studio degree tracks majoring in Painting/Drawing, Photography or Sculpture. Course work covers research into professional practices, business practices, creative practice and career development.

Note: Students missing the first 2 classes of this course may be administratively dropped. Students will not be allowed to add course if they have missed the first 2 classes. Prereq: 90 credits completed, 45 credits in fine arts; open to UCD Fine Arts Majors only. Cross-listed with FINE 5800. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

- _____ - Upper-division Art History Elective (3 semester hours)
- _____ - Studio Arts Electives (9 semester hours)
- _____ - Visual Arts Electives (6 semester hours) *May include studio, lecture, internship or art history*

Total: 54 Hours

Photography Emphasis Courses

Students must complete the first seven courses listed in the "Required Visual Arts Courses" section and FINE 1150 and FINE 2155 before going on to the upper-division photography courses. FINE 3160, FINE 3161 and FINE 3162 may be completed in any order after having completed FINE 2155. FINE 3161 must be completed before FINE 3171. FINE 3162 must be completed before FINE 3172. FINE 3630 and all 3000-level studio courses must be completed prior to beginning the advanced photography sequence (FINE 4195 and FINE 4196).

FINE 1150 - Introduction to Photography

Summer 2010 Registration F A 1150

Students learn traditional, film-based photographic practice. Topics such as camera functions, film processing, black and white darkroom printing, color theory and alternative darkroom techniques are explored through demonstrations, critiques, readings and discussions of historical and contemporary photography. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 2155 - Introduction to Digital Photography

Summer 2010 Registration F A 2155

Students learn digital image manipulation, input and output strategies, and digital camera functions through assignments that emphasize conceptual development.

Presentations, readings, projects and class discussions help students gain an understanding of the role of digital imaging in contemporary photography. Prereqs: FINE 1150. Priority given to Photography Majors and Minors. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3160 - Color and Studio Lighting

Summer 2010 Registration F A 3160

Students explore traditional color photography, studio lighting, concept development, critical thinking, and expressive uses of the medium. Topics include chromogenic printing, color theory, 4x5 technique and studio lighting. Students gain insight into the creative impact of color on photographic representation. FINE 1150, FINE 2155. Photography majors must also have completed the Fine Arts Foundation Core including: FINE 1015, FINE 1100, FINE 1400, FINE 1500, FINE 2015, FINE 2600, FINE 2610. Photography majors and minors must apply to the program to enroll in this class. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3161 - The Silver Fine Print

Summer 2010 Registration F A 3161

Students learn advanced black and white darkroom techniques while translating ideas into photographic form. Techniques include the zone system, split filter printing, toning, montage printing, and film/paper choices. Students gain insight into photographic artists, techniques, and movements. Prereq: FINE 1150, FINE 2155. Photography majors must also have completed the Fine Arts Foundation Core including: FINE 1015, FINE 1100, FINE 1400, FINE 1500, FINE 2015, FINE 2600, FINE 2610. Photography majors and minors must apply to the program to enroll in this class. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

Note: must be completed before 3171

FINE 3162 - The Digital Fine Print

Summer 2010 Registration F A 3162

Students learn the fine art of digital printing as it relates to photographic practice and theory. Assignments focus on conceptual development, advanced image manipulation, workflow, and color management. Students gain insight into the role of digital imaging in contemporary photography. Prereq: FINE 1150, FINE 2155. Photography majors must also have completed the Fine Arts Foundation Core including: FINE 1015, FINE 1100, FINE 1400, FINE 1500, FINE 2015, FINE 2600, FINE 2610. Photography majors and minors must apply to the program to enroll in this class. **Semester Hours:** 3to 3 **When Offered:** FALL

Registration is changing. Visit our website for details ucdenver.edu/registration.

Note: must be completed before 3172

FINE 3171 - Concepts and Processes in Photography

Summer 2010 Registration F A 3171

Students develop skills in alternative photographic techniques. Processes covered include cameraless and pinhole photography, reticulation, non-silver printing, enlarged negatives, liquid emulsions and digital/traditional cross-manipulation. Students gain insights into the relationship between ideas and experimental ways of creating images.

Prereq: FINE 1150, FINE 2155, FINE 3161. Photography majors must also have completed the Fine Arts Foundation Core including: FINE 1015, FINE 1100, FINE 1400, FINE 1500, FINE 2015, FINE 2600, FINE 2610. Photography majors and minors must apply to the program to enroll in this class. **Semester Hours: 3to 3**

When Offered:
SPRING

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3172 - Digital Bookmaking

Summer 2010 Registration F A 3172

Students create handmade artists books using digital technologies. Projects build skills in idea development, use of text and image, digital image manipulation, digital printing, scanning and book binding. Students learn strategies for creating visual narratives through photography. Prereq: FINE 1150, FINE 2155, FINE 3162. Photography majors must also have completed the Fine Arts Foundation Core including: FINE 1015, FINE 1100, FINE 1400, FINE 1500, FINE 2015, FINE 2600, FINE 2610. Photography majors and minors must apply to the program to enroll in this class. **Semester Hours: 3to 3**

When Offered: *SPRING*

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3630 - History of Photography

Summer 2010 Registration F A 3630

Students examine the history of photography from its origins to the present. Emphasis is placed on photography as an artistic medium. Topics covered include important movements, photographers, and technical innovations, as well as photographer's broader role in visual culture. **Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3631 - Photography: Theory and Criticism

Summer 2010 Registration F A 3631

Students investigate the historical texts of photographic criticism. Readings relate to photography as a fine art form, concentrating on 1970 to the present. Through discussions, readings and critical writing, students examine and appreciate the

significance of photographic theory. Prereq: FINE 3630. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3635 - Photography Now

Summer 2010 Registration F A 3635

Students investigate trends in fine art photography from 1990 through the present. By examining current topics, styles, and techniques students gain insights into contemporary photographic practice and its relationship to the history and future of the medium. Prereq: FINE 3630. **Semester Hours:** 3to 3 **When Offered:** FALL
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 4195 - Advanced Photography I

Summer 2010 Registration F A 4195

Students create an independent body of photographic work that integrates sophisticated concepts with technical mastery. Through critiques, presentations and discussions, students relate subject matter to historical and contemporary context. Students build expertise in the area of professional development in photography. Prereq: FINE 1150, FINE 2155, FINE 3160, FINE 3161, FINE 3162, FINE 3171, FINE 3172, FINE 3630. Photography majors must also have completed the Fine Arts Foundation Core including: FINE 1015, FINE 1100, FINE 1400, FINE 1500, FINE 2015, FINE 2600, FINE 2610. Photography majors and minors must apply to the program to enroll in this class. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 4196 - Advanced Photography II

Summer 2010 Registration F A 4196

Students create an independent body of photographic work that integrates sophisticated concepts with technical mastery. Through critiques, presentations and discussions, students relate subject matter to historical and contemporary context. Students build expertise in the area of professional development in photography. Prereq: FINE 1150, FINE 2155, FINE 3160, FINE 3161, FINE 3162, FINE 3171, FINE 3172, FINE 3630, FINE 4195. Photography majors must also have completed the Fine Arts Foundation Core including: FINE 1015, FINE 1100, FINE 1400, FINE 1500, FINE 2015, FINE 2600, FINE 2610. Photography majors and minors must apply to the program to enroll in this class. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 4800 - Senior Art Seminar

Summer 2010 Registration F A 4800

Required of Fine Arts majors in the B.F.A. and B.A. studio degree tracks majoring in

Painting/Drawing, Photography or Sculpture. Course work covers research into professional practices, business practices, creative practice and career development. Note: Students missing the first 2 classes of this course may be administratively dropped. Students will not be allowed to add course if they have missed the first 2 classes. Prereq: 90 credits completed, 45 credits in fine arts; open to UCD Fine Arts Majors only. Cross-listed with FINE 5800. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

_____ - Studio Arts Electives (9 semester hours)

_____ - Visual Arts Electives (6 semester hours) *May include studio, lecture, internship or art history*

Total: 54 Hours

Sculpture Emphasis Courses

FINE 2500 - Bronze Casting and Metal Sculpture

Summer 2010 Registration F A 2500

Students learn lost wax casting with ceramic shell investment and bonded sand. Modeling, foundry work, centrifugal casting and welding for cast metal is introduced, as is steel fabrication and mixed media. Individual vocabularies are explored and design skills required. Prereq: FINE 1500. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 2510 - Wood and Metal Sculpture

Summer 2010 Registration F A 2510

Wood, metal fabrication and introduction of the found object are premise for the exploration of individual visual vocabularies. Investigation and design are applied towards developing conceptual ideas while students advance skills in the metal and wood studios. Prereq: FINE 1500, FINE 2500 (Can be taken concurrently with FINE 2500). **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3500 - Modeling and Casting the Figure

Summer 2010 Registration F A 3500

Study of the human figure from life and imagination directs visual vocabulary towards expression three dimensionally. Mold making using rubber, alginate and plaster is introduced for casting in metal, resin, synthetics, plastic, paper and biodegradable materials. Drawing is included. Prereq: FINE 1015, FINE 1100, FINE 1400, FINE 1500, FINE 2015, FINE 2600, FINE 2610, FINE 2500, FINE 2510. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3510 - Installation Art

Summer 2010 Registration F A 3510

Students learn to modify the way a particular space is experienced through material intervention in everyday public or private spaces. Material use ranges from everyday and natural materials to new media such as video, sound, performance, computers and the Internet. Prereq: FINE 1015, FINE 1100, FINE 1400, FINE 1500, FINE 2015, FINE 2500, FINE 2510, FINE 2600, FINE 2610. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3515 - Public Art

Summer 2010 Registration F A 3515

Students connect with professional/visiting artists installing public art works on campus for the Auraria Sculpture Park. Public relations, installation techniques, curatorial and administration skills are developed. Students learn to establish, maintain and promote the current sculpture collection on campus. Prereq: FINE 1015, FINE 1100, FINE 1400, FINE 1500, FINE 2015, FINE 2500, FINE 2510, FINE 2600, FINE 2610. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3525 - Environmental Sculpture

Summer 2010 Registration F A 3525

Students create environmental site-specific work to exist in a certain place. This involves temporary outdoor landscaping combined with permanently site sculptured elements. The format, the political, the historical, or the social context of the natural environment will be explored. Prereq: FINE 1015, FINE 1100, FINE 1400, FINE 1500, FINE 2500, FINE 2510, FINE 2600, FINE 2610, FINE 3500, FINE 3510. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3530 - Iron Casting

Summer 2010 Registration F A 3530

Students will learn traditional and innovative mold making techniques for casting iron. Working with lost wax, sand molds and space age materials students will cast ingots molds to final object. Furnace and Cupola design and fabrication techniques are researched. Prereq: FINE 1015, FINE 1100, FINE 1400, FINE 1500, FINE 2015, FINE 2500, FINE 2510, FINE 2600, FINE 2610. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3535 - Sculpture Rendering

Summer 2010 Registration **F A 3535**

Students apply traditional and mixed media drawing skills, photography and digital reproduction to depict the sculptural object in two and three-dimensional space. Students learn to construct small-scale models and develop sculpture proposals. Drawing as sculpture medium is explored. Prereq: FINE 1015, FINE 1100, FINE 1400, FINE 1500, FINE 2015, FINE 2500, FINE 2510, FINE 2600, FINE 2610. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 4500 - Kinetic Sculpture

Summer 2010 Registration **F A 4500**

Students explore movement and balance in sculptural work using pivot points and motors. Sound, projection, sensors and mechanics provide cause and effect scenarios in conjunction with knowledge, materials, and techniques acquired to date in the program. Prereq: FINE 1015, FINE 1100, FINE 1400, FINE 1500, FINE 2015, FINE 2500, FINE 2510, FINE 2600, FINE 2610. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 4505 - Performance Art

Summer 2010 Registration **F A 4505**

Students use the human body as a vehicle and premise to examine social, political and personal concerns through events and situations around conceptual idea, time, space, and a relationship between performer and audience. Site, object and documentation are integral components. Prereq: FINE 1015, FINE 1100, FINE 1400, FINE 1500, FINE 2015, FINE 2500, FINE 2510, FINE 2600, FINE 2610. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 4510 - Advanced Sculpture

Summer 2010 Registration **F A 4510**

Individual decision-making is stressed in developing a strong body of work. Competent technical skills and conceptual ideology are expanded to achieve complete visual experiences and development of conceptual ideas. Prereq: FINE 1015, FINE 1100, FINE 1400, FINE 1500, FINE 2015, FINE 2500, FINE 2510, FINE 2600, FINE 2610, FINE 3500, FINE 3510, FINE 3515, FINE 3525, FINE 3530, FINE 3535, FINE 4500. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 4800 - Senior Art Seminar

Summer 2010 Registration **F A 4800**

Required of Fine Arts majors in the B.F.A. and B.A. studio degree tracks majoring in

Painting/Drawing, Photography or Sculpture. Course work covers research into professional practices, business practices, creative practice and career development. Note: Students missing the first 2 classes of this course may be administratively dropped. Students will not be allowed to add course if they have missed the first 2 classes. Prereq: 90 credits completed, 45 credits in fine arts; open to UCD Fine Arts Majors only. Cross-listed with FINE 5800. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

- _____ - Upper-division Art History Elective (3 semester hours)
- _____ - Studio Arts Electives (9 semester hours)
- _____ - Visual Arts Electives (6 semester hours) *May include studio, lecture, internship or art history*

Total: 54 Hours

Transmedia Emphasis Courses

Student must apply for admission to the Transmedia emphasis. For more information, please contact College of Arts and Media advising at CAMAdvising@ucdenver.edu.

FINE 2405 - Introduction to Digital Design

Summer 2010 Registration F A 2405

A project-based exploration of the design potentials of vector, raster and motion based digital media. Through project critiques, discussion and demonstration students will create projects that examine technology as an art medium and a design strategy. Note: Priority seating given to Digital Design and Transmedia majors. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 2510 - Wood and Metal Sculpture

Summer 2010 Registration F A 2510

Wood, metal fabrication and introduction of the found object are premise for the exploration of individual visual vocabularies. Investigation and design are applied towards developing conceptual ideas while students advance skills in the metal and wood studios. Prereq: FINE 1500, FINE 2500 (Can be taken concurrently with FINE 2500). **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3414 - Motion Design I

Summer 2010 Registration F A 3414

A workshop devoted to understanding time based imagery that focuses on utilizing video and motion graphics as a creative communication tool. Students will create projects that

explore topics using video, animation, time and motion using a non-linear digital editing software. Note: Priority seating given to Digital Design and Transmedia majors. Prereq: Digital Design majors: passed portfolio review, FINE 2405 and 2415. Digital Design minors: FINE 2405 and 2415. Transmedia: FINE 2405, 2510, 3505 - can be taken concurrently with 3424 and 3438, or permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3424 - Interactive Media

Summer 2010 Registration F A 3424

A workshop exploring how interactive media can be used to convey a message and deliver information. Through critiques of projects, discussion and research, students will learn principles of user interface design, aesthetics and structure including their potential cultural impact. Note: priority seating given to Digital Design and Transmedia majors. Prereq: Digital Design majors: passed portfolio review, FINE 2405 and 2415. Digital Design minors: FINE 2405 and 2415. Transmedia: FINE 2405, 2510, 3505 - can be taken concurrently with 3414 and 3438 or permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3434 - 3D Motion Design

Summer 2010 Registration F A 3434

A workshop devoted to 3D as a medium for creating works of art. Through demonstration, discussion, readings and project based explorations, students will learn to navigate and create in the 3D digital environment. Note: Priority seating given to Digital Design and Transmedia majors. Prereq: Digital Design majors: FINE 3410, FINE 3414 and FINE 3424; Digital Design minors and Transmedia majors: FINE 2405, FINE 3414 or permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3438 - Text, Image and Electronic Art

Summer 2010 Registration F A 3438

A workshop-laboratory devoted to examining advanced concepts concerning the role of image and text within time-based and interactive media in design/artistic practices. Through creative investigations, readings and discussion students consider the new and expanding roles of text and image within the electronic sphere. Note: priority is given to Digital Design and Transmedia majors. Prereq: Digital Design majors: FINE 3410, 3414, 3424 and portfolio review. Transmedia: FINE 2405, 2510, 3505 - can be taken concurrently with 3414 and 3424. Other: Permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3441 - Narrative and Experience

Summer 2010 Registration F A 3441

A workshop-laboratory that focuses on narrative structure and its ability to create, control and manipulate viewer and user-experience. Through creative explorations, students will examine issues of narrative, identity, reception and audience and private/public space and develop approaches to creating user-centered works of art and design. Note: Priority seating is given to Digital Design and Transmedia majors. Prereq: Digital Design majors: FINE 3410, FINE 3414 and FINE 3424; Transmedia majors: FINE 3414, FINE 3424 and FINE 3438; Other: Permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3510 - Installation Art

Summer 2010 Registration F A 3510

Students learn to modify the way a particular space is experienced through material intervention in everyday public or private spaces. Material use ranges from everyday and natural materials to new media such as video, sound, performance, computers and the Internet. Prereq: FINE 1015, FINE 1100, FINE 1400, FINE 1500, FINE 2015, FINE 2500, FINE 2510, FINE 2600, FINE 2610. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3520 - Sculpture: Contemporary Artists and Concepts

Summer 2010 Registration F A 3520

Provides the art student (sculpture majors and non-majors) with a focused opportunity to look at contemporary sculpture, installation and performance art, and to examine the philosophical issues, processes, and methods, motivating practicing artists today. Prereq: FINE 1100, 1500, 2600 and 2610. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3535 - Sculpture Rendering

Summer 2010 Registration F A 3535

Students apply traditional and mixed media drawing skills, photography and digital reproduction to depict the sculptural object in two and three-dimensional space. Students learn to construct small-scale models and develop sculpture proposals. Drawing as sculpture medium is explored. Prereq: FINE 1015, FINE 1100, FINE 1400, FINE 1500, FINE 2015, FINE 2500, FINE 2510, FINE 2600, FINE 2610. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 4434 - Virtual Landscapes

Summer 2010 Registration F A 4434

In a studio environment students will explore place in relation to contemporary digital art practice. Through readings, lectures and production of projects assigned, students will create work that addresses the natural, urban and virtual environment. Prereq: Digital Design majors: FINE 3434 and portfolio review. Transmedia: FINE 3434 and 4500. Or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 4500 - Kinetic Sculpture

Summer 2010 Registration F A 4500

Students explore movement and balance in sculptural work using pivot points and motors. Sound, projection, sensors and mechanics provide cause and effect scenarios in conjunction with knowledge, materials, and techniques acquired to date in the program.

Prereq: FINE 1015, FINE 1100, FINE 1400, FINE 1500, FINE 2015, FINE 2500, FINE 2510, FINE 2600, FINE 2610. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 4510 - Advanced Sculpture

Summer 2010 Registration F A 4510

Individual decision-making is stressed in developing a strong body of work. Competent technical skills and conceptual ideology are expanded to achieve complete visual experiences and development of conceptual ideas. Prereq: FINE 1015, FINE 1100, FINE 1400, FINE 1500, FINE 2015, FINE 2500, FINE 2510, FINE 2600, FINE 2610, FINE 3500, FINE 3510, FINE 3515, FINE 3525, FINE 3530, FINE 3535, FINE 4500. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 4632 - Media History and Aesthetics

Summer 2010 Registration F A 4632

This survey class will present the current and historic impact of media technology on the arts and professional design practice. Through lectures, research and discussion students will become familiar with issues specific to digital media and design. Prereq: Digital Design majors: FINE 3410, portfolio review or permission of instructor. Cross-listed with FINE 5632. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

_____ - Studio Arts Electives (9 semester hours)

_____ - Visual Arts Elective (3 semester hours) *May include studio, lecture, internship or art history*

Total: 54 Hours

French BA

The French program offers courses in advanced language, linguistics, literature, civilization, culture and business, all taught exclusively in French. A minor is also offered. All French majors are strongly encouraged to participate in a study abroad program. Please see your French department advisor for information about opportunities to include study abroad as part of your major.

Admission and Grade Requirements

To be admitted to major status in French, students must have an overall GPA of C+ (2.3). The minimum grade acceptable in any French course applied to a French major is C (2.0). The grade point average in all courses applied to a French major at UC Denver must be 2.5. No courses taken on a pass/fail basis may be credited toward a French major. Upon declaring a major in French, each student will be assigned to a faculty advisor with whom the student should consult at least once per semester thereafter. It is especially important that students have their transcripts reviewed by their advisor before enrolling in their final 30 credit hours at UC Denver. Failure to do so may result in delay of graduation. Students presenting four years of high school French (Level IV) for admission to UC Denver must see a French advisor before enrolling in courses for the major. Students with advanced placement credits from high school must see a French advisor about course equivalencies. The Department of Modern Languages does not accept CLEP credits.

Honors in French

Qualified majors will automatically graduate with regular honors in French. Faculty occasionally nominate students for extra course work leading to higher levels of honors in French. For information, consult the French advisor in the Department of Modern Languages.

Outcomes Assessment

During their final semester in the language, French major students participate in an oral proficiency interview and take a written outcomes assessment exam to measure their level of proficiency and mastery of key concepts.

Residency Requirement

All students majoring in French must complete 30 semester hours of upper-division French courses (courses numbered 3000 and above). A minimum of 18 of those semester hours must be taken from the faculty in French at the Downtown Campus. Courses taken at other institutions while a student is enrolled at UC Denver may be

applied to the major only with departmental approval before enrollment in those courses. Students studying French for the professions must also take courses in other areas. Requirements for both tracks are outlined below.

Course Requirements for the Major

Track A: Language, Literature and Culture

Students wishing to improve their linguistic skills as well as their knowledge of Francophone literature and culture may choose this track.

Required Courses

FREN 3010 - French Phonetics and Pronunciation

Summer 2010 Registration **FR 3010**

Helps students acquire speech habits through knowledge of phonetics. Topics include the function of the speech organs, accurate production and recognition of sound, and the use of phonetic symbols. Note: Students with native or near-native level proficiency in French must consult with the French advisor before enrolling in this course. These students may, in some cases, take this course. The instructor of the course and/or the French advisor reserve the right to determine the level of linguistic proficiency of the student and his or her admission to the class by means of an oral interview and/or placement exam scores. Prereq: FREN 2120 or equivalent. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FREN 3020 - Oral Practice

Summer 2010 Registration **FR 3020**

Conversation course, using dialogues, debates, small-group discussion, and short oral presentations to improve fluency in spoken French and to build vocabulary. Discussions center around current issues. Note: Students with native or near-native-level proficiency will not be allowed to take FREN 3020. The instructor of the course and/or the French advisor reserve the right to determine the level of linguistic proficiency of the student and his or her admission to the class by means of an oral interview and/or placement exam scores. Prereq: FREN 2120 or equivalent. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FREN 3050 - Advanced Grammar and Composition

Summer 2010 Registration **FR 3050**

Rigorous review of grammar (including past and future tenses, conditional mood and

nominal phrase), along with development of writing skills through analysis and discussion of selections from French writers. Through questions and written exercises, students familiarize themselves with vocabulary, spelling, syntax and grammar. Note: May be taken before or after FREN 3060. Students with native or near-native level proficiency in French must consult with the French advisor before enrolling in this course. These students may, in some cases, take this course. The instructor of the course and/or the French advisor reserve the right to determine the level of linguistic proficiency of the student and his or her admission to the class by means of an oral interview and/or placement exam scores. Prereq: FREN 2120 or equivalent. **Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

FREN 3060 - Advanced French Language Skills

Summer 2010 Registration **FR 3060**

Rigorous review of grammar (including subjunctive, interrogative, verbal phrase and passive voice), along with development of writing skills through analysis and discussion of selections from French writers. Through questions and written exercises, students familiarize themselves with vocabulary, spelling, and grammar. Note: May be taken before or after FREN 3050. Students with native or near-native level proficiency in French must consult with the French advisor before enrolling in this course. These students may, in some cases, take this course. The instructor of the course and/or the French advisor reserve the right to determine the level of linguistic proficiency of the student and his or her admission to the class by means of an oral interview and/or placement exam scores. Prereq: FREN 2120 or equivalent. **Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 12 Hours

Electives

Three courses at the 4000 level: **9 semester hours**

Three electives at 3000 or 4000 level: **9 semester hours**

Note: students must take at least one literature course and at least one culture or civilization course.

Total: 18 Hours

Track A Major Total: 30 Hours

Track B: International Language and Culture for the Professions

This option in the French major offers career possibilities, both in government and private industry, at home and abroad. Languages are useful in business, industry, commerce, civil service, law, library science, media, science, economics, health and social sciences. Students who follow this course of study could also qualify as teachers of general business subjects in bilingual as well as traditional school systems. Students interested in this track should contact the French advisor in the Department of Modern Languages as early as possible in their academic career, but not later than the second semester of the sophomore year.

Prerequisites

(these courses do not count toward the major total of 48 hours)

ECON 1012 - Principles of Economics: Macroeconomics

Summer 2010 Registration **ECON 1012**

Covers topics of inflation, unemployment, national income, growth and problems of the national economy, stabilization policy, plus others at the discretion of the instructor.

Purpose is to teach fundamental principles, to open the field of economics in the way most helpful to further a more detailed study of special problems, and to give those not intending to specialize in the subject an outline of the general principles of economics. **Semester Hours:** 3to 3 **GT Pathways Category Key:** GT-SS1

Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 1022 - Principles of Economics: Microeconomics

Summer 2010 Registration **ECON 1022**

Topics include price determination in a market system composed of households and firms: resource allocation and efficiency of various market structures, plus others at the discretion of the instructor. Note: Complementary to and normally taken following ECON 1012. ECON 1012 is not a prerequisite for ECON 1022. **Semester Hours:** 3to 3 **GT**

Pathways Category Key: GT-SS1

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 1070 - Algebra for Social Sciences and Business

Summer 2010 Registration **MATH 1070**

Topics in algebra designed for students who intend to take business calculus. Functions, graphs, scatter plots, curve-fitting, solving systems of equations, polynomial and rational functions, and selected other topics. Note: Graphics calculator required. No co-credit

with MATH 1110 or MATH 1130. Prereq: intermediate algebra and satisfactory score on the placement exam. **Semester Hours:** 3to 3 **GT Pathways Category Key:** GT-MA1
Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

MATH 1110 - College Algebra

Summer 2010 Registration **MATH 1110**

Topics in algebra designed for students who intend to take the calculus sequence. Functions, domains, ranges, graphs, data scatter plots and curve fitting, solving equations and systems of equations, polynomial functions, rational functions, and selected other topics. Graphic calculators and/or computer algebra systems are used extensively. Applications are emphasized. Note: No co-credit with either MATH 1070 or 1130. Prereq: intermediate algebra and satisfactory score on the placement exam. **Semester Hours:** 3to 3 **GT Pathways Category Key:** GT-MA1
Registration is changing. Visit our website for details ucdenver.edu/registration.

(or higher level math course)

Required French Courses

FREN 1000 - Introduction to Cultures of the French- Speaking World

Summer 2010 Registration **FR 1000**

Introduces students to the many cultures of the French-speaking world. Taught in English for accessibility to students from different colleges at the University. The countries studied are: France, its overseas departments (Guadeloupe and Martinique) and territories (Tahiti); Quebec; Senegal; and other African countries. **Semester Hours:** 3to 3 **GT Pathways Category Key:** GT-AH1
Registration is changing. Visit our website for details ucdenver.edu/registration.

FREN 3020 - Oral Practice

Summer 2010 Registration **FR 3020**

Conversation course, using dialogues, debates, small-group discussion, and short oral presentations to improve fluency in spoken French and to build vocabulary. Discussions center around current issues. Note: Students with native or near-native-level proficiency will not be allowed to take FREN 3020. The instructor of the course and/or the French advisor reserve the right to determine the level of linguistic proficiency of the student and his or her admission to the class by means of an oral interview and/or placement exam scores. Prereq: FREN 2120 or equivalent. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FREN 3050 - Advanced Grammar and Composition

Summer 2010 Registration **FR 3050**

Rigorous review of grammar (including past and future tenses, conditional mood and nominal phrase), along with development of writing skills through analysis and discussion of selections from French writers. Through questions and written exercises, students familiarize themselves with vocabulary, spelling, syntax and grammar. Note: May be taken before or after FREN 3060. Students with native or near-native level proficiency in French must consult with the French advisor before enrolling in this course. These students may, in some cases, take this course. The instructor of the course and/or the French advisor reserve the right to determine the level of linguistic proficiency of the student and his or her admission to the class by means of an oral interview and/or placement exam scores. Prereq: FREN 2120 or equivalent. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FREN 3060 - Advanced French Language Skills

Summer 2010 Registration **FR 3060**

Rigorous review of grammar (including subjunctive, interrogative, verbal phrase and passive voice), along with development of writing skills through analysis and discussion of selections from French writers. Through questions and written exercises, students familiarize themselves with vocabulary, spelling, and grammar. Note: May be taken before or after FREN 3050. Students with native or near-native level proficiency in French must consult with the French advisor before enrolling in this course. These students may, in some cases, take this course. The instructor of the course and/or the French advisor reserve the right to determine the level of linguistic proficiency of the student and his or her admission to the class by means of an oral interview and/or placement exam scores. Prereq: FREN 2120 or equivalent. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FREN 3112 - Survey of French Literature I

Summer 2010 Registration **FR 3112**

Introduces survey of the major literary trends and prominent writers of French literature from 842 A.D. to the end of the 18th century. Note: May be taken before or after FREN 3122. Prereq: FREN 2120 or equivalent. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

FREN 3122 - Survey of French Literature II

Summer 2010 Registration **FR 3122**

Introduces survey of the major literary trends (romanticism, realism and existentialism) and writers of the 19th and 20th centuries. Students become acquainted with prominent writers of the period such as Beauvoir, Chateaubriand, Hugo, Balzac, Flaubert, Proust, Camus and Sartre. Note: May be taken before or after FREN 3112. Prereq: FREN 2120 or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FREN 3130 - Current Topics of the French-Speaking World

Summer 2010 Registration **FR 3130**

Combines discussion and writing on political, economic, and social conditions in contemporary France and the Francophone world. Articles from current French newspapers, news magazines, television broadcasts, and the World Wide Web are analyzed for a better understanding of modern French culture. Prereq: FREN 2120 or equivalent. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

FREN 3140 - Contemporary Francophone Cultures

Summer 2010 Registration **FR 3140**

Through the reading of short stories and cultural texts, engages students in the exploration of cultures of the Francophone world. Addresses political, economic and geographic status of each region as well as societal identity, immigration, the individual and cultural identity. Prereq: FREN 2120 or equivalent. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FREN 4050 - Advanced French for Business

Summer 2010 Registration **FR 4050**

Concentrates on the technical language necessary to meet the economic and commercial needs of the modern world. Prepares students for the practical certificate of business and economic French of the Paris Chamber of Commerce. Note: Students with native or near-native level proficiency in French must consult with the French advisor before enrolling in this course. These students may, in some cases, take this course. The instructor of the course and/or the French advisor reserve the right to determine the level of linguistic proficiency of the student and his or her admission to the class by means of an oral interview and/or placement exam scores. Prereq: FREN 3050 or 3060 plus one other 3000-level French course or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FREN 4082 - Introduction to Translation

Summer 2010 Registration **FR 4082**

Introduces the methodology and practice of written translation from English to French/French to English. Students will learn techniques on how to avoid word-by-word translation, faulty sentence structure and Anglicisms by focusing on grammar, syntax and vocabulary. Note: Students must demonstrate third-year competence and advanced writing skills in English. Students with native or near-native level proficiency in French must consult with the French advisor before enrolling in this course. These students may, in some cases, take this course. The instructor of the course and/or the French advisor reserve the right to determine the level of linguistic proficiency of the student and his or her admission to the class by means of an oral interview and/or placement exam scores. Prereq: FREN 3050 or 3060 and one other upper-division French class. Cross-listed with FREN 5082. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FREN 4210 - French Civilization - Twentieth and Twenty-First Centuries

Summer 2010 Registration **FR 4210**

(Continuation of FREN 4200) The development of French culture and civilization in a historical perspective from the beginning of the 20th century to the present. Includes historical background, sciences and techniques, daily life, the arts, literature and philosophy, and religion. Note: May be taken before or after FREN 4200. Prereq: Two 3000-level courses or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 27 Hours

French Electives

Choose two (at least one at 4000 level) from:

FREN 3120 - French Cultural Identities: Myths and Realities

Summer 2010 Registration **FR 3120**

The self-assured demeanor of the average French man or woman both attracts and confounds. In fact, a French person's behavior -- or that of the French government -- can seem impossible to decode if not understood within an authentically French context. This course examines that context and explores how the French view everyday life. Includes analysis of classic French films. Prereq: FREN 2120 or equivalent. **Semester Hours:** 3to

Registration is changing. Visit our website for details ucdenver.edu/registration.

FREN 3130 - Current Topics of the French-Speaking World

Summer 2010 Registration **FR 3130**

Combines discussion and writing on political, economic, and social conditions in contemporary France and the Francophone world. Articles from current French newspapers, news magazines, television broadcasts, and the World Wide Web are analyzed for a better understanding of modern French culture. Prereq: FREN 2120 or equivalent. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FREN 3140 - Contemporary Francophone Cultures

Summer 2010 Registration **FR 3140**

Through the reading of short stories and cultural texts, engages students in the exploration of cultures of the Francophone world. Addresses political, economic and geographic status of each region as well as societal identity, immigration, the individual and cultural identity. Prereq: FREN 2120 or equivalent. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FREN 4200 - French Civilization Through the Nineteenth Century

Summer 2010 Registration **FR 4200**

Development of French culture and civilization from a historical perspective, beginning with the origins of France and continuing through the 19th century. Includes historical background, sciences and techniques, daily life, the arts, literature and philosophy, and religion. Note: May be taken before or after FREN 4210. Prereq: Two 3000-level courses or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Any 3000- or 4000-level literature course (not already taken from required list)

Total: 6 Hours

Business Courses

(please be aware of prerequisites in business course descriptions)

ACCT 2200 - Financial Accounting and Financial Statement Analysis

Summer 2010 Registration **ACCT 2200**

The financial accounting process, the role of the profession and the analysis of financial

statements. Principal focus on interpretation of financial statements, with emphasis on asset and liability valuation problems and the determination of net income. Prereq: MATH 1070 and sophomore standing. A grade of 'C' or better is required in this course to proceed to ACCT 2220. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MGMT 1000 - Introduction to Business

Summer 2010 Registration **MGMT 1000**

This course will introduce students to the nature and role of business in our society. Problems confronting business are surveyed from a management, financial, economic and marketing viewpoint. Career opportunities in business are also considered. Students are advised to take this course during their freshman year and may not take it in the junior or senior years. Prereq: Open to freshman and sophomores, non-degree students and music majors at all levels. **Semester Hours:** 3to 3 **When Offered:** FASPRSUM
Registration is changing. Visit our website for details ucdenver.edu/registration.

MGMT 3000 - Managing Individuals and Teams

Summer 2010 Registration **MGMT 3000**

Focuses on helping students understand how to manage individuals and groups effectively. Students are encouraged to know themselves better and how their behavior affects how they deal with organizational situations; they also learn how individuals differ and how to design, manage and work in a team. This is a business core course therefore a grade of a 'c' or better must be earned to satisfy graduation requirements. Prereq: Junior standing. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MKTG 3000 - Principles of Marketing

Summer 2010 Registration **MKTG 3000**

Focuses on the basic marketing concepts of Buyer Behavior, Marketing Research, Marketing Planning and Implementation and the marketing process of product, price, distribution and promotion. This is a business core course therefore a grade of a 'C' or better must be earned to satisfy graduation requirements. Prereq: Junior standing. **Semester Hours:** 3to 3 **When Offered:** FASPRSUM
Registration is changing. Visit our website for details ucdenver.edu/registration.

One 3000-level course in international business

Total: 15 Hours

Recommended

Official proficiency exam (Paris Chamber of Commerce)

Track B Major Total: 48 Hours

Secondary Foreign Language Teacher Licensure Program

With this option, students complete a major in French along with additional course work required for certification to teach French in the public schools. This program should be chosen early in the students' careers. For information, see the Teacher Education Program section of this catalog or contact the CLAS Advising Office (phone 303-556-2555 or visit North Classroom, 4002) and the French advisor.

Geography BA

Requirements for Major in Geography

Students must declare a major by the time they have completed 60 semester hours of course work. The geography program (within the Department of Geography and Environmental Sciences) offers a BA degree that includes a full range of courses in the fundamentals of geography taught mainly by full-time faculty. Five degree options are available for the major in geography: general, environmental science, environmental studies, urban studies and planning and earth science. Total semester-hour requirements vary among the five options, but all options require a minimum of 24 hours of upper-division credit. In addition, for each option, at least 15 semester hours must be taken at the Downtown Campus.

- Option 1—General Geography
- Option 2—Environmental Science
- Option 3—Environmental Studies
- Option 4—Urban Studies and Planning
- Option 5—Earth Science

Option 1—General Geography

Option Advisors: Frederick B. Chambers and Brian Page

OPTION 1 REQUIREMENTS

Lower division

GEOG 1202 - Introduction to Physical Geography

Summer 2010 Registration **GEOG 1202**

The science that studies the processes, forms, and spatial or geographic structures of natural systems operating at or near the earth's surface, including weather, climate, and landform processes. **Semester Hours:** 3to 3 **GT Pathways Category Key:** GT-SC2
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 1302 - Introduction to Human Geography

Summer 2010 Registration **GEOG 1302**

Systematic introduction to basic concepts and approaches in human geographic analysis. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 2080 - Introduction to Mapping and Map Analysis

Summer 2010 Registration **GEOG 2080**

Studies major elements in the preparation of thematic maps, including sources of data collection and manipulation of data, and cartographic techniques for display of data. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

Upper division

GEOG 3232 - Weather and Climate

Summer 2010 Registration **GEOG 3232**

Introduces the processes and systems that govern both day-to-day weather and longer-term climate variations. Covers instrumentation and weather forecasting techniques. Prereq: GEOG 1202 or permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 3411 - Globalization and Regional Development

Summer 2010 Registration **GEOG 3411**

Addresses global political-restructuring and its implications for regional development in the U.S. Both historical and contemporary processes of globalization are examined. Topics include: the environmental basis of American industrial growth, the relationship between technological change and geographical shifts, the rise and decline of Fordism, the transfer of Japanese manufacturing methods to the U.S., the role of regional and national industrial policy, and the social consequences of globalization for labor and communities. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4080 - Introduction to GIS

Summer 2010 Registration **GEOG 4080**

Introduces various aspects of geographic information systems (GIS), including justification, definition of hardware/software, database design, and data conversion. GIS is a computer-based mapping system providing a graphical interface to locational and relational attribute data on facilities and land. Includes hands-on use of a geographic information system workstation. Prereq: GEOG 3080 or permission of instructor. Cross-listed with GEOG 5080. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

GEOG 5080 - Introduction to GIS

Summer 2010 Registration **GEOG 5080**

Introduces various aspects of geographic information systems (GIS), including justification, definition of hardware/software, database design, and data conversion. GIS is a computer-based mapping system providing a graphical interface to locational and relational attribute data on facilities and land. Includes hands-on use of a geographic information system workstation. Cross-listed with GEOG 4080. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 18 Hours

ADDITIONAL REQUIREMENTS

Choose six additional courses, including at least one course from each of the following subfields:

Physical Geography

GEOG 3240 - Colorado Climates

Summer 2010 Registration **GEOG 3240**

Provides a broad overview of the various weather and climate patterns that are found within the state of Colorado. To accomplish this, the state of Colorado will be divided into regions which (hopefully) have a large degree of homogeneity in terms of weather and climate controls. Note: Taught in a seminar style with students giving presentations and reports on their findings about a given region. Prereq: GEOG 1202 and/or GEOG 3232 or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4010 - Landscape Geochemistry

Summer 2010 Registration **GEOG 4010**

A holistic approach to studying the role chemical elements play in synthesis/decomposition cycles, and the resultant environment from interaction of the lithosphere with the hydrosphere, atmosphere, biosphere, and pedosphere during geological and ecological timeframes, together with anthropogenic activities. Prereq: Introductory college-level physical geography or environmental science course or permission of instructor. Cross-listed with GEOL 4010/ENVS 5010. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4020 - Earth Environments and Human Impacts

Summer 2010 Registration **GEOG 4020**

Basic concepts describing earth's biomes and physical environment are presented in a systems context. Global warming assessment, from both political and scientific perspectives, is then presented. Model visualization of these concepts to consider human impacts on Earth's biomes is discussed. Earth system viewpoint, having links of Earth's biomes to oceans and atmosphere, completes the course discussion. Prereq: GEOG 1202 and 3232 or permission of instructor. Cross-listed with ENVS 5020, GEOL 4020. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4240 - Principles of Geomorphology

Summer 2010 Registration **GEOG 4240**

Systematic study of processes associated with rock structures, weathering, mass wasting, fluvial, wind, glacial, and shorelines, and the resultant landforms they can produce, influence, and change over time. Course includes field trips and in-class exercises to help solidify concepts. Cross-listed with GEOL 4630 and GEOG 5240. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4270 - Glacial Geomorphology

Summer 2010 Registration **GEOG 4270**

Provides an in-depth view of the processes and systems found in glacial environments. Topics include: evidence of past glaciation; present-day glacial extent; glacier dynamics; glacial erosional processes and landforms; glacial depositional processes and landforms. Prereq: GEOG 1202 or GEOL 1072. Cross-listed with GEOG/GEOL 4270/5270. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Human Geography

ENVS 1342 - Introduction to Environment and Society

Summer 2010 Registration **ENVS 1342**

Overview of perspectives on environmental issues within the context of sustainable development and taking a systems approach. The focus is on social science approaches to explore the human footprint on the earth, environmentalism, scientific uncertainty, policy creation and social change. **Semester Hours:** 3to 3 **GT Pathways Category Key:** GT-SS2

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 1602 - Introduction to Urban Studies

Summer 2010 Registration **GEOG 1602**

Surveys the process of urbanization, emphasizing the development of American cities and using Denver as an example. Topics covered include the evolution of metropolitan form and land use patterns, cultural landscape formation, city planning and architectural design, and urban social and policy issues. **Semester Hours:** 3to 3 **GT Pathways Category Key:** GT-SS2

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 2202 - Natural Hazards

Summer 2010 Registration **GEOG 2202**

Surveys those physical phenomena that often cause substantial damage when they occur in areas of human settlement. **Semester Hours:** 3to 3 **GT Pathways Category Key:** GT-SS2

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 3300 - Population and Resources in the World Environment

Summer 2010 Registration **GEOG 3300**

Increasing world human populations are examined in the context of regional and global resources. Opposing viewpoints are studied, and students are required to complete a case study of a self-selected issue analyzing viewpoints associated with relevant opposing opinions. Prereq: upper division standing. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 3430 - Geography of Tourism

Summer 2010 Registration **GEOG 3430**

Geographic analysis of trends in recreation, travel, and tourism, and their economic, social, and environmental impacts. Examines growth and change in resorts and tourist destination areas. Prereq: GEOG 1302 or 3411. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 3501 - Geography of Health

Summer 2010 Registration **GEOG 3501**

Offers a critical geographic perspective to human health issues, examining disease distributions, how changing relationships between people and their environments (natural, built, and social environments) influence health, and different approaches to the study of health in geography. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4265 - Sustainability in Resources Management

Summer 2010 Registration **GEOG 4265**

Sustainability and sustainable development are the dominant economic, environmental and social issues of the 21st century. Follows a multi-disciplinary approach to these concepts. Case studies demonstrate their implementation in different geographical, ecological and socio-economic conditions worldwide. Prereq: ENVS 1042 or permission of instructor. Cross-listed with GEOG 5265. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

GEOG 5265 - Sustainability in Resources Management

Summer 2010 Registration **GEOG 5265**

Sustainability and sustainable development are the dominant economic, environmental and social issues of the 21st century. Follows a multi-disciplinary approach to these concepts. Case studies demonstrate their implementation in different geographical, ecological and socio-economic conditions worldwide. Prereq: ENVS 1042 or permission of instructor. Cross-listed with GEOG 4265. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4335 - Contemporary Environmental Issues

Summer 2010 Registration **GEOG 4335**

Provides an overview of environmental challenges facing society today, focusing on how humans impact and change the environment. Opposing views and environmental policy at the local, state, national, and international levels are explored. Cross-listed with GEOG 5335. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

GEOG 5335 - Contemporary Environmental Issues

Summer 2010 Registration **GEOG 5335**

Provides an overview of environmental challenges facing society today, focusing on how

humans impact and change the environment. Opposing views and environmental policy at the local, state, national, and international levels are explored. Cross-listed with GEOG 4335. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4350 - Environment and Society in the American Past

Summer 2010 Registration **GEOG 4350**

Overview of the geographical development of North American society from the late 15th century to the mid-20th century. A comparative regional approach emphasizing relationships between natural resource exploitation, cultural landscape formation and environmental change. Cross-listed with GEOG 5350. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

GEOG 5350 - Environment and Society in the American Past

Summer 2010 Registration **GEOG 5350**

Overview of the geographical development of North American society from the late 15th century to the mid-20th century. A comparative regional approach emphasizing relationships between natural resource exploitation, cultural landscape formation and environmental change. Cross-listed with GEOG 4350. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4640 - Urban Geography: Denver and the U.S.

Summer 2010 Registration **GEOG 4640**

Uses a combined lecture/seminar format to explore research themes in urban geography. Topics covered include both historical and contemporary processes of urban development and transformation. Particular emphasis is placed on the U.S. and Colorado's Front Range. Cross-listed with GEOG 5640. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

GEOG 5640 - Urban Geography: Denver and the U.S.

Summer 2010 Registration **GEOG 5640**

Uses a combined lecture/seminar format to explore research themes in urban geography. Topics covered include both historical and contemporary processes of urban development and transformation. Particular emphasis is placed on the U.S. and Colorado's Front Range. Cross-listed with GEOG 4640. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4710 - Disasters, Climate Change, and Health

Summer 2010 Registration **GEOG 4710**

Provides a review of the impacts of disasters and climate change on human health, using a broad framework of preparedness, mitigation, response, recovery, and adaptation. Prereq: GEOG 2202 or GEOG 3501. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

Regional Geography

GEOG 1102 - World Regional Geography

Summer 2010 Registration **GEOG 1102**

Analysis of the relationships of man and the landscape based on geographic distributions in the world. **Semester Hours:** 3to 3 **GT Pathways Category Key:** GT-SS2
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 3100 - Geography of Colorado

Summer 2010 Registration **GEOG 3100**

An analysis of the physical environment, history of settlement, and resource base of Colorado in relation to present economic patterns of the state. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 3120 - Geography of Europe

Summer 2010 Registration **GEOG 3120**

An analysis of the physical environment, resource utilization, economic development and cooperation in Europe. A cultural and political geography which focuses on continuity and change in Eastern and Western Europe. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 3130 - Central America and the Caribbean

Summer 2010 Registration **GEOG 3130**

Surveys the physical environment and cultural development of Central America and the Caribbean Islands. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 3140 - Geography of South America

Summer 2010 Registration **GEOG 3140**

The physical environment, cultural development, and political instability within the area are analyzed. Influence of the landscape and climate, as well as Iberian cultural and

land tenure patterns on historic settlement and modern growth are discussed. Problems associated with population, economics, politics, education, and geography are emphasized. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 3150 - Middle East

Summer 2010 Registration **GEOG 3150**

Physical, cultural, and economic approach to the arid lands of the Middle East, including Arab land of the Sahara. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 3160 - Geography of China

Summer 2010 Registration **GEOG 3160**

Geographic survey of the physical, cultural, and economic features characterizing the geography of China. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Techniques for Geographical Analysis

GEOG 4060 - Remote Sensing I: Introduction to Environmental Remote Sensing

Summer 2010 Registration **GEOG 4060**

An in-depth treatment of the use of aerial photographs and other forms of imagery for the analysis of urban-industrial patterns, vegetation, agriculture, landforms, and geologic structure. Prereq: GEOG 3080 or permission of instructor. Cross-listed with GEOG 5060, GEOL 4060, GEOL 5060. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

GEOG 5060 - Remote Sensing I: Introduction to Environmental Remote Sensing

Summer 2010 Registration **GEOG 5060**

An in-depth treatment of the use of aerial photographs and other forms of imagery for the analysis of urban-industrial patterns, vegetation, agriculture, landforms, and geologic structure. Prereq: GEOG 3080 or permission of instructor. Cross-listed with GEOG 4060, GEOL 4060, 5060. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4070 - Remote Sensing II: Advanced Remote Sensing

Summer 2010 Registration **GEOG 4070**

Focuses on digital image processing of satellite and aerial images. Students explore the

nature of digital image data, gain an understanding of image analysis using PCs, and learn about the use of analysis products in the development of GIS databases. Prereq: GEOG 4060/5060 or GEOL 4060/5060 or permission of instructor. Cross-listed with GEOG 5070, GEOL 4070, 5070. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

GEOG 5070 - Remote Sensing II: Advanced Remote Sensing

Summer 2010 Registration **GEOG 5070**

Focuses on digital image processing of satellite and aerial images. Students explore the nature of digital image data, gain an understanding of image analysis using PCs, and learn about the use of analysis products in the development of GIS databases. Prereq: GEOG 5060/4060 or GEOL 5060/4060 or permission of instructor. Cross-listed with GEOG 4070, GEOL 5070, 4070. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4081 - Introduction to Cartography and Computer Mapping

Summer 2010 Registration **GEOG 4081**

Provides an introduction to the art and science of cartography (map making). Students will learn about design principles, tools and techniques of map production, culminating in the creation of a high-quality map through hands-on exercises. Prereq: GEOG 3080.

Cross-listed with GEOG 5081. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4085 - GIS Applications for the Urban Environment

Summer 2010 Registration **GEOG 4085**

Takes a more detailed look at basic concepts presented in the introductory GIS course, concentrating on how GIS is used to solve real-world geographic problems. Various GIS applications within both the natural and social sciences are highlighted. The selection of specific topics is flexible, based on the interests of enrolled students. Prereq: GEOG 4080 or GEOG 5080 or permission of instructor. Cross-listed with GEOG

5085. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

GEOG 5085 - GIS Applications for the Urban Environment

Summer 2010 Registration **GEOG 5085**

Takes a more detailed look at basic concepts presented in the introductory GIS course, concentrating on how GIS is used to solve real-world geographic problems. Various GIS applications within both the natural and social sciences are highlighted. The selection of

specific topics is flexible, based on the interests of enrolled students. Prereq: GEOG 4080 or GEOG 5080 or permission of instructor. Cross-listed with GEOG 4085.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4090 - Environmental Modeling with Geographic Information Systems

Summer 2010 Registration **GEOG 4090**

Expands the basic knowledge of GIS to spatial models. Establishes a comprehensive framework that can be used to address a wide range of applications in natural and built environments. Prereq: GEOG 4080 or GEOG 5080 or permission of instructor. Cross-listed with GEOG 5090.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

GEOG 5090 - Environmental Modeling with Geographic Information Systems

Summer 2010 Registration **GEOG 5090**

Expands the basic knowledge of GIS to spatial models. Establishes a comprehensive framework that can be used to address a wide range of applications in natural and built environments. Prereq: GEOG 4080 or GEOG 5080 or permission of instructor. Cross-listed with GEOG 4090.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4095 - Deploying GIS Functionality on the Web

Summer 2010 Registration **GEOG 4095**

Covers the core principles and technologies that allow the deployment of geographic information system (GIS) functionality over the World Wide Web. Hands-on exercises make use of the latest commercial software as well as open source technologies. Prereq: GEOG 4080 or GEOG 5080, computer science background, or permission of instructor. Cross-listed with GEOG 5095.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

GEOG 5095 - Deploying GIS Functionality on the Web

Summer 2010 Registration **GEOG 5095**

Covers the core principles and technologies that allow the deployment of geographic information system (GIS) functionality over the World Wide Web. Hands-on exercises make use of the latest commercial software as well as open source technologies. Prereq: GEOG 4080 or GEOG 5080, computer science background, or permission of

instructor. Cross-listed with GEOG 4095. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4220 - Environmental Impact Assessment

Summer 2010 Registration **GEOG 4220**

The objective of this course is to provide the foundation for understanding the environmental impact assessment process, its legal context, and the criteria and methods for procedural and substantive compliance. Prereq: URPL 5530 or permission of instructor. Cross-listed with GEOG 5220, URPL 6651. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

GEOG 5220 - Environmental Impact Assessment

Summer 2010 Registration **GEOG 5220**

The objective of this course is to provide the foundation for understanding the environmental impact assessment process, its legal context, and the criteria and methods for procedural and substantive compliance. Prereq: URPL 5530 or permission of instructor. Cross-listed with GEOG 4220, URPL 6651. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4230 - Hazard Mitigation and Vulnerability Assessment

Summer 2010 Registration **GEOG 4230**

Examines hazard mitigation and its planning and policy implications, emphasizing how vulnerability assessments play an integral role. Students explore how mitigation minimizes the impacts from hazards and use GIS to conduct a local study. Prereq: GEOG 2202 or permission of instructor. Cross-listed with GEOG 5230. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

GEOG 5230 - Hazard Mitigation and Vulnerability Assessment

Summer 2010 Registration **GEOG 5230**

Examines hazard mitigation and its planning and policy implications, emphasizing how vulnerability assessments play an integral role. Students explore how mitigation minimizes the impacts from hazards and use GIS to conduct a local study. Prereq: GEOG 2202 or permission of instructor. Cross-listed with GEOG 4230. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4235 - GIS Applications in the Health Sciences

Summer 2010 Registration **GEOG 4235**

Examines how GIS is used throughout the health care industry and public health. Covers environmental health, disease surveillance, and health services research. Students critically review current literature and gain hands-on experience with GIS software.

Prereq: GEOG 4080 or GEOG 5080, public health background, or consent of instructor.

Cross-listed with GEOG 5235, HBSC 7235. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

GEOG 5235 - GIS Applications in the Health Sciences

Summer 2010 Registration **GEOG 5235**

Examines how GIS is used throughout the health care industry and public health. Covers environmental health, disease surveillance, and health services research. Students critically review current literature and gain hands-on experience with GIS software.

Prereq: GEOG 4080 or GEOG 5080, public health background, or consent of instructor.

Cross-listed with GEOG 4235, HBSC 7235. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4770 - Applied Statistics for the Natural Sciences

Summer 2010 Registration **GEOG 4770**

Surveys statistical techniques including: quick review of basic statistics, tests for normality and outliers, display of data; simple and multiple regression; ANOVA and its relation to regression. Emphasis on computer or stat-pak analysis and interpretation of statistical results. Prereq: College algebra and GEOG 3080, or consent of instructor.

Cross-listed with ENVS 5600, GEOL 4770, 5770. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 18 Hours

OPTION TOTAL: 36 HOURS

Option 2—Environmental Science

Option Advisor: Frederick B. Chambers

Option 2 allows geography majors to concentrate on course work in environmental science.

ANCILLARY COURSES

Option 2 students must take one general biology and one general chemistry course (both with labs), OR a sequence of either (BIOL 2051 and 2061 with labs or CHEM 2031 and 2061 with labs). If applying to the MS in Environmental Sciences program, students must have taken both sequences. Also, students must have an introductory statistics course. Course choices with descriptions are below:

BIOL 2051 - General Biology I

Summer 2010 Registration **BIOL 2051**

Introduces four major areas of study: (1) the chemistry of biological systems; (2) the structure and function of the cell; (3) cellular energy transformations (photosynthesis and respiration); and (4) genetics (mitosis, meiosis, patterns of inheritance, molecular genetics). Note: Biology and health science (pre-med, pre-vet, pre-physical therapy, etc.) majors must also take the accompanying laboratory - BIOL 2071. Prereq: CHEM 1000 or high school chemistry required. **Semester Hours: 3 to 3** **GT Pathways Category Key: GT-SC1**

Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 2071 - General Biology Laboratory I

Summer 2010 Registration **BIOL 2071**

Introduces the basic scientific approach and report preparation through exercises and experiments in cell biology, basic biochemical techniques, genetics, molecular genetics and applications of biotechnology. Note: Exercises corresponding to topics in BIOL 2051. Coreq: BIOL 2051. **Semester Hours: 1 to 1** **GT Pathways Category Key: GT-SC1**

Registration is changing. Visit our website for details ucdenver.edu/registration.

(4 semester hours total), followed by:

BIOL 2061 - General Biology II

Summer 2010 Registration **BIOL 2061**

This course is a continuation of BIOL 2051. Introduces four major areas of study: (1) evolution, (2) animal structure and function, (3) plant structure and function and (4) ecology. Note: Biology and health science (pre-med, pre-vet, nursing, etc.) majors must also take the accompanying laboratory - BIOL 2081. Prereq: BIOL 2051 or equivalent with a grade of "C" (2.0) or higher. **Semester Hours: 3 to 3** **GT Pathways Category Key: GT-SC1**

Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 2081 - General Biology Laboratory II

Summer 2010 Registration **BIOL 2081**

Study of evolution, plant and animal anatomy, developmental biology; includes two off-campus ecology field trips. Note: Exercises corresponding to topics in BIOL 2061.

Prereq: BIOL 2071 or equivalent with a grade of "C" (2.0) or higher; Coreq: BIOL

2061. **Semester Hours:** 1 to 1 **GT Pathways Category Key:** GT-SC1

Registration is changing. Visit our website for details ucdenver.edu/registration.

(4 semester hours total)

CHEM 2031 - General Chemistry I

Summer 2010 Registration **CHEM 2031**

Topics include chemical structure, atomic and molecular properties, molecular geometry and bonding, and gas laws. Prepares students to take upper division chemistry courses.

Note: a beginning course for science majors, medical technologists, pre-medical and pre-dental students. Prereq: One year of high school chemistry or CHEM 1000 and

MATH 1110 (or high school equivalent); Coreq: CHEM 2038. **Semester Hours:** 3 to 3 **GT**

Pathways Category Key: GT-SC1

Registration is changing. Visit our website for details ucdenver.edu/registration.

CHEM 2038 - General Chemistry Laboratory I

Summer 2010 Registration **CHEM 2038**

Students perform laboratory experiments on topics covered in CHEM 2031 and gain experience in observing, recording, and interpreting physical and chemical phenomena.

Note: Laboratory to accompany CHEM 2031. Coreq: CHEM 2031. **Semester Hours:** 1 to

1 **GT Pathways Category Key:** GT-SC1

Registration is changing. Visit our website for details ucdenver.edu/registration.

(4 semester hours total), followed by:

CHEM 2061 - General Chemistry II

Summer 2010 Registration **CHEM 2061**

(Continuation of CHEM 2031.) Topics include kinetics, equilibria and thermodynamics.

Prereq: CHEM 2031; Coreq: CHEM 2068. **Semester Hours:** 3 to 3 **GT Pathways**

Category Key: GT-SC1

Registration is changing. Visit our website for details ucdenver.edu/registration.

CHEM 2068 - General Chemistry Laboratory II

Summer 2010 Registration **CHEM 2068**

Students gain experience with laboratory technique and elementary chemical instrumentation. Note: Laboratory to accompany CHEM 2061 and a continuation of CHEM 2038. Prereq: CHEM 2038; Coreq: CHEM 2061. **Semester Hours:** 2to 2**GT Pathways Category Key:** GT-SC1

Registration is changing. Visit our website for details ucdenver.edu/registration.
(5 semester hours total)

-AND-

One introductory statistics course (3 semester hours). Suitable courses include:

MATH 2830 - Introductory Statistics

Summer 2010 Registration **MATH 2830**

Basic statistical concepts, summarizing data, probability concepts, distributions, confidence intervals, hypothesis testing. Prereq: intermediate algebra. **Semester Hours:** 3to 3**GT Pathways Category Key:** GT-MA1

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 2090 - Statistics and Research Methods

Summer 2010 Registration **PSY 2090**

Introduces statistics and research methods in the field of psychology. Note: Intended for those who plan to major in psychology. Completion of college algebra or equivalent is recommended. Prereq: PSYC 1000. **Semester Hours:** 4to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

OPTION 2 REQUIREMENTS

Lower division

ENVS 1042 - Introduction to Environmental Sciences

Summer 2010 Registration **ENVS 1042**

This laboratory or survey course develops a basic understanding of ecological relationships and environmental systems. Issues such as the effects of human activities on earth's environment, extinction or diversity, greenhouse effect, hazardous or toxic wastes and human population growth are discussed. **Semester Hours:** 4to 4**GT**

Pathways Category Key: GT-SC1

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 1202 - Introduction to Physical Geography

Summer 2010 Registration **GEOG 1202**

The science that studies the processes, forms, and spatial or geographic structures of natural systems operating at or near the earth's surface, including weather, climate, and landform processes. **Semester Hours:** 3to 3 **GT Pathways Category Key:** GT-SC2
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 1302 - Introduction to Human Geography

Summer 2010 Registration **GEOG 1302**

Systematic introduction to basic concepts and approaches in human geographic analysis. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.
-OR-

ENVS 1342 - Introduction to Environment and Society

Summer 2010 Registration **ENVS 1342**

Overview of perspectives on environmental issues within the context of sustainable development and taking a systems approach. The focus is on social science approaches to explore the human footprint on the earth, environmentalism, scientific uncertainty, policy creation and social change. **Semester Hours:** 3to 3 **GT Pathways Category Key:** GT-SS2
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 2080 - Introduction to Mapping and Map Analysis

Summer 2010 Registration **GEOG 2080**

Studies major elements in the preparation of thematic maps, including sources of data collection and manipulation of data, and cartographic techniques for display of data. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

Upper division

GEOG 3232 - Weather and Climate

Summer 2010 Registration **GEOG 3232**

Introduces the processes and systems that govern both day-to-day weather and longer-term climate variations. Covers instrumentation and weather forecasting techniques. Prereq: GEOG 1202 or permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 3411 - Globalization and Regional Development

Summer 2010 Registration **GEOG 3411**

Addresses global political-restructuring and its implications for regional development in the U.S. Both historical and contemporary processes of globalization are examined. Topics include: the environmental basis of American industrial growth, the relationship between technological change and geographical shifts, the rise and decline of Fordism, the transfer of Japanese manufacturing methods to the U.S., the role of regional and national industrial policy, and the social consequences of globalization for labor and communities. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

GEOG 4335 - Contemporary Environmental Issues

Summer 2010 Registration **GEOG 4335**

Provides an overview of environmental challenges facing society today, focusing on how humans impact and change the environment. Opposing views and environmental policy at the local, state, national, and international levels are explored. Cross-listed with GEOG 5335. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

GEOG 5335 - Contemporary Environmental Issues

Summer 2010 Registration **GEOG 5335**

Provides an overview of environmental challenges facing society today, focusing on how humans impact and change the environment. Opposing views and environmental policy at the local, state, national, and international levels are explored. Cross-listed with GEOG 4335. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4080 - Introduction to GIS

Summer 2010 Registration **GEOG 4080**

Introduces various aspects of geographic information systems (GIS), including justification, definition of hardware/software, database design, and data conversion. GIS is a computer-based mapping system providing a graphical interface to locational and relational attribute data on facilities and land. Includes hands-on use of a geographic information system workstation. Prereq: GEOG 3080 or permission of instructor. Cross-listed with GEOG 5080. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

GEOG 5080 - Introduction to GIS

Summer 2010 Registration **GEOG 5080**

Introduces various aspects of geographic information systems (GIS), including justification, definition of hardware/software, database design, and data conversion. GIS is a computer-based mapping system providing a graphical interface to locational and relational attribute data on facilities and land. Includes hands-on use of a geographic information system workstation. Cross-listed with GEOG 4080. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 22 Hours

ADDITIONAL REQUIREMENTS

Choose six additional courses:

Environmental Science

GEOG 4020 - Earth Environments and Human Impacts

Summer 2010 Registration **GEOG 4020**

Basic concepts describing earth's biomes and physical environment are presented in a systems context. Global warming assessment, from both political and scientific perspectives, is then presented. Model visualization of these concepts to consider human impacts on Earth's biomes is discussed. Earth system viewpoint, having links of Earth's biomes to oceans and atmosphere, completes the course discussion. Prereq: GEOG 1202 and 3232 or permission of instructor. Cross-listed with ENVS 5020, GEOL 4020. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4265 - Sustainability in Resources Management

Summer 2010 Registration **GEOG 4265**

Sustainability and sustainable development are the dominant economic, environmental and social issues of the 21st century. Follows a multi-disciplinary approach to these concepts. Case studies demonstrate their implementation in different geographical, ecological and socio-economic conditions worldwide. Prereq: ENVS 1042 or permission of instructor. Cross-listed with GEOG 5265. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

GEOG 5265 - Sustainability in Resources Management

Summer 2010 Registration **GEOG 5265**

Sustainability and sustainable development are the dominant economic, environmental and social issues of the 21st century. Follows a multi-disciplinary approach to these concepts. Case studies demonstrate their implementation in different geographical, ecological and socio-economic conditions worldwide. Prereq: ENVS 1042 or permission of instructor. Cross-listed with GEOG 4265. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Plus one class from the following list:

ENVS 3082 - Energy and the Environment

Summer 2010 Registration **ENVS 3082**

For students of various backgrounds who wish to increase their understanding of the environmental and technical issues of supplying the energy demands of our society. Alternative energy sources and conservation are explored as solutions to promote a sustainable society. Prereq: One course in college science or mathematics. Cross-listed with PHYS 3082. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENVS 5030 - Environmental Geology

Summer 2010 Registration **ENVS 5030**

Applies geological information to interactions between people and the physical environment. Increasing awareness of its importance in our society means that this is an expanding field as companies are required to address the environmental consequences of their actions. Prereq: Entry into MSES program, senior standing in sciences or geography, or permission of instructor. Cross-listed with GEOL 4030 and 5030. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 3240 - Colorado Climates

Summer 2010 Registration **GEOG 3240**

Provides a broad overview of the various weather and climate patterns that are found within the state of Colorado. To accomplish this, the state of Colorado will be divided into regions which (hopefully) have a large degree of homogeneity in terms of weather and climate controls. Note: Taught in a seminar style with students giving presentations and reports on their findings about a given region. Prereq: GEOG 1202 and/or GEOG 3232 or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4010 - Landscape Geochemistry

Summer 2010 Registration **GEOG 4010**

A holistic approach to studying the role chemical elements play in synthesis/decomposition cycles, and the resultant environment from interaction of the lithosphere with the hydrosphere, atmosphere, biosphere, and pedosphere during geological and ecological timeframes, together with anthropogenic activities. Prereq: Introductory college-level physical geography or environmental science course or permission of instructor. Cross-listed with GEOL 4010/ENVS 5010. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4240 - Principles of Geomorphology

Summer 2010 Registration **GEOG 4240**

Systematic study of processes associated with rock structures, weathering, mass wasting, fluvial, wind, glacial, and shorelines, and the resultant landforms they can produce, influence, and change over time. Course includes field trips and in-class exercises to help solidify concepts. Cross-listed with GEOL 4630 and GEOG 5240. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4270 - Glacial Geomorphology

Summer 2010 Registration **GEOG 4270**

Provides an in-depth view of the processes and systems found in glacial environments. Topics include: evidence of past glaciation; present-day glacial extent; glacier dynamics; glacial erosional processes and landforms; glacial depositional processes and landforms. Prereq: GEOG 1202 or GEOL 1072. Cross-listed with GEOG/GEOL 4270/5270. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Upper-Division Environmental-Oriented Biology or Chemistry (3 Hours)

One upper-division biology or chemistry course related to the student's environmental science interest must be taken as part of the environmental science option.

Techniques for Environmental Analysis

Quantitative methods (one course):

GEOG 4770 - Applied Statistics for the Natural Sciences

Summer 2010 Registration **GEOG 4770**

Surveys statistical techniques including: quick review of basic statistics, tests for normality and outliers, display of data; simple and multiple regression; ANOVA and its

relation to regression. Emphasis on computer or stat-pak analysis and interpretation of statistical results. Prereq: College algebra and GEOG 3080, or consent of instructor. Cross-listed with ENVS 5600, GEOL 4770, 5770. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

GEOL 4770 - Applied Statistics for the Natural Sciences

Summer 2010 Registration **GEOL 4770**

Surveys statistical techniques including: quick review of basic statistics, tests for normality and outliers, display of data; simple and multiple regression; Anova and its relation to regression. Emphasis on computer or stat-pak analysis and interpretation of statistical results. Prereq: College algebra and GEOG 3080, or consent of instructor. Cross-listed with GEOL 5770, GEOG 4770, ENVS 5600. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

Geo-Spatial Analysis (one course):

GEOG 4060 - Remote Sensing I: Introduction to Environmental Remote Sensing

Summer 2010 Registration **GEOG 4060**

An in-depth treatment of the use of aerial photographs and other forms of imagery for the analysis of urban-industrial patterns, vegetation, agriculture, landforms, and geologic structure. Prereq: GEOG 3080 or permission of instructor. Cross-listed with GEOG 5060, GEOL 4060, GEOL 5060. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

GEOG 5060 - Remote Sensing I: Introduction to Environmental Remote Sensing

Summer 2010 Registration **GEOG 5060**

An in-depth treatment of the use of aerial photographs and other forms of imagery for the analysis of urban-industrial patterns, vegetation, agriculture, landforms, and geologic structure. Prereq: GEOG 3080 or permission of instructor. Cross-listed with GEOG 4060, GEOL 4060, 5060. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4085 - GIS Applications for the Urban Environment

Summer 2010 Registration **GEOG 4085**

Takes a more detailed look at basic concepts presented in the introductory GIS course, concentrating on how GIS is used to solve real-world geographic problems. Various GIS applications within both the natural and social sciences are highlighted. The selection of specific topics is flexible, based on the interests of enrolled students. Prereq: GEOG 4080 or GEOG 5080 or permission of instructor. Cross-listed with GEOG 5085. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

GEOG 5085 - GIS Applications for the Urban Environment

Summer 2010 Registration **GEOG 5085**

Takes a more detailed look at basic concepts presented in the introductory GIS course, concentrating on how GIS is used to solve real-world geographic problems. Various GIS applications within both the natural and social sciences are highlighted. The selection of specific topics is flexible, based on the interests of enrolled students. Prereq: GEOG 4080 or GEOG 5080 or permission of instructor. Cross-listed with GEOG 4085. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4090 - Environmental Modeling with Geographic Information Systems

Summer 2010 Registration **GEOG 4090**

Expands the basic knowledge of GIS to spatial models. Establishes a comprehensive framework that can be used to address a wide range of applications in natural and built environments. Prereq: GEOG 4080 or GEOG 5080 or permission of instructor. Cross-listed with GEOG 5090. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

GEOG 5090 - Environmental Modeling with Geographic Information Systems

Summer 2010 Registration **GEOG 5090**

Expands the basic knowledge of GIS to spatial models. Establishes a comprehensive framework that can be used to address a wide range of applications in natural and built environments. Prereq: GEOG 4080 or GEOG 5080 or permission of instructor. Cross-listed with GEOG 4090. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4230 - Hazard Mitigation and Vulnerability Assessment

Summer 2010 Registration **GEOG 4230**

Examines hazard mitigation and its planning and policy implications, emphasizing how vulnerability assessments play an integral role. Students explore how mitigation minimizes the impacts from hazards and use GIS to conduct a local study. Prereq: GEOG 2202 or permission of instructor. Cross-listed with GEOG 5230. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

GEOG 5230 - Hazard Mitigation and Vulnerability Assessment

Summer 2010 Registration **GEOG 5230**

Examines hazard mitigation and its planning and policy implications, emphasizing how vulnerability assessments play an integral role. Students explore how mitigation minimizes the impacts from hazards and use GIS to conduct a local study. Prereq: GEOG 2202 or permission of instructor. Cross-listed with GEOG 4230. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4235 - GIS Applications in the Health Sciences

Summer 2010 Registration **GEOG 4235**

Examines how GIS is used throughout the health care industry and public health. Covers environmental health, disease surveillance, and health services research. Students critically review current literature and gain hands-on experience with GIS software. Prereq: GEOG 4080 or GEOG 5080, public health background, or consent of instructor. Cross-listed with GEOG 5235, HBSC 7235. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

GEOG 5235 - GIS Applications in the Health Sciences

Summer 2010 Registration **GEOG 5235**

Examines how GIS is used throughout the health care industry and public health. Covers environmental health, disease surveillance, and health services research. Students critically review current literature and gain hands-on experience with GIS software. Prereq: GEOG 4080 or GEOG 5080, public health background, or consent of instructor. Cross-listed with GEOG 4235, HBSC 7235. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 18 Hours

OPTION TOTAL: 40 HOURS

Option 3—Environmental Studies

Option Advisors: Rafael Moreno and Deborah Thomas

Option 3 gives geography majors the opportunity to concentrate on the topic of human-environmental interaction, emphasizing environmental policy, sustainability and social issues.

OPTION 3 REQUIREMENTS

Lower division

ENVS 1042 - Introduction to Environmental Sciences

Summer 2010 Registration **ENVS 1042**

This laboratory or survey course develops a basic understanding of ecological relationships and environmental systems. Issues such as the effects of human activities on earth's environment, extinction or diversity, greenhouse effect, hazardous or toxic wastes and human population growth are discussed. **Semester Hours:** 4to 4**GT**

Pathways Category Key: GT-SC1

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENVS 1342 - Introduction to Environment and Society

Summer 2010 Registration **ENVS 1342**

Overview of perspectives on environmental issues within the context of sustainable development and taking a systems approach. The focus is on social science approaches to explore the human footprint on the earth, environmentalism, scientific uncertainty, policy creation and social change. **Semester Hours:** 3to 3**GT Pathways Category Key:** GT-SS2

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 1302 - Introduction to Human Geography

Summer 2010 Registration **GEOG 1302**

Systematic introduction to basic concepts and approaches in human geographic analysis. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 2080 - Introduction to Mapping and Map Analysis

Summer 2010 Registration **GEOG 2080**

Studies major elements in the preparation of thematic maps, including sources of data collection and manipulation of data, and cartographic techniques for display of data. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Upper division

GEOG 3232 - Weather and Climate

Summer 2010 Registration **GEOG 3232**

Introduces the processes and systems that govern both day-to-day weather and longer-term climate variations. Covers instrumentation and weather forecasting techniques.

Prereq: GEOG 1202 or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 3411 - Globalization and Regional Development

Summer 2010 Registration **GEOG 3411**

Addresses global political-restructuring and its implications for regional development in the U.S. Both historical and contemporary processes of globalization are examined.

Topics include: the environmental basis of American industrial growth, the relationship between technological change and geographical shifts, the rise and decline of Fordism, the transfer of Japanese manufacturing methods to the U.S., the role of regional and national industrial policy, and the social consequences of globalization for labor and communities. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4080 - Introduction to GIS

Summer 2010 Registration **GEOG 4080**

Introduces various aspects of geographic information systems (GIS), including justification, definition of hardware/software, database design, and data conversion. GIS is a computer-based mapping system providing a graphical interface to locational and relational attribute data on facilities and land. Includes hands-on use of a geographic information system workstation. Prereq: GEOG 3080 or permission of instructor. Cross-listed with GEOG 5080. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

GEOG 5080 - Introduction to GIS

Summer 2010 Registration **GEOG 5080**

Introduces various aspects of geographic information systems (GIS), including justification, definition of hardware/software, database design, and data conversion. GIS is a computer-based mapping system providing a graphical interface to locational and relational attribute data on facilities and land. Includes hands-on use of a geographic information system workstation. Cross-listed with GEOG 4080. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 22 Hours

ADDITIONAL REQUIREMENTS

Choose six additional courses:

Environmental Studies

Choose three courses from the following:

GEOG 3300 - Population and Resources in the World Environment

Summer 2010 Registration **GEOG 3300**

Increasing world human populations are examined in the context of regional and global resources. Opposing viewpoints are studied, and students are required to complete a case study of a self-selected issue analyzing viewpoints associated with relevant opposing opinions. Prereq: upper division standing. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 3302 - Water Resources

Summer 2010 Registration **GEOG 3302**

Introduces water resources aimed at students with little or no background in the field. This is a broad course covering topics ranging from the physical aspects of water to water politics and international law. While the course is largely a lecture format, discussion of current issues is a significant part of the class. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 3501 - Geography of Health

Summer 2010 Registration **GEOG 3501**

Offers a critical geographic perspective to human health issues, examining disease

distributions, how changing relationships between people and their environments (natural, built, and social environments) influence health, and different approaches to the study of health in geography. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4335 - Contemporary Environmental Issues

Summer 2010 Registration **GEOG 4335**

Provides an overview of environmental challenges facing society today, focusing on how humans impact and change the environment. Opposing views and environmental policy at the local, state, national, and international levels are explored. Cross-listed with

GEOG 5335. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

GEOG 5335 - Contemporary Environmental Issues

Summer 2010 Registration **GEOG 5335**

Provides an overview of environmental challenges facing society today, focusing on how humans impact and change the environment. Opposing views and environmental policy at the local, state, national, and international levels are explored. Cross-listed with

GEOG 4335. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4350 - Environment and Society in the American Past

Summer 2010 Registration **GEOG 4350**

Overview of the geographical development of North American society from the late 15th century to the mid-20th century. A comparative regional approach emphasizing relationships between natural resource exploitation, cultural landscape formation and environmental change. Cross-listed with GEOG 5350. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

GEOG 5350 - Environment and Society in the American Past

Summer 2010 Registration **GEOG 5350**

Overview of the geographical development of North American society from the late 15th century to the mid-20th century. A comparative regional approach emphasizing relationships between natural resource exploitation, cultural landscape formation and environmental change. Cross-listed with GEOG 4350. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Environmental Policy and Planning

Choose two:

GEOG 4220 - Environmental Impact Assessment

Summer 2010 Registration **GEOG 4220**

The objective of this course is to provide the foundation for understanding the environmental impact assessment process, its legal context, and the criteria and methods for procedural and substantive compliance. Prereq: URPL 5530 or permission of instructor. Cross-listed with GEOG 5220, URPL 6651. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

GEOG 5220 - Environmental Impact Assessment

Summer 2010 Registration **GEOG 5220**

The objective of this course is to provide the foundation for understanding the environmental impact assessment process, its legal context, and the criteria and methods for procedural and substantive compliance. Prereq: URPL 5530 or permission of instructor. Cross-listed with GEOG 4220, URPL 6651. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4230 - Hazard Mitigation and Vulnerability Assessment

Summer 2010 Registration **GEOG 4230**

Examines hazard mitigation and its planning and policy implications, emphasizing how vulnerability assessments play an integral role. Students explore how mitigation minimizes the impacts from hazards and use GIS to conduct a local study. Prereq: GEOG 2202 or permission of instructor. Cross-listed with GEOG 5230. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

GEOG 5230 - Hazard Mitigation and Vulnerability Assessment

Summer 2010 Registration **GEOG 5230**

Examines hazard mitigation and its planning and policy implications, emphasizing how vulnerability assessments play an integral role. Students explore how mitigation minimizes the impacts from hazards and use GIS to conduct a local study. Prereq:

GEOG 2202 or permission of instructor. Cross-listed with GEOG 4230. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4260 - Natural Resource Planning and Management

Summer 2010 Registration **GEOG 4260**

Considers methods for managing renewable and non-renewable resources using both legislative and economic controls. The role of technology, ideologies, and equity are discussed. Decision making techniques are applied to problems of resource and environmental management. The ability to allocate and control resource usage to ensure sustainability are discussed. Cross-listed with URPL 6653. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

PUAD 5631 - Seminar in Environmental Politics and Policy

Summer 2010 Registration **P AD 5631**

Examines the fundamental principles of politics and policy that shape strategies of environmental protection. Focuses on the role of institutional processes, government organizations and nongovernmental organizations in environmental politics and policy.

Cross-listed with PUAD 7631. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4265 - Sustainability in Resources Management

Summer 2010 Registration **GEOG 4265**

Sustainability and sustainable development are the dominant economic, environmental and social issues of the 21st century. Follows a multi-disciplinary approach to these concepts. Case studies demonstrate their implementation in different geographical, ecological and socio-economic conditions worldwide. Prereq: ENVS 1042 or permission of instructor. Cross-listed with GEOG 5265. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

GEOG 5265 - Sustainability in Resources Management

Summer 2010 Registration **GEOG 5265**

Sustainability and sustainable development are the dominant economic, environmental and social issues of the 21st century. Follows a multi-disciplinary approach to these concepts. Case studies demonstrate their implementation in different geographical, ecological and socio-economic conditions worldwide. Prereq: ENVS 1042 or permission of instructor. Cross-listed with GEOG 4265. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4710 - Disasters, Climate Change, and Health

Summer 2010 Registration **GEOG 4710**

Provides a review of the impacts of disasters and climate change on human health, using a broad framework of preparedness, mitigation, response, recovery, and adaptation. Prereq: GEOG 2202 or GEOG 3501. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 5633 - Seminar in Natural Resource and Environmental Health Law

Summer 2010 Registration **P AD 5633**

Administrative law aspects of environmental policy implementation and enforcement, the role of courts in both stimulating and limiting statutory reform, and regulatory innovation. Focus on the legal aspects of both natural resource allocation and management, and environmental protection. Alternatives to traditional processes for environmental dispute resolution. Cross-listed with PUAD 7633. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

Techniques for Environmental Analysis

Choose one:

GEOG 4060 - Remote Sensing I: Introduction to Environmental Remote Sensing

Summer 2010 Registration **GEOG 4060**

An in-depth treatment of the use of aerial photographs and other forms of imagery for the analysis of urban-industrial patterns, vegetation, agriculture, landforms, and geologic structure. Prereq: GEOG 3080 or permission of instructor. Cross-listed with GEOG 5060, GEOL 4060, GEOL 5060. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

GEOG 5060 - Remote Sensing I: Introduction to Environmental Remote Sensing

Summer 2010 Registration **GEOG 5060**

An in-depth treatment of the use of aerial photographs and other forms of imagery for the analysis of urban-industrial patterns, vegetation, agriculture, landforms, and geologic structure. Prereq: GEOG 3080 or permission of instructor. Cross-listed with GEOG 4060, GEOL 4060, 5060. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4070 - Remote Sensing II: Advanced Remote Sensing

Summer 2010 Registration **GEOG 4070**

Focuses on digital image processing of satellite and aerial images. Students explore the nature of digital image data, gain an understanding of image analysis using PCs, and learn about the use of analysis products in the development of GIS databases. Prereq: GEOG 4060/5060 or GEOL 4060/5060 or permission of instructor. Cross-listed with GEOG 5070, GEOL 4070, 5070. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

GEOG 5070 - Remote Sensing II: Advanced Remote Sensing

Summer 2010 Registration **GEOG 5070**

Focuses on digital image processing of satellite and aerial images. Students explore the nature of digital image data, gain an understanding of image analysis using PCs, and learn about the use of analysis products in the development of GIS databases. Prereq: GEOG 5060/4060 or GEOL 5060/4060 or permission of instructor. Cross-listed with GEOG 4070, GEOL 5070, 4070. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4081 - Introduction to Cartography and Computer Mapping

Summer 2010 Registration **GEOG 4081**

Provides an introduction to the art and science of cartography (map making). Students will learn about design principles, tools and techniques of map production, culminating in the creation of a high-quality map through hands-on exercises. Prereq: GEOG 3080.

Cross-listed with GEOG 5081. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4085 - GIS Applications for the Urban Environment

Summer 2010 Registration **GEOG 4085**

Takes a more detailed look at basic concepts presented in the introductory GIS course, concentrating on how GIS is used to solve real-world geographic problems. Various GIS applications within both the natural and social sciences are highlighted. The selection of specific topics is flexible, based on the interests of enrolled students. Prereq: GEOG 4080 or GEOG 5080 or permission of instructor. Cross-listed with GEOG 5085. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

GEOG 5085 - GIS Applications for the Urban Environment

Summer 2010 Registration **GEOG 5085**

Takes a more detailed look at basic concepts presented in the introductory GIS course,

concentrating on how GIS is used to solve real-world geographic problems. Various GIS applications within both the natural and social sciences are highlighted. The selection of specific topics is flexible, based on the interests of enrolled students. Prereq: GEOG 4080 or GEOG 5080 or permission of instructor. Cross-listed with GEOG

4085.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4090 - Environmental Modeling with Geographic Information Systems

Summer 2010 Registration **GEOG 4090**

Expands the basic knowledge of GIS to spatial models. Establishes a comprehensive framework that can be used to address a wide range of applications in natural and built environments. Prereq: GEOG 4080 or GEOG 5080 or permission of instructor. Cross-listed with GEOG 5090.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

GEOG 5090 - Environmental Modeling with Geographic Information Systems

Summer 2010 Registration **GEOG 5090**

Expands the basic knowledge of GIS to spatial models. Establishes a comprehensive framework that can be used to address a wide range of applications in natural and built environments. Prereq: GEOG 4080 or GEOG 5080 or permission of instructor. Cross-listed with GEOG 4090.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4095 - Deploying GIS Functionality on the Web

Summer 2010 Registration **GEOG 4095**

Covers the core principles and technologies that allow the deployment of geographic information system (GIS) functionality over the World Wide Web. Hands-on exercises make use of the latest commercial software as well as open source technologies.

Prereq: GEOG 4080 or GEOG 5080, computer science background, or permission of instructor. Cross-listed with GEOG 5095.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

GEOG 5095 - Deploying GIS Functionality on the Web

Summer 2010 Registration **GEOG 5095**

Covers the core principles and technologies that allow the deployment of geographic information system (GIS) functionality over the World Wide Web. Hands-on exercises make use of the latest commercial software as well as open source technologies.

Prereq: GEOG 4080 or GEOG 5080, computer science background, or permission of

instructor. Cross-listed with GEOG 4095. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4235 - GIS Applications in the Health Sciences

Summer 2010 Registration **GEOG 4235**

Examines how GIS is used throughout the health care industry and public health. Covers environmental health, disease surveillance, and health services research. Students critically review current literature and gain hands-on experience with GIS software.

Prereq: GEOG 4080 or GEOG 5080, public health background, or consent of instructor.

Cross-listed with GEOG 5235, HBSC 7235. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

GEOG 5235 - GIS Applications in the Health Sciences

Summer 2010 Registration **GEOG 5235**

Examines how GIS is used throughout the health care industry and public health. Covers environmental health, disease surveillance, and health services research. Students critically review current literature and gain hands-on experience with GIS software.

Prereq: GEOG 4080 or GEOG 5080, public health background, or consent of instructor.

Cross-listed with GEOG 4235, HBSC 7235. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4770 - Applied Statistics for the Natural Sciences

Summer 2010 Registration **GEOG 4770**

Surveys statistical techniques including: quick review of basic statistics, tests for normality and outliers, display of data; simple and multiple regression; ANOVA and its relation to regression. Emphasis on computer or stat-pak analysis and interpretation of statistical results. Prereq: College algebra and GEOG 3080, or consent of instructor.

Cross-listed with ENVS 5600, GEOL 4770, 5770. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Community/Professional Experience

(optional but highly recommended)

GEOG 3939 - Internship/Cooperative Education

Summer 2010 Registration **GEOG 3939**

Designed experiences involving application of specific, relevant concepts and skills in

supervised employment situations. Prereq: Junior standing and 2.75 Gpa. **Semester Hours:** 1to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 18 Hours

OPTION TOTAL: 40 HOURS

Note: Up to 4 semester hours of honors thesis course work or up to 3 semester hours of internships may be counted toward the 18 hours of additional requirements. Such substitutions must be approved by a program option advisor.

Option 4—Urban Studies and Planning

Option Advisors: Brian Page and Amanda Weaver

Option 4 allows geography majors to concentrate on social and spatial aspects of metropolitan growth and change. Students are given the opportunity to take advanced planning courses in their junior and senior years.

OPTION 4 REQUIREMENTS

Lower Division

GEOG 1202 - Introduction to Physical Geography

Summer 2010 Registration **GEOG 1202**

The science that studies the processes, forms, and spatial or geographic structures of natural systems operating at or near the earth's surface, including weather, climate, and landform processes. **Semester Hours:** 3to 3 **GT Pathways Category Key:** GT-SC2
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 1302 - Introduction to Human Geography

Summer 2010 Registration **GEOG 1302**

Systematic introduction to basic concepts and approaches in human geographic analysis. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 1602 - Introduction to Urban Studies

Summer 2010 Registration **GEOG 1602**

Surveys the process of urbanization, emphasizing the development of American cities and using Denver as an example. Topics covered include the evolution of metropolitan

form and land use patterns, cultural landscape formation, city planning and architectural design, and urban social and policy issues. **Semester Hours:** 3to 3 **GT Pathways**

Category Key: GT-SS2

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 2080 - Introduction to Mapping and Map Analysis

Summer 2010 Registration **GEOG 2080**

Studies major elements in the preparation of thematic maps, including sources of data collection and manipulation of data, and cartographic techniques for display of data. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Upper division

GEOG 3232 - Weather and Climate

Summer 2010 Registration **GEOG 3232**

Introduces the processes and systems that govern both day-to-day weather and longer-term climate variations. Covers instrumentation and weather forecasting techniques.

Prereq: GEOG 1202 or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 3411 - Globalization and Regional Development

Summer 2010 Registration **GEOG 3411**

Addresses global political-restructuring and its implications for regional development in the U.S. Both historical and contemporary processes of globalization are examined.

Topics include: the environmental basis of American industrial growth, the relationship between technological change and geographical shifts, the rise and decline of Fordism, the transfer of Japanese manufacturing methods to the U.S., the role of regional and national industrial policy, and the social consequences of globalization for labor and communities. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4080 - Introduction to GIS

Summer 2010 Registration **GEOG 4080**

Introduces various aspects of geographic information systems (GIS), including justification, definition of hardware/software, database design, and data conversion. GIS is a computer-based mapping system providing a graphical interface to locational and relational attribute data on facilities and land. Includes hands-on use of a geographic

information system workstation. Prereq: GEOG 3080 or permission of instructor. Cross-listed with GEOG 5080. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

GEOG 5080 - Introduction to GIS

Summer 2010 Registration **GEOG 5080**

Introduces various aspects of geographic information systems (GIS), including justification, definition of hardware/software, database design, and data conversion. GIS is a computer-based mapping system providing a graphical interface to locational and relational attribute data on facilities and land. Includes hands-on use of a geographic information system workstation. Cross-listed with GEOG 4080. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 21 Hours

ADDITIONAL REQUIREMENTS

Choose six additional courses:

Urban Studies and Planning

GEOG 4640 - Urban Geography: Denver and the U.S.

Summer 2010 Registration **GEOG 4640**

Uses a combined lecture/seminar format to explore research themes in urban geography. Topics covered include both historical and contemporary processes of urban development and transformation. Particular emphasis is placed on the U.S. and Colorado's Front Range. Cross-listed with GEOG 5640. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

GEOG 5640 - Urban Geography: Denver and the U.S.

Summer 2010 Registration **GEOG 5640**

Uses a combined lecture/seminar format to explore research themes in urban geography. Topics covered include both historical and contemporary processes of urban development and transformation. Particular emphasis is placed on the U.S. and Colorado's Front Range. Cross-listed with GEOG 4640. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

Plus three courses from the following list:

GEOG 4000 - Planning Methods I

Summer 2010 Registration **GEOG 4000**

Focuses on the application of statistical, quantitative, and mathematical techniques and computer applications for urban and regional planning and policy development. Major topics include types of data, sampling, basic probability distributions, hypothesis testing, regression and correlation, and an introduction to multivariate and cluster analysis. Applications in planning and development are emphasized. Cross-listed with URPL 5510. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

URPL 5510 - Planning Methods I

Summer 2010 Registration **URP 5510**

Focuses on application of methodological techniques commonly used in planning practice. Course covers data collection, management, analysis, communication and presentation. Major topics include primary/secondary data analysis, database construction, descriptive and inferential statistics, sampling, probability distributions, hypothesis testing, and correlation. Cross-listed with GEOG 4000. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4220 - Environmental Impact Assessment

Summer 2010 Registration **GEOG 4220**

The objective of this course is to provide the foundation for understanding the environmental impact assessment process, its legal context, and the criteria and methods for procedural and substantive compliance. Prereq: URPL 5530 or permission of instructor. Cross-listed with GEOG 5220, URPL 6651. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

GEOG 5220 - Environmental Impact Assessment

Summer 2010 Registration **GEOG 5220**

The objective of this course is to provide the foundation for understanding the environmental impact assessment process, its legal context, and the criteria and methods for procedural and substantive compliance. Prereq: URPL 5530 or permission of instructor. Cross-listed with GEOG 4220, URPL 6651. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4230 - Hazard Mitigation and Vulnerability Assessment

Summer 2010 Registration **GEOG 4230**

Examines hazard mitigation and its planning and policy implications, emphasizing how vulnerability assessments play an integral role. Students explore how mitigation minimizes the impacts from hazards and use GIS to conduct a local study. Prereq: GEOG 2202 or permission of instructor. Cross-listed with GEOG 5230. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

GEOG 5230 - Hazard Mitigation and Vulnerability Assessment

Summer 2010 Registration **GEOG 5230**

Examines hazard mitigation and its planning and policy implications, emphasizing how vulnerability assessments play an integral role. Students explore how mitigation minimizes the impacts from hazards and use GIS to conduct a local study. Prereq: GEOG 2202 or permission of instructor. Cross-listed with GEOG 4230. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4260 - Natural Resource Planning and Management

Summer 2010 Registration **GEOG 4260**

Considers methods for managing renewable and non-renewable resources using both legislative and economic controls. The role of technology, ideologies, and equity are discussed. Decision making techniques are applied to problems of resource and environmental management. The ability to allocate and control resource usage to ensure sustainability are discussed. Cross-listed with URPL 6653. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

URPL 6653 - Natural Resource Planning and Management

Summer 2010 Registration **URP 6653**

Considers methods for managing renewable and non-renewable resources using both legislative and economic controls. The role of technology, ideologies, and equity are discussed. Decision making techniques are applied to problems of resource and environmental management. The ability to allocate and control resource usage to ensure sustainability is discussed. Cross-listed with Geog 4260. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4265 - Sustainability in Resources Management

Summer 2010 Registration **GEOG 4265**

Sustainability and sustainable development are the dominant economic, environmental and social issues of the 21st century. Follows a multi-disciplinary approach to these concepts. Case studies demonstrate their implementation in different geographical, ecological and socio-economic conditions worldwide. Prereq: ENVS 1042 or permission of instructor. Cross-listed with GEOG 5265. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

GEOG 5265 - Sustainability in Resources Management

Summer 2010 Registration **GEOG 5265**

Sustainability and sustainable development are the dominant economic, environmental and social issues of the 21st century. Follows a multi-disciplinary approach to these concepts. Case studies demonstrate their implementation in different geographical, ecological and socio-economic conditions worldwide. Prereq: ENVS 1042 or permission of instructor. Cross-listed with GEOG 4265. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4400 - Regional Economic Development

Summer 2010 Registration **GEOG 4400**

Examines the economies of metropolitan, rural, state, and national regions, placing each within the fabric of global relations that direct capital, manage productive activities, and govern prosperity's geography. Organized both sectorally and spatially, the course addresses key sectors of the emerging global economy, as well as the rationale of the "entrepreneurial" state at the public-private interface. Posits institutional approaches and professional roles in the management of regional economies. Seeks in theory a template of regional change, and both the means and purpose of policy intervention. Finds in strategic planning, an integration of developmental and environmental perspectives. Prereq: URPL 5520 or permission of instructor. Cross-listed with URPL 6671. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

URPL 6671 - Regional Economic Development

Summer 2010 Registration **URP 6671**

Examines the economies of metropolitan, rural, state, and national regions, placing each within the fabric of global relations that direct capital, manage productive activities, and govern prosperity's geography. Organized both sectorally and spatially, the course addresses key sectors of the emerging global economy, as well as the rationale of the "Entrepreneurial" state at the public-private interface. Posits institutional approaches and professional roles in the management of regional economies. Seeks in theory a

template of regional change, and both the means and purpose of policy intervention. Finds in strategic planning an integration of developmental and environmental perspectives. Prereq: Urp 5520 or permission of instructor. Cross-listed with Geog 4400.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4630 - Transportation Planning I: Transport Network Analysis

Summer 2010 Registration **GEOG 4630**

Examines several important aspects of the transport network: accessibility and connectivity of nodes and linkages and the volume and direction of the flow of a transport network. Descriptive, predictive, and planning methods and models discussed include graph theoretical measures, connectivity matrices, gravity model, abstract mode model, entropy-maximization, trip generation model and flow allocation models. Prereq: URPL 5510 or permission of instructor. Cross-listed with URPL 6673.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

URPL 6673 - Transportation Planning I: Land Use and Transport

Summer 2010 Registration **URP 6673**

Examines several important aspects of the transport network: accessibility and connectivity of nodes and linkages and the volume and direction of the flow of a transport network. Descriptive, predictive, and planning methods and models discussed include graph theoretical measures, connectivity matrices, gravity model, abstract mode model, entropy-maximization, trip generation model and flow allocation models. Prereq: Urp 5510 or permission of instructor. Cross-listed with Geog 4630.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4670 - Transportation Planning II: Urban Transportation Planning

Summer 2010 Registration **GEOG 4670**

Examines major issues of transportation in urban development, the urban transportation system, the relationship between land use planning and transportation planning, urban transportation planning processes and selected issues. Introduces the use of two state-of-the-art multi-modal transportation computer programs - EMME2 and TransCAD. Prereq: URPL 6673. Cross-listed with URPL 6674.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

URPL 6674 - Transportation Planning II

Summer 2010 Registration **URP 6674**

Examines issues of transportation in urban development, the urban transportation system, the relationship between land use planning and transportation planning, urban transportation planning processes and selected issues. Covers theoretical, policy, and practical perspectives to understand the merits of employing specific planning policies or other infrastructure investments. Prereq: Urp 6673. Cross-listed with Geog 4670. **Semester Hours:** 3 to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4710 - Disasters, Climate Change, and Health

Summer 2010 Registration **GEOG 4710**

Provides a review of the impacts of disasters and climate change on human health, using a broad framework of preparedness, mitigation, response, recovery, and adaptation. Prereq: GEOG 2202 or GEOG 3501. **Semester Hours:** 3 to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

URPL 5501 - Planning Issues and Processes

Summer 2010 Registration **URP 5501**

Provides an overview of planning history and theory. The philosophical, political, and economic roots of the various theories are discussed. Ideas are placed in the context of the planning profession's history and its present aims, interests, and ethics. **Semester Hours:** 3 to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Techniques for Urban Analysis

Choose one:

GEOG 4060 - Remote Sensing I: Introduction to Environmental Remote Sensing

Summer 2010 Registration **GEOG 4060**

An in-depth treatment of the use of aerial photographs and other forms of imagery for the analysis of urban-industrial patterns, vegetation, agriculture, landforms, and geologic structure. Prereq: GEOG 3080 or permission of instructor. Cross-listed with GEOG 5060, GEOL 4060, GEOL 5060. **Semester Hours:** 3 to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

GEOG 5060 - Remote Sensing I: Introduction to Environmental Remote Sensing

Summer 2010 Registration **GEOG 5060**

An in-depth treatment of the use of aerial photographs and other forms of imagery for the analysis of urban-industrial patterns, vegetation, agriculture, landforms, and geologic structure. Prereq: GEOG 3080 or permission of instructor. Cross-listed with GEOG 4060, GEOL 4060, 5060. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4070 - Remote Sensing II: Advanced Remote Sensing

Summer 2010 Registration **GEOG 4070**

Focuses on digital image processing of satellite and aerial images. Students explore the nature of digital image data, gain an understanding of image analysis using PCs, and learn about the use of analysis products in the development of GIS databases. Prereq: GEOG 4060/5060 or GEOL 4060/5060 or permission of instructor. Cross-listed with GEOG 5070, GEOL 4070, 5070. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

GEOG 5070 - Remote Sensing II: Advanced Remote Sensing

Summer 2010 Registration **GEOG 5070**

Focuses on digital image processing of satellite and aerial images. Students explore the nature of digital image data, gain an understanding of image analysis using PCs, and learn about the use of analysis products in the development of GIS databases. Prereq: GEOG 5060/4060 or GEOL 5060/4060 or permission of instructor. Cross-listed with GEOG 4070, GEOL 5070, 4070. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4081 - Introduction to Cartography and Computer Mapping

Summer 2010 Registration **GEOG 4081**

Provides an introduction to the art and science of cartography (map making). Students will learn about design principles, tools and techniques of map production, culminating in the creation of a high-quality map through hands-on exercises. Prereq: GEOG 3080.

Cross-listed with GEOG 5081. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4085 - GIS Applications for the Urban Environment

Summer 2010 Registration **GEOG 4085**

Takes a more detailed look at basic concepts presented in the introductory GIS course, concentrating on how GIS is used to solve real-world geographic problems. Various GIS

applications within both the natural and social sciences are highlighted. The selection of specific topics is flexible, based on the interests of enrolled students. Prereq: GEOG 4080 or GEOG 5080 or permission of instructor. Cross-listed with GEOG

5085.Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

GEOG 5085 - GIS Applications for the Urban Environment

Summer 2010 Registration **GEOG 5085**

Takes a more detailed look at basic concepts presented in the introductory GIS course, concentrating on how GIS is used to solve real-world geographic problems. Various GIS applications within both the natural and social sciences are highlighted. The selection of specific topics is flexible, based on the interests of enrolled students. Prereq: GEOG 4080 or GEOG 5080 or permission of instructor. Cross-listed with GEOG

4085.Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4090 - Environmental Modeling with Geographic Information Systems

Summer 2010 Registration **GEOG 4090**

Expands the basic knowledge of GIS to spatial models. Establishes a comprehensive framework that can be used to address a wide range of applications in natural and built environments. Prereq: GEOG 4080 or GEOG 5080 or permission of instructor. Cross-listed with GEOG 5090.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

GEOG 5090 - Environmental Modeling with Geographic Information Systems

Summer 2010 Registration **GEOG 5090**

Expands the basic knowledge of GIS to spatial models. Establishes a comprehensive framework that can be used to address a wide range of applications in natural and built environments. Prereq: GEOG 4080 or GEOG 5080 or permission of instructor. Cross-listed with GEOG 4090.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4095 - Deploying GIS Functionality on the Web

Summer 2010 Registration **GEOG 4095**

Covers the core principles and technologies that allow the deployment of geographic information system (GIS) functionality over the World Wide Web. Hands-on exercises make use of the latest commercial software as well as open source technologies.

Prereq: GEOG 4080 or GEOG 5080, computer science background, or permission of instructor. Cross-listed with GEOG 5095. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

GEOG 5095 - Deploying GIS Functionality on the Web

Summer 2010 Registration **GEOG 5095**

Covers the core principles and technologies that allow the deployment of geographic information system (GIS) functionality over the World Wide Web. Hands-on exercises make use of the latest commercial software as well as open source technologies.

Prereq: GEOG 4080 or GEOG 5080, computer science background, or permission of instructor. Cross-listed with GEOG 4095. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4235 - GIS Applications in the Health Sciences

Summer 2010 Registration **GEOG 4235**

Examines how GIS is used throughout the health care industry and public health. Covers environmental health, disease surveillance, and health services research. Students critically review current literature and gain hands-on experience with GIS software.

Prereq: GEOG 4080 or GEOG 5080, public health background, or consent of instructor.

Cross-listed with GEOG 5235, HBSC 7235. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

GEOG 5235 - GIS Applications in the Health Sciences

Summer 2010 Registration **GEOG 5235**

Examines how GIS is used throughout the health care industry and public health. Covers environmental health, disease surveillance, and health services research. Students critically review current literature and gain hands-on experience with GIS software.

Prereq: GEOG 4080 or GEOG 5080, public health background, or consent of instructor.

Cross-listed with GEOG 4235, HBSC 7235. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Community/Professional Experience

(optional but highly recommended)

GEOG 3939 - Internship/Cooperative Education

Summer 2010 Registration **GEOG 3939**

Designed experiences involving application of specific, relevant concepts and skills in supervised employment situations. Prereq: Junior standing and 2.75 Gpa. **Semester**

Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 18 Hours

OPTION TOTAL: 39 HOURS

Note: Up to 4 semester hours of honors thesis course work or up to 3 semester hours of internship may be counted toward the 18 hours of additional requirements. Such substitutions must be approved by a program option advisor.

Option 5—Earth Science

Option Advisor: Ryan Sincavage

Option 5 allows geography majors to concentrate on studying natural and physical processes within and on the surface of the planet.

OPTION 5 REQUIREMENTS

Lower division

ENVS 1342 - Introduction to Environment and Society

Summer 2010 Registration **ENVS 1342**

Overview of perspectives on environmental issues within the context of sustainable development and taking a systems approach. The focus is on social science approaches to explore the human footprint on the earth, environmentalism, scientific uncertainty, policy creation and social change. **Semester Hours:** 3to 3 **GT Pathways Category Key:** GT-SS2

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

GEOG 1302 - Introduction to Human Geography

Summer 2010 Registration **GEOG 1302**

Systematic introduction to basic concepts and approaches in human geographic

analysis. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOL 1072 - Physical Geology: Surface Processes

Summer 2010 Registration **GEOL 1072**

Introductory course in physical geology that covers surface processes and landforms, and includes one all-day field trip. Note: Required for geology majors. **Semester Hours:** 4to 4**GT Pathways Category Key:** GT-SC1

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOL 1082 - Physical Geology: Internal Processes

Summer 2010 Registration **GEOL 1082**

Introductory course in physical geology that covers internal processes and properties of the earth's interior, with plate tectonics as the underlying theme. Includes one all-day field trip. Note: Required for geology majors. **Semester Hours:** 4to 4**GT Pathways Category Key:** GT-SC1

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 2080 - Introduction to Mapping and Map Analysis

Summer 2010 Registration **GEOG 2080**

Studies major elements in the preparation of thematic maps, including sources of data collection and manipulation of data, and cartographic techniques for display of data. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Upper division

GEOG 3411 - Globalization and Regional Development

Summer 2010 Registration **GEOG 3411**

Addresses global political-restructuring and its implications for regional development in the U.S. Both historical and contemporary processes of globalization are examined. Topics include: the environmental basis of American industrial growth, the relationship between technological change and geographical shifts, the rise and decline of Fordism, the transfer of Japanese manufacturing methods to the U.S., the role of regional and national industrial policy, and the social consequences of globalization for labor and

communities.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

GEOG 4335 - Contemporary Environmental Issues

Summer 2010 Registration **GEOG 4335**

Provides an overview of environmental challenges facing society today, focusing on how humans impact and change the environment. Opposing views and environmental policy at the local, state, national, and international levels are explored. Cross-listed with GEOG 5335.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

GEOG 5335 - Contemporary Environmental Issues

Summer 2010 Registration **GEOG 5335**

Provides an overview of environmental challenges facing society today, focusing on how humans impact and change the environment. Opposing views and environmental policy at the local, state, national, and international levels are explored. Cross-listed with GEOG 4335.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4080 - Introduction to GIS

Summer 2010 Registration **GEOG 4080**

Introduces various aspects of geographic information systems (GIS), including justification, definition of hardware/software, database design, and data conversion. GIS is a computer-based mapping system providing a graphical interface to locational and relational attribute data on facilities and land. Includes hands-on use of a geographic information system workstation. Prereq: GEOG 3080 or permission of instructor. Cross-listed with GEOG 5080.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

GEOG 5080 - Introduction to GIS

Summer 2010 Registration **GEOG 5080**

Introduces various aspects of geographic information systems (GIS), including justification, definition of hardware/software, database design, and data conversion. GIS is a computer-based mapping system providing a graphical interface to locational and relational attribute data on facilities and land. Includes hands-on use of a geographic

information system workstation. Cross-listed with GEOG 4080. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 20 Hours

ADDITIONAL REQUIREMENTS

Choose six additional courses:

Earth Science

GEOG 3232 - Weather and Climate

Summer 2010 Registration **GEOG 3232**

Introduces the processes and systems that govern both day-to-day weather and longer-term climate variations. Covers instrumentation and weather forecasting techniques.

Prereq: GEOG 1202 or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4240 - Principles of Geomorphology

Summer 2010 Registration **GEOG 4240**

Systematic study of processes associated with rock structures, weathering, mass wasting, fluvial, wind, glacial, and shorelines, and the resultant landforms they can produce, influence, and change over time. Course includes field trips and in-class exercises to help solidify concepts. Cross-listed with GEOL 4630 and GEOG 5240. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOL 3011 - Mineralogy

Summer 2010 Registration **GEOL 3011**

Principles of mineralogy, including crystallography, crystal chemistry, and a systematic study of the more important nonsilicate and silicate minerals. Origins and occurrences of minerals. Prereq: Physical geology and college-level chemistry. **Semester Hours:** 4to 4
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOL 3421 - Sedimentation and Stratigraphy

Summer 2010 Registration **GEOL 3421**

Introduces the principles of sedimentology and stratigraphy. Emphasis is on dynamic processes within sedimentary environments and the resulting stratigraphic record.

Prereq: GEOL 1082 or equivalent. **Semester Hours:** 4to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

Plus one of the following courses:

GEOG 3240 - Colorado Climates

Summer 2010 Registration **GEOG 3240**

Provides a broad overview of the various weather and climate patterns that are found within the state of Colorado. To accomplish this, the state of Colorado will be divided into regions which (hopefully) have a large degree of homogeneity in terms of weather and climate controls. Note: Taught in a seminar style with students giving presentations and reports on their findings about a given region. Prereq: GEOG 1202 and/or GEOG 3232 or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4010 - Landscape Geochemistry

Summer 2010 Registration **GEOG 4010**

A holistic approach to studying the role chemical elements play in synthesis/decomposition cycles, and the resultant environment from interaction of the lithosphere with the hydrosphere, atmosphere, biosphere, and pedosphere during geological and ecological timeframes, together with anthropogenic activities. Prereq: Introductory college-level physical geography or environmental science course or permission of instructor. Cross-listed with GEOL 4010/ENVS 5010. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4020 - Earth Environments and Human Impacts

Summer 2010 Registration **GEOG 4020**

Basic concepts describing earth's biomes and physical environment are presented in a systems context. Global warming assessment, from both political and scientific perspectives, is then presented. Model visualization of these concepts to consider human impacts on Earth's biomes is discussed. Earth system viewpoint, having links of Earth's biomes to oceans and atmosphere, completes the course discussion. Prereq: GEOG 1202 and 3232 or permission of instructor. Cross-listed with ENVS 5020, GEOL 4020. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4095 - Deploying GIS Functionality on the Web

Summer 2010 Registration **GEOG 4095**

Covers the core principles and technologies that allow the deployment of geographic information system (GIS) functionality over the World Wide Web. Hands-on exercises make use of the latest commercial software as well as open source technologies.

Prereq: GEOG 4080 or GEOG 5080, computer science background, or permission of

instructor. Cross-listed with GEOG 5095. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.
-OR-

GEOG 5095 - Deploying GIS Functionality on the Web

Summer 2010 Registration **GEOG 5095**

Covers the core principles and technologies that allow the deployment of geographic information system (GIS) functionality over the World Wide Web. Hands-on exercises make use of the latest commercial software as well as open source technologies.

Prereq: GEOG 4080 or GEOG 5080, computer science background, or permission of instructor. Cross-listed with GEOG 4095. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4270 - Glacial Geomorphology

Summer 2010 Registration **GEOG 4270**

Provides an in-depth view of the processes and systems found in glacial environments. Topics include: evidence of past glaciation; present-day glacial extent; glacier dynamics; glacial erosional processes and landforms; glacial depositional processes and landforms. Prereq: GEOG 1202 or GEOL 1072. Cross-listed with GEOG/GEOL 4270/5270. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOL 3032 - Geology of Colorado

Summer 2010 Registration **GEOL 3032**

Introductory course focused on the geology of Colorado. The course is divided into two parts: the first half covers general principles of geology, and the second is devoted to the observation of rock types, structures, and geologic relationships in the field. Discussion of plate tectonics, rock formation, construction and interpretation of geologic maps, the geologic time scale, geologic provinces of Colorado, evolution of major landforms, formation and development of mineral resources of Colorado, and current topics in environmental geology. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOL 4030 - Environmental Geology

Summer 2010 Registration **GEOL 4030**

Applies geological information to interactions between people and the physical

environment. Increasing awareness of its importance in our society means that this is an expanding field as companies are required to address the environmental consequences of their actions. Prereq: Entry into MSES program, senior standing in sciences or geography, or permission of instructor. Cross-listed with ENVS 5030 and GEOL 5030.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

ENVS 5030 - Environmental Geology

Summer 2010 Registration **ENVS 5030**

Applies geological information to interactions between people and the physical environment. Increasing awareness of its importance in our society means that this is an expanding field as companies are required to address the environmental consequences of their actions. Prereq: Entry into MSES program, senior standing in sciences or geography, or permission of instructor. Cross-listed with GEOL 4030 and 5030.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOL 4111 - Field Geology

Summer 2010 Registration **GEOL 4111**

Introduces methods of geologic mapping in sedimentary, igneous and metamorphic rocks. Includes plane table surveying, brunton and pace methods, and the use of aerial photographs. Prereq: GEOL 3011; GEOL 3231 and 3421 strongly recommended.**Semester Hours:** 5to 5

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOL 4402 - Unsaturated Zone Hydrology

Summer 2010 Registration **GEOL 4402**

Focuses on water and contaminant transport through the unsaturated zone, infiltration and drainage, and heat and gas transport. Students learn to design, perform field installation, and collect data in order to model and predict contaminant movement on/off site. Prereq: Chemistry, physics, calculus or permission of instructor. Cross-listed with ENVS 5403.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Techniques for Earth Science Analysis

Choose one:

GEOG 4060 - Remote Sensing I: Introduction to Environmental Remote Sensing

Summer 2010 Registration **GEOG 4060**

An in-depth treatment of the use of aerial photographs and other forms of imagery for the analysis of urban-industrial patterns, vegetation, agriculture, landforms, and geologic structure. Prereq: GEOG 3080 or permission of instructor. Cross-listed with GEOG 5060, GEOL 4060, GEOL 5060. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

GEOG 5060 - Remote Sensing I: Introduction to Environmental Remote Sensing

Summer 2010 Registration **GEOG 5060**

An in-depth treatment of the use of aerial photographs and other forms of imagery for the analysis of urban-industrial patterns, vegetation, agriculture, landforms, and geologic structure. Prereq: GEOG 3080 or permission of instructor. Cross-listed with GEOG 4060, GEOL 4060, 5060. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4090 - Environmental Modeling with Geographic Information Systems

Summer 2010 Registration **GEOG 4090**

Expands the basic knowledge of GIS to spatial models. Establishes a comprehensive framework that can be used to address a wide range of applications in natural and built environments. Prereq: GEOG 4080 or GEOG 5080 or permission of instructor. Cross-listed with GEOG 5090. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

GEOG 5090 - Environmental Modeling with Geographic Information Systems

Summer 2010 Registration **GEOG 5090**

Expands the basic knowledge of GIS to spatial models. Establishes a comprehensive framework that can be used to address a wide range of applications in natural and built environments. Prereq: GEOG 4080 or GEOG 5080 or permission of instructor. Cross-listed with GEOG 4090. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4095 - Deploying GIS Functionality on the Web

Summer 2010 Registration **GEOG 4095**

Covers the core principles and technologies that allow the deployment of geographic information system (GIS) functionality over the World Wide Web. Hands-on exercises make use of the latest commercial software as well as open source technologies.

Prereq: GEOG 4080 or GEOG 5080, computer science background, or permission of instructor. Cross-listed with GEOG 5095. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

GEOG 5095 - Deploying GIS Functionality on the Web

Summer 2010 Registration **GEOG 5095**

Covers the core principles and technologies that allow the deployment of geographic information system (GIS) functionality over the World Wide Web. Hands-on exercises make use of the latest commercial software as well as open source technologies.

Prereq: GEOG 4080 or GEOG 5080, computer science background, or permission of instructor. Cross-listed with GEOG 4095. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4770 - Applied Statistics for the Natural Sciences

Summer 2010 Registration **GEOG 4770**

Surveys statistical techniques including: quick review of basic statistics, tests for normality and outliers, display of data; simple and multiple regression; ANOVA and its relation to regression. Emphasis on computer or stat-pak analysis and interpretation of statistical results. Prereq: College algebra and GEOG 3080, or consent of instructor. Cross-listed with ENV5 5600, GEOL 4770, 5770. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

GEOL 4770 - Applied Statistics for the Natural Sciences

Summer 2010 Registration **GEOL 4770**

Surveys statistical techniques including: quick review of basic statistics, tests for normality and outliers, display of data; simple and multiple regression; Anova and its relation to regression. Emphasis on computer or stat-pak analysis and interpretation of statistical results. Prereq: College algebra and GEOG 3080, or consent of instructor. Cross-listed with GEOL 5770, GEOG 4770, ENV5 5600. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOL 4111 - Field Geology

Summer 2010 Registration **GEOL 4111**

Introduces methods of geologic mapping in sedimentary, igneous and metamorphic rocks. Includes plane table surveying, brunton and pace methods, and the use of aerial photographs. Prereq: GEOL 3011; GEOL 3231 and 3421 strongly recommended. **Semester Hours:** 5to 5
Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 20 Hours

OPTION TOTAL: 40 HOURS

Senior Exit Examination

All majors are required to take a senior exit examination based on required courses in the discipline.

History BA

The bachelor's degree in history provides students with firm grounding for advanced studies in education, librarianship, law, business and public service, as well as graduate work in the humanities and social sciences broadly. History is an all-inclusive discipline, making it an excellent choice for students with a wide variety of career goals.

Students must declare a major by the time they have completed 60 semester hours of course work. For the BA in history, students must complete a minimum of 36 semester hours of history course work. Majors must complete at least 18 upper-division (3000- and 4000-level) hours at the University of Colorado Denver. Not more than 48 hours of history will be counted toward graduation requirements. No grade below a C (2.0) will count toward major requirements to graduate.

Course Requirements

Required History Courses

HIST 3031 - Theory and Practice of History: An Introduction to the Major

Summer 2010 Registration **HIST 3031**

Introduces history majors to the discipline at the outset of their course work. Covers historiographical trends and methodologies, and familiarizes students with the various types of research and writing they are likely to encounter in their classes. Note: This course should be taken as early as possible, and must be taken before HIST

4839. Semester Hours: 3 to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4839 - History Seminar

Summer 2010 Registration **HIST 4839**

Covers the use of documentary sources and historical criticism, with students utilizing these skills in a historical research paper. Note: Required for history majors. Preferably

taken in the senior year. Prereq: HIST 3031. **Semester Hours:** 3 to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

Students must complete HIST 3031 before enrolling in HIST 4839.
Majors must take a minimum of 15 credit hours in History at the 4000-level, including HIST 4839.

Total: 6 Hours

Distribution Requirement

A minimum of 6 semester hours in each of the following areas: United States, Europe and world (Africa, Asia, Latin America). At least 3 semester hours in each area must be upper-division (3000- and 4000-level).

Total: 18 Hours

Electives

The degree requires a minimum of 12 additional semester hours of electives, which can be satisfied by a combination of additional history courses, history internships, or history honors independent study for eligible students.

Total: 12 Hours

Major Total: 36 Hours

BA in History with Secondary Licensure

Students seeking secondary social studies teacher licensure may pursue a BA in history. This option enables them to complete their history major as well as fulfill requirements for licensure at the undergraduate level.

If you are interested in this option, you should meet with a CLAS advisor as soon as possible. You can complete your degree, including licensure, within a 4-year graduation plan, but only if you declare it early in your college career and meet regularly with your advisors.

To earn the professional teacher licensure, you will complete a major in history and then complete the teacher licensure requirements through the School of Education & Human

Development (SEHD). The licensure process requires that you be admitted into the SOEHD to complete licensure classes. You will be working with your CLAS advisor through the application process.

Get to know your advisor! He/she is your guide through what can be a complex process dictated by the State of Colorado. Call 303-556-8316 for more information.

Human Resources Management Emphasis—BS in Business Administration

Human resources management offers opportunities for students to develop professional competence in the areas of personnel administration and development. Students acquire an understanding of, and skills in, developing and implementing human resources systems, including recruitment, selection, evaluation, training, motivation and compensation.

Required Course

MGMT 3010 - Managing People for a Competitive Advantage

Summer 2010 Registration **MGMT 3010**

Provides an overview of the management of human resources in organizations. Areas of study include recruitment, selection, training, career development, performance appraisal, compensation and employee or labor relations. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

Electives

Choose two:

MGMT 4420 - Human Resources Management: Staffing

Summer 2010 Registration **MGMT 4420**

Methods, theories, research findings, and issues in staffing. Topics include performance-based framework for selecting employees, establishing performance expectations, planning the recruitment process and finding valid and useful tools to select the best candidate. Prereq: MGMT 3010 (may be taken concurrently). **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MGMT 4430 - Human Resources Management: Training

Summer 2010 Registration **MGMT 4430**

Methods, theories, research findings, and issues in training. Topics include how to design, deliver, and evaluate training programs. Prereq: MGMT 3010 (may be taken concurrently). Cross-listed with MGMT 6720. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MGMT 4440 - Human Resource Management: Performance Management

Summer 2010 Registration **MGMT 4440**

Focuses on the design and implementation of human resource management systems to assess and enhance employee performance. Areas of study include performance definition and measurement, goal setting, feedback, employee development, rater training, and pay for performance. Prereq: MGMT 3010 (may be taken concurrently). **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MGMT 4450 - Human Resources Management: Compensation

Summer 2010 Registration **MGMT 4450**

Develop and administer pay systems considering economic and social pressures, traditional approaches and strategic choices in managing compensation. Current theory research and practice. Students design a compensation strategy and a system that translates that strategy into reality. Prereq: MGMT 3010 (may be taken concurrently). Cross-listed with MGMT 6740. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

Management Electives

Choose three:

Any MGMT Course (3 semester hours)

BLAW 4120 - Legal Issues for Entrepreneurs

Summer 2010 Registration **BLAW 4120**

Skills in legal and factual analysis and the application of ethical theories are addressed with an emphasis on applicability for entrepreneurs. The cases are drawn from a variety of functional areas such as accounting, information systems, finance, management,

marketing and production. Topics include securities, venture capital, employment law and consumer law. Cross-listed with ENTP 3120.**Semester Hours:** 3to 3**When Offered:** FASPRSUM

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENTP 3000 - Principles of Entrepreneurship

Summer 2010 Registration **ENTP 3000**

Focuses on the concepts, skills, know-how, practical information, attitudes and alternatives that are relevant for start-up companies. The materials are designed to enhance the student's capacity to anticipate HR, financial, marketing problems through the application of proper planning. The primary objective of the course is to teach participants the practical aspects of entrepreneurship in order to change the odds of success.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 18 Hours

Individually Structured Major BA

Requirements for the Major

The ISM program plan requires course work over two or three disciplines. A discipline is defined as a single department or program such as biology, ethnic studies or math. The ISM program plan must comply with the following policies:

- Between 48 and 54 semester hours are allowed for the program plan.
- A minimum of 16 semester hours must be upper-division credit.
- Each discipline requires a minimum of 15 semester hours, of which at least 3 must be upper-division hours.
- A minimum of 6 semester hours in each discipline must be taken from Downtown Campus faculty.
- A maximum of one discipline may be outside CLAS.
- A third optional discipline may be a mixture of course work, excluding courses from the first and second disciplines.
- An ISM title must be consistent with the academic theme and disciplines in the program plan.

The ISM program plan contract is approved by faculty for each discipline and submitted to the CLAS Advising Office, North Classroom, 4002, for college approval by the

associate dean. The ISM program plan must be approved before one-third of the ISM course work is completed. Typically, a maximum of 18-21 hours of previously completed courses is allowed.

Graduation requirements for ISM students include a minimum 2.0 GPA for all ISM course work, a minimum 2.0 GPA in each discipline in the program plan and a minimum of 24 hours of course work taken from Downtown Campus faculty.

Information Systems Emphasis—BS in Business Administration

The information systems program at the University of Colorado Denver is a nationally accredited program for students who want to design and implement effective solutions to meet organizational and management needs for information, control and decision making.

An information systems (ISMG) emphasis draws on a diverse set of skills and strengths requiring creative and innovative thinking at the intersections of disciplinary knowledge and practice. Information systems students learn how information technology, effective teamwork and leadership and sound project management combine to enable innovation and change, to improve organizational agility and to add competitive value. Courses require extensive hands-on projects, teamwork and use of high-end technology. A combination of technical skills gained in class work with broad based business process knowledge enables our graduates to be ideally situated to take leading roles in shaping the technology-based future of employers in the Rocky Mountain region and the nation.

Undergraduate options

The Business School at the University of Colorado Denver offers a bachelor of science in business administration where you may choose information systems as your primary core specialty:

- Information Systems, Bachelor of Science in Business Administration degree

Or you may choose to add an information systems speciality to another business discipline.

- Accounting and Information Systems emphasis
- Financial Management Systems emphasis
- Management and Information Systems emphasis
- Marketing and Information Systems emphasis

Career Opportunities

Careers in information systems continue to be one of the highest growth markets in the business world. A student completing the information systems program curriculum will be prepared for challenging careers as business analyst, database analyst, Web content manager, project manager, IT consultant and information auditing and compliance specialist. Employment possibilities include financial operations, health care, management consulting, service operations, transportation and logistics and government.

Information systems is becoming the foundation of all business activities, and a solid understanding of the role of information systems in business and in the national and global economy is now critical for every business student. The information systems emphasis focuses on effective use of information technology in business. You are equipped with logical and analytical thinking in all areas of business and a strong basis for continued career growth in a variety of growing professions. You will develop the technical skills, business know-how and administrative insights required for acquisition, deployment and management of IT resources and services development, operation and evolution of IS infrastructure for use in accounting, finance, marketing, management and other business processes.

Curriculum

The courses emphasize both team and individual work, allowing students to gain critical thinking skills, knowledge and experience to analyze, design, program, implement and use information.

Requirements for the Information Systems emphasis

Lower Division

ISMG 2050 - Introduction to Business Problem Solving

Summer 2010 Registration **ISMG 2050**

Focuses on the technology and problem solving skills necessary for students to succeed both at school and in the business world. Focuses on business decision making using spreadsheets, database and web tools. Students solve problems in statistics, accounting, finance, marketing, management and information systems. The objective is to provide problem solving methods necessary for students to succeed in the business community. This is a business core course therefore a grade of a 'C' or better must be

earned to satisfy Business graduation and prerequisites for other business courses.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 2800 - Designing for the Web

Summer 2010 Registration **ISMG 2800**

Students examine how the Web is evolving to support a variety of business needs. The course covers the design and usability principals necessary for improving online interactions via traditional websites as well as using technologies promoting collaboration and information sharing (e.g. social networks, blogs, wikis, forms). Topics include: the principles of web page and web site design; hypertext markup language, cascading style sheets, streaming video, online collaboration technologies; client and server scripting; and the process of testing and publishing web sites. Prereq: ISMG 2050 or taken concurrently with ISMG 2050.**Semester Hours:** 3to 3**When Offered:** *SPRING*
Registration is changing. Visit our website for details ucdenver.edu/registration.

Upper Division: Junior Year

ISMG 3000 - Principles of Information Systems

Summer 2010 Registration **ISMG 3000**

Covers the role of information technology in business organizations. It exposes students to innovative and interesting technologies and illustrates how those technologies are changing the way businesses operate. It highlights the importance of IT in organizations, including the relationship between technology & competitiveness, the alignment of business and IT strategy, the development and management of an effective IT infrastructure and the use of IT strategy, the development and management of an effective IT infrastructure and the use of IT-enabled organizational processes. Topics include: coping with information intensity, web sites, social networks and blogs; business intelligence at each level of management; IT based reports and data; collaboration and the impact of technology on organizational interaction; the use of IT for controlling and enhancing business processes; security, privacy & disaster recovery; and emerging technologies. Note: Business core course therefore a grade of a "C" or better must be earned to satisfy graduation requirements.**Semester Hours:** 3to 3**When Offered:** *FALL SPR*

Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 3500 - Enterprise Data and Content Management

Summer 2010 Registration **ISMG 3500**

The success of today's business often hinges on the ability to turn mountains of data into critical information to make right decisions quickly and efficiently. This course introduces students to data, content and multimedia management using current enterprise data

management tools. Topics include: Oracle SQL for relational database and for multi-media content; Oracle forms and reports, XML, and content management. Prereq: ISMG 2050 or equivalent, transfer credit VALIDATION (may need ISMG 2075 - 1 credit). **Semester Hours:** 3to 3**When Offered:** FALL

Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 3600 - System Strategy, Architecture and Design

Summer 2010 Registration ISMG 3600

This course is designed to provide the understanding of current concepts related to information systems development in an organizational context. It emphasizes the interactive nature of the analysis and design process. Topics include: requirements analysis, model based analysis and design; evaluating outsourcing, COTS and other systems acquisition options; and quality, six-sigma, and ethics in design. New concepts such as agile modeling and extreme programming are covered. Prereq: ISMG 2050 or equivalent, transfer credit VALIDATION (may need ISMG 2075 - 1 credit). **Semester**

Hours: 3to 3**When Offered:** SPRING

Registration is changing. Visit our website for details ucdenver.edu/registration.

Upper Division: Senior Year

ISMG 4200 - Building Business Applications

Summer 2010 Registration ISMG 4200

Examines how business technologies are designed and implemented. Usability, logic, and platform selection issues are highlighted through the development of simple business systems. Includes Windows interface design; storing, retrieving, and manipulating information; real time decision making; task automation through iteration; platform selection (mobile, desktop or web); and web programming. Prereq: ISMG 2800. **Semester Hours:** 3to 3**When Offered:** FALL

Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 4700 - Business Data Communications and Networking

Summer 2010 Registration ISMG 4700

Provides an in-depth knowledge of data communications and networking requirements including: networking and telecommunications technologies, hardware, and software. Emphasis is upon the analysis and design of networking applications in organizations. Management of telecommunications networks, cost-benefit analysis, and evaluation of connectivity options are also covered. Students learn to evaluate, select, and implement

different communication options within an organization. Topics include: network hardware and software; network configuration; network applications; distributed versus centralized systems; network architectures, topologies and protocols; network performance analysis; privacy, security, reliability; management of telecommunications, and communications standards. Prereq: Jr. Standing. **Semester Hours:** 3to 3**When Offered:** *SPRING*

Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 4900 - Project Management and Practice

Summer 2010 Registration **ISMG 4900**

Covers the factors necessary for successful management of enhancement projects. Both technical and behavioral aspects of project management are discussed. The focus is on management of development for enterprise-level systems. Topics include: managing the system lifecycle; requirements determination, logical design, physical design, testing, implementation; metrics for project management; managing expectations: superiors, users, team members and others related to the project; determining skill requirement and staffing the project; cost-effectiveness analysis; reporting and presentation techniques; effective management of both behavioral and technical aspects of the project; change management. Note: Successful completion of this course meets the educational requirements to sit for both the PMP and CAPM exams. Prereq: ISMG 2200. Cross-listed with CSCI 4900 and MGMT 4900. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Important note

It is particularly important to take the required courses in the proper sequence to fulfill the prerequisites and ensure you can complete your degree within four years. Please refer to the sample degree plan for the recommended course sequence.

Information Systems Electives

ACCT 3054 - Accounting Systems and Data Processing

Summer 2010 Registration **ACCT 3054**

The design and analysis of accounting information systems, with special emphasis on computers and computer programming, and the role of accounting in the role of accounting in the management process. Must earn a grade of 'C' or better to qualify for graduation. Prereq: Completion of ACCT 2220 and ISMG 2050 with a grade of 'C' or better (Strictly enforced). **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 2312 - Intermediate Programming

Summer 2010 Registration C SC 2312

Programming topics in the C++ language. The emphasis is on problem solving using object oriented and Generic Programming. Topics include advanced I/O, classes, inheritance, polymorphism and virtual functions, abstract base classes, exception handling, templates, and the Standard Template Library. Prereq: CSCI 1410. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 2421 - Data Structures and Program Design

Summer 2010 Registration C SC 2421

Topics include a first look at an algorithm, data structures, abstract data types, and basic techniques such as sorting, searching, and recursion. Programming exercises are assigned through the semester. Prereq: ENGL 1020, CSCI 2312. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 4300 - Information Security and Compliance

Summer 2010 Registration ISMG 4300

This course covers information security threats and various mechanisms available to organizations to defend against information compromise. It offers thorough analysis of state, national, and international information security regulations with which businesses must comply, including the Sarbanes-Oxley, Gramm-Leach-Bliley and Hippa Acts. The regulatory compliance analysis will include measures the organizations must and should perform to be in compliance. **Semester Hours:** 3to 3 **When Offered:** SPRING

Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 4750 - Business Intelligence and Financial Modeling

Summer 2010 Registration ISMG 4750

In this course, the student learns to analyze and solve financial problems with spreadsheet models, apply Oracle Financial and Business Intelligence software that is widely used in corporate financial operations and model risk and uncertainty with Monte Carlo software. Prereq: ISMG 2050, FNCE 3000 and ISMG 3000 (or ACCT 3054) with a grade of 'C' or better. Cross-listed with FNCE 4750. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 4760 - Customer Relationship Management

Summer 2010 Registration ISMG 4760

This marketing-theory driven course examines customer relationship management

(CRM) as a key strategic process for organizations. Composed of people, technology and processes, effective CRM optimizes the selection or identification, acquisition, growth and retention of desired customers to maximize profit. Besides presenting an overview of the CRM process, its strategic role in the organization and its place in marketing, students have an opportunity to create simulated CRM database using popular software package that help to illustrate what CRM can do, its advantages and limitations. Prereq: MKTG 3000 and ISMG 3000. Cross-listed with MKTG 4760. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

Specialization in a minor area

You may also choose a secondary business minor area to support your career objectives.

Accounting

Choose two from the following:

ACCT 3054 - Accounting Systems and Data Processing

Summer 2010 Registration **ACCT 3054**

The design and analysis of accounting information systems, with special emphasis on computers and computer programming, and the role of accounting in the role of accounting in the management process. Must earn a grade of 'C' or better to qualify for graduation. Prereq: Completion of ACCT 2220 and ISMG 2050 with a grade of 'C' or better (Strictly enforced). **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ACCT 3220 - Intermediate Financial Accounting I

Summer 2010 Registration **ACCT 3220**

An intensive analysis of generally accepted accounting principles, accounting theory and preparation of annual financial statements for public corporations. Must complete course with a 'C' to qualify in graduation requirements. Prereq: Completion of ACCT 2220 with a grade of 'C' or better. Strictly enforced. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ACCT 3230 - Intermediate Financial Accounting II

Summer 2010 Registration **ACCT 3230**

Selected topics not covered in ACCT 3220. Must complete course with a grade of 'C' to qualify in graduation requirements. Prereq: ACCT 3220, completed with a grade of a 'C'

or better. Strictly enforced.**Semester Hours:** 3to 3**When Offered:** *FALL SPR*
Registration is changing. Visit our website for details ucdenver.edu/registration.

ACCT 4780 - Accounting and Information Systems Processes and Controls

Summer 2010 Registration **ACCT 4780**

The course is designed to develop knowledge and skills used to understand and evaluate corporate accounting processes and systems. It focuses on financial and information system internal controls and the flow of corporate information through an accounting system. A financial system objective and risk assessment approach is used to present concepts and techniques for evaluating the adequacy of system processes and controls. Prereq: Completion of ACCT 2200, ACCT 2220 and ACCT 3054 with a grade of 'C' or better (strictly enforced). Cross-listed with ACCT 6510, ISMG 4780, and ISMG 6510.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Finance

Choose two from the following:

FNCE 3500 - Management of Business Capital

Summer 2010 Registration **FNCE 3500**

Students learn the basic principles of managing capital in the business firm. Topics include financial statement analysis, management of working capital, theory and management of capital structure and cost of capital. A grade of 'C' or better must be earned to receive credit for this course and to take subsequent courses for which it is a prerequisite. Prereq: MATH 1080, DSCI 2010, ACCT 2220, FNCE 3000 with a grade of 'C' or better.**Semester Hours:** 3to 3**When Offered:** *FASPRSUM*

Registration is changing. Visit our website for details ucdenver.edu/registration.

FNCE 4330 - Investment and Portfolio Management

Summer 2010 Registration **FNCE 4330**

In this course students learn about the different types of investment vehicles, including methods to estimate their value and analyze their risk. They will also be introduced to portfolio management, including the identification of objectives and constraints and the analysis and use of investment information. Topics include the functioning of security markets, asset allocation, security valuation, and portfolio analysis. A grade of 'C' or better must be earned to receive credit for the course, and to take subsequent courses for which it is a prerequisite. Prereq: FNCE 3500 (and its prerequisites) and FNCE 4330, FNCE 4350 (which may be taken concurrently).**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FNCE 4350 - Financial Markets and Institutions

Summer 2010 Registration **FNCE 4350**

Focuses on the supply and demand for loanable funds, the process of money creation, the structure of interest rates, and the role of banks and the Federal Reserve in the financial system. Special attention is devoted to the impact of monetary and fiscal policies on interest rates, the flow of funds and economic activity; and the operation of financial markets and institutions. A grade of 'C' or better must be earned in this course to receive credit for the area of emphasis and to take subsequent courses for which it is a prerequisite. Prereq: FNCE 3000. **Semester Hours:** 3to 3 **When Offered:** FALL SPR
Registration is changing. Visit our website for details ucdenver.edu/registration.

FNCE 4750 - Business Intelligence and Financial Modeling

Summer 2010 Registration **FNCE 4750**

In this course, the student learns to analyze and solve financial problems with spreadsheet models, apply Oracle Financial and Business Intelligence software that is widely used in corporate financial operations and model risk and uncertainty with Monte Carlo software. Prereq: ISMG 2050, FNCE 3000 and ISMG 3000 (or ACCT 3054) with a grade of 'C' or better. Cross-listed with ISMG 4750. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

Human Resource Management

Choose two from the following:

MGMT 3010 - Managing People for a Competitive Advantage

Summer 2010 Registration **MGMT 3010**

Provides an overview of the management of human resources in organizations. Areas of study include recruitment, selection, training, career development, performance appraisal, compensation and employee or labor relations. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MGMT 4420 - Human Resources Management: Staffing

Summer 2010 Registration **MGMT 4420**

Methods, theories, research findings, and issues in staffing. Topics include performance-based framework for selecting employees, establishing performance expectations, planning the recruitment process and finding valid and useful tools to select the best

candidate. Prereq: MGMT 3010 (may be taken concurrently). **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MGMT 4430 - Human Resources Management: Training

Summer 2010 Registration **MGMT 4430**

Methods, theories, research findings, and issues in training. Topics include how to design, deliver, and evaluate training programs. Prereq: MGMT 3010 (may be taken concurrently). Cross-listed with MGMT 6720. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MGMT 4450 - Human Resources Management: Compensation

Summer 2010 Registration **MGMT 4450**

Develop and administer pay systems considering economic and social pressures, traditional approaches and strategic choices in managing compensation. Current theory research and practice. Students design a compensation strategy and a system that translates that strategy into reality. Prereq: MGMT 3010 (may be taken concurrently). Cross-listed with MGMT 6740. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MGMT 4770 - Human Resource Information Systems

Summer 2010 Registration **MGMT 4770**

Focuses on the management of human resource information systems. It addresses how modern information systems tools can provide better human resource intelligence to users in today's enterprises, allowing them to make better decisions. It examines how information about workforce and human resource management processes can be collected and used to set targets to meet strategic objectives, monitor performance, receive notifications when performance is below expectations and respond immediately by taking corrective actions. Prereq: MGMT 3000. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

Management

Choose two from the following:

MGMT 4350 - Leading Organizational Change

Summer 2010 Registration **MGMT 4350**

Focuses on the tasks and skills of a leader in leading organizational changes. Topics include: diagnosing problems, creating urgency, building the change team, creating a vision, implementing change strategies, sustaining the momentum and making change stick. These tasks and skills are studied in various organizational change contexts.

Prereq: MGMT 3000 with a grade of 'c' or better and MGMT 4370. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MGMT 4370 - Organization Design

Summer 2010 Registration **MGMT 4370**

Examines how to structure organizations to perform effectively. Addresses the effects of computer-based information technologies (e.g. intranets, extranets, and the internet) on firm structure, strategy, and culture. Emphasis is placed on the role of the task, technology, and the environment as constraints on organizational design. Prereq: MGMT 3000. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MGMT 4400 - Environments of International Business

Summer 2010 Registration **MGMT 4400**

An overview of the environmental complexities that arise when business activities and firms cross national borders. Key international business environmental complexities associated with country differences, cross-border trade and investment, and global monetary system are examined. Prereq: MGMT 3000 and junior standing. Cross-listed with INTB 4400. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Marketing

Choose two from the following:

MKTG 3100 - Marketing Research

Summer 2010 Registration **MKTG 3100**

Provides practical experience in research methodologies, planning an investigation, designing a questionnaire, selecting a sample, interpreting results and making a report. Techniques focus on attitude surveys, behavioral experiments, and qualitative research. Prereq: MKTG 3000 and DSCI 2010. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MKTG 3200 - Buyer Behavior

Summer 2010 Registration **MKTG 3200**

Focuses on improving the student's understanding of consumer and organizational buying behavior as a basis for better formulation and implementation of marketing

strategy. Blends concepts from the behavioral sciences with empirical evidence and introduces buyer research techniques. Prereq: MKTG 3000. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MKTG 4050 - Applied Marketing Management

Summer 2010 Registration **MKTG 4050**

The course is designed to enhance the student's ability to formulate and implement a marketing plan and to better understand the relationship of marketing to other business functions. Emphasized application of marketing concepts through the use of cases, simulations or projects. Prereq: MKTG 3000 and DSCI 2010. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MKTG 4760 - Customer Relationship Management

Summer 2010 Registration **MKTG 4760**

This marketing-theory driven course examines customer relationship management (CRM) as a key strategic process for organizations. Composed of people, technology and processes, effective CRM optimizes the selection or identification, acquisition, growth and retention of desired customers to maximize profit. Besides presenting an overview of the CRM process, its strategic role in the organization and its place in marketing, students have an opportunity to create simulated CRM database using popular software package that help to illustrate what CRM can do, its advantages and limitations. Prereq: MKTG 3000. Cross-listed with ISMG 4760. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

NOTE:

All information systems courses are not offered every semester.

International Business Emphasis— BS in Business Administration

Increasingly, businesses are reorienting their thinking, planning and operations to capitalize on opportunities that exist in the world marketplace. Every phase of business is affected by this reorientation. For individuals with the appropriate skills, training and interest, international business provides excellent career opportunities.

The international business curriculum is designed to enhance and build on thorough training in basic business skills and to provide students with additional skills and knowledge appropriate to international business.

Required Foundation Courses

MGMT 4370 - Organization Design

Summer 2010 Registration **MGMT 4370**

Examines how to structure organizations to perform effectively. Addresses the effects of computer-based information technologies (e.g. intranets, extranets, and the internet) on firm structure, strategy, and culture. Emphasis is placed on the role of the task, technology, and the environment as constraints on organizational design. Prereq: MGMT 3000. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MKTG 4050 - Applied Marketing Management

Summer 2010 Registration **MKTG 4050**

The course is designed to enhance the student's ability to formulate and implement a marketing plan and to better understand the relationship of marketing to other business functions. Emphasized application of marketing concepts through the use of cases, simulations or projects. Prereq: MKTG 3000 and DSCI 2010. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Required Emphasis Courses

FNCE 4370 - International Financial Management

Summer 2010 Registration **FNCE 4370**

Financial management in the international environment. Topics include international capital movements; international operations as they affect the financial functions; foreign and international institutions; and the foreign exchange process. Also considers foreign exchange theory and risk management, financial requirements, problems, sources, and policies of firms doing business internationally. A grade of 'C' or better must be earned to receive credit for the course and to take subsequent courses for which it is a prerequisite. Prereq: FNCE 3000. **Semester Hours:** 3to 3 **When Offered:** FASPRSUM

Registration is changing. Visit our website for details ucdenver.edu/registration.

MGMT 4400 - Environments of International Business

Summer 2010 Registration **MGMT 4400**

An overview of the environmental complexities that arise when business activities and firms cross national borders. Key international business environmental complexities associated with country differences, cross-border trade and investment, and global monetary system are examined. Prereq: MGMT 3000 and junior standing. Cross-listed

with INTB 4400. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MGMT 4410 - Operations of International Business

Summer 2010 Registration **MGMT 4410**

Focuses on the impact of environmental factors on international business operations and the identification and analysis of complex strategic and operational issues facing business firms in global markets. The strategies and structures of international businesses, alternative foreign market entry modes, and the unique roles of various business functions at international business firms are explained and assessed. Prereq: INTB 4400 or MGMT 4400. Cross-listed with INTB 4410. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MKTG 4200 - International Marketing

Summer 2010 Registration **MKTG 4200**

Studies managerial marketing policies and practices of firms marketing their products in foreign countries. Analytical survey of institutions, functions, policies, and practices in international marketing. Relates marketing activities to market structure and environment. Prereq: MKTG 3000. **Semester Hours:** 3to 3 **When Offered:** FALL SPR
Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 18 Hours

A second area of emphasis in business is highly recommended. In addition, serious consideration should be given to advanced study of a foreign language and to either a minor or a certificate in international affairs, offered by the College of Liberal Arts and Sciences.

Elective Business Emphasis Courses (9 credit Hours)

- Three business courses (3000 or 4000 level), 3 semester hours each

Students are strongly recommended to take courses within the same business discipline, including internationally-oriented courses within the discipline such as MKTG 4220 (Asian Business Development and Marketing) and ACCT 4370 (Internationally Accounting)

International Studies BA

Program Requirements

The major consists of 48 to 51 semester hours, structured as follows:

- complete 9 semester hours from a list of introductory courses listed below
- choose three thematic concentrations from the following five:
language and culture, international relations and comparative politics, economics and development, international commerce, and regional societies and history.
Majors complete 12 hours in each theme (except international commerce, which requires 15). Below is a list of preapproved courses in each concentration.
Students wishing to apply courses not on the list may do so with the approval of the program director.
- a capstone seminar (3 semester hours) for students in their last year
- the major is interdisciplinary, and students must take classes in at least three different disciplines (anthropology, economics, geography, history, international commerce/business, modern languages, political science or religious studies). No more than 18 hours in any one discipline will be accepted toward the major.
- students are expected to develop a regional specialization. They must choose courses from the introductory and thematic concentration lists that contribute to an understanding of a world region.
- all international studies majors must demonstrate a proficiency in a language other than English. This may be fulfilled with the fourth semester of a foreign language course sequence. Students must receive a grade of C or better in all language courses; they also have the option of testing out of this requirement.
- majors must complete at least half (24 hours) of the semester hours at the Downtown Campus. A cumulative GPA of 2.5 or better is required, with a minimum grade of C- earned in all major courses to graduate.

Required Courses

Introductory Courses

Choose one course from each of the following three groups:

Choose one:

ECON 2012 - Principles of Economics: Macroeconomics

Summer 2010 Registration **ECON 2012**

Covers topics of inflation, unemployment, national income, growth and problems of the national economy, stabilization policy, plus others at the discretion of the instructor.

Purpose is to teach fundamental principles, to open the field of economics in the way most helpful to further a more detailed study of special problems, and to give those not

intending to specialize in the subject an outline of the general principles of economics.**Semester Hours:** 3to 3**GT Pathways Category Key:** GT-SS1
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 1102 - World Regional Geography

Summer 2010 Registration **GEOG 1102**

Analysis of the relationships of man and the landscape based on geographic distributions in the world.**Semester Hours:** 3to 3**GT Pathways Category Key:** GT-SS2
Registration is changing. Visit our website for details ucdenver.edu/registration.

Choose one:

INTB 3000 - Global Perspectives

Summer 2010 Registration **INTB 3000**

Globalization brings both opportunities and anxieties that need to be fully explored, discussed and understood both by the business and non-business student. This interdisciplinary course is designed to stimulate thought, perspective, discussion and debate for business and non-business students on issues ranging from globalization; political economy and geopolitics; the environment; cultures; finances; economic integration; trade; global regions; emerging markets; human rights; terrorism and conflict; leadership, ethics and values; entrepreneurship, to future trends in global issues. The Global Perspective course is designed (1) to increase and promote both business and non-business students' capacity for international understanding and international enterprise through the study and discussion of global business environment-related issues from multiple points of views in a neutral forum. (2) It is to provide students with the awareness that global issues cannot be viewed in isolation, that they are all interrelated.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 3022 - Introduction to Comparative Politics

Summer 2010 Registration **P SC 3022**

Comparison of the basic political features of selected countries with focus on political behavior, institutions and political cultures. Themes examined include development, democratization, social movements, political instability and globalization.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 3042 - Introduction to International Relations

Summer 2010 Registration **P SC 3042**

Basic background and theories of international relations with focus on the interaction between nation states, international organizations, regimes and transnational movements. Themes examined include foreign policy conduct, international security and political economy, human rights and environmental management. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Choose one:

ANTH 2102 - Culture and the Human Experience

Summer 2010 Registration **ANTH 2102**

An application of the concept of culture to several aspects of the human experience, including gender relations, emotion and personality, cognition, language, health and healing and economic behavior. In exploring these dimensions of the human experience, the course focuses on selected cultures from each of the world's major geographic areas. **Semester Hours:** 3to 3 **GT Pathways Category Key:** GT-SS3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 3451 - Introduction to African History

Summer 2010 Registration **HIST 3451**

By looking at specific examples of the cultural, political, and economic experience of African society, this course attempts to introduce and make comprehensive the diverse history of the people of Africa. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 3460 - Introduction to Latin American History

Summer 2010 Registration **HIST 3460**

Surveys the historical development of the modern Latin American countries, beginning with the independence movements of the early 19th century. Emphasizes the 20th century issues and problems that have characterized these countries and affected their relations with the United States. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 3470 - Introduction to Asian History

Summer 2010 Registration **HIST 3470**

Introduces the origin and development of civilization in China, Japan and Korea. Explores the relationship between culture and civilization. Readings are drawn from literature, religion, philosophy, anthropology and history. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 3480 - Introduction to European History

Summer 2010 Registration **HIST 3480**

Students are introduced to the major themes of European history and culture from the Enlightenment to the present. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 3483 - Introduction to Modern South Asia

Summer 2010 Registration **HIST 3483**

Surveys the social, economic, and political processes that shaped modern South Asia. Considers issues in contemporary political debates within their original historical contexts and trace the power of relationships that affected changes, long-term continuities, and revivals. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

RLST 2660 - World Religions

Summer 2010 Registration **RLST 2660**

Provides an introduction to the basic beliefs and concepts of the world's great religious traditions. Covers the history, development, belief patterns, and institutional forms of the world's religions, including Judaism, Zoroastrianism, Christianity, Islam, Hinduism, Buddhism, Confucianism, Taoism and Shintoism. **Semester Hours:** 3to 3 **GT Pathways**

Category Key: GT-AH3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 9 Hours

Thematic Concentrations

Students must take a minimum of four upper-division courses in each of three of the following five concentrations, for a total of 36 semester hours (12 hours in each concentration). Please note that the concentration in international commerce requires five courses rather than four, for a total of 39 semester hours. The list below does not include all the international courses applicable to the major, only the ones frequently taught. It is expected to change as departments develop new courses and hire new faculty in different areas.

Note: Concentrations are interdisciplinary and are not the same as academic departments. Students must take courses in at least three different academic departments and no more than 18 semester hours in any one department.

Language, Culture and Literature

This concentration aims at deepening the student's understanding of the cultural underpinnings and worldviews of different societies.

Modern languages: any upper-division courses in the Department of Modern Languages except Methods of Teaching French/German/Spanish. We have not listed the courses individually because there are so many upper-division courses on world literature and culture available in modern languages.

ANTH 3121 - Language and Communication

Summer 2010 Registration **ANTH 3121**

Definitions of language and communication and their relationship to human behavior, thought and culture. The classification of languages, linguistic universals, language acquisition, multilingualism, and nonhuman communication, with consideration of the evolutionary implications of such studies. Prereq: Introductory course in cultural anthropology. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 4130 - Comparative Religious Systems

Summer 2010 Registration **ANTH 4130**

A cross-cultural analysis of religious belief and behavior. Emphasis is placed on religions found among non-Western cultural groups and includes consideration of how major religions of the world are manifested on local levels. Prereq: ANTH 2102 or equivalent.

Cross-listed with ANTH 5130, RLST 4010, 5010. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

RLST 4010 - Comparative Religious Systems

Summer 2010 Registration **RLST 4010**

A cross-cultural analysis of religious belief and behavior. Emphasis is placed on religions found among non-Western cultural groups and includes consideration of how major religions of the world are manifested on local levels. Cross-listed with ANTH 4130, 5130, RLST 5010. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 4650 - Differing Concepts of God

Summer 2010 Registration **PHIL 4650**

God, gods, and goddesses have been imagined in many different modes, forms, aspects, and guises throughout human history. This course investigates Paleolithic

models of God, the Great Goddess of the Neolithic era, the gods of mythological traditions, Biblical God, the abstract God of the philosophers, the God of the pantheists, the deists, and the God of the mystics. Cross-listed with PHIL 5655, RLST 4400 and 5400. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

RLST 4400 - Differing Concepts of God

Summer 2010 Registration **RLST 4400**

God, gods, and goddesses have been imagined in many different modes, forms, aspects, and guises throughout human history. This course investigates Paleolithic models of God, the Great Goddess of the Neolithic era, the gods of mythological traditions, Biblical God, the abstract God of the philosophers, the God of the pantheists, the deists, and the God of the mystics. Cross-listed with RLST 5400, PHIL 4650 and 5655. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

International Relations and Comparative Politics

Courses in this concentration stress comparative approaches, diplomacy and conflict resolution. Students will have an understanding of how different societies make decisions and manage international relations. How do other cultures conceive of and practice power?

ANTH 4180 - The Nature of Power

Summer 2010 Registration **ANTH 4180**

Introduces the major theories of power used in contemporary anthropology, with an emphasis on cross-cultural perspectives. Explores how power is defined, determined and exercised globally and locally and how different systems of power articulate with one another. Prereq: ANTH 2102 or equivalent. Cross-listed with ANTH 5180. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 3121 - The World at War, 1914-1945

Summer 2010 Registration **HIST 3121**

Examines World Wars I and II as episodes in a protracted conflict among the nations of the capitalist West, the emerging states of Asia and the colonial world, and the USSR. Studies the causes and consequences of the wars. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4032 - Globalization in World History Since 1945

Summer 2010 Registration HIST 4032

An interdisciplinary course on contemporary world history and globalization. While the course is historically structured, economic, political, and sociological matters are explored. Cross-listed with HIST 5032. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4220 - U.S. Foreign Policy Since 1912

Summer 2010 Registration HIST 4220

The main thrust is the emergence of the U.S. from isolation toward full-scale participation in the affairs of Europe and other areas. Special attention is given to U.S. intervention in two world wars, the Cold War, and the over extension of U.S. commitments since 1960. Cross-listed with HIST 5220. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4412 - Mexico and the United States: People and Politics on the Border

Summer 2010 Registration HIST 4412

Examines the convoluted relations between these two republics, focusing on diplomatic, cultural, and social interactions. Cross-listed with HIST 5412. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4471 - The Second World War

Summer 2010 Registration HIST 4471

The War in its totality: causes, military strategies (equal treatment to European and Pacific theaters), campaigns, impact of technology and weapons, political and social upheaval. Cross-listed with HIST 5471. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4475 - The Vietnam War

Summer 2010 Registration HIST 4475

Covers the conflict in Vietnam, with roots in the period prior to World War II. Main topics include the rise of nationalism in French Indochina, the war against the French, the Northern move to unify Vietnam, American intervention, and eventual victory of the Northern regime. Cross-listed with HIST 5475. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 3022 - Introduction to Comparative Politics

Summer 2010 Registration **P SC 3022**

Comparison of the basic political features of selected countries with focus on political behavior, institutions and political cultures. Themes examined include development, democratization, social movements, political instability and globalization. **Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 3042 - Introduction to International Relations

Summer 2010 Registration **P SC 3042**

Basic background and theories of international relations with focus on the interaction between nation states, international organizations, regimes and transnational movements. Themes examined include foreign policy conduct, international security and political economy, human rights and environmental management. **Semester Hours:** 3to

3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4057 - Religion and Politics

Summer 2010 Registration **P SC 4057**

Exploration of: (1) theoretical perspectives on the relationship between religion and politics; (2) causes of and justifications for the historical development of the Western separation of "church" and state; (3) contemporary responses to and analyses of this separation; and (4) several current debates about public policy in America that reveal tensions between these two spheres. Cross-listed with PSCI 5057 and RLST 4500, 5500. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

RLST 4500 - Religion and Politics

Summer 2010 Registration **RLST 4500**

Exploration of: (1) theoretical perspectives on the relationship between religion and politics; (2) causes of and justifications for the historical development of the Western separation of "church" and state; (3) contemporary responses to and analyses of this separation; and (4) several current debates about public policy in America that reveal tensions between these two spheres. Cross-listed with PSCI 4057, 5057 and RLST 5500. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4105 - Comparative Politics: Europe

Summer 2010 Registration **P SC 4105**

An intensive and comparative analysis of the political systems and processes of Europe.

Emphasis on political culture and economy; executive-legislative relationships; electoral systems; political parties and interest groups; political conflict and citizen participation; and the impact of social changes on political institutions. Cross-listed with PSCI

5105.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4146 - Indigenous Politics

Summer 2010 Registration P SC 4146

Surveys the status of the world's native peoples and nations, and the role of law and politics in the future of indigenous peoples in the global arena. Examines questions of human rights, economic development, and international law and politics. Prereq: PSCI 1001. Cross-listed with PSCI 5145 and ETST 4146.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4156 - The Arab-Israeli Peace Process

Summer 2010 Registration P SC 4156

Critical analysis of Arab and Israeli perspectives on the on-going peace negotiations in the Middle East. Historical background and religious-cultural aspects of current problems. Prereq: Upper division standing. Cross-listed with ETST 4156.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4185 - Corruption in the U.S. and Abroad

Summer 2010 Registration P SC 4185

Explores the causes and consequences of administrative and political corruption in developed and developing countries, and evaluates various anti-corruption strategies. Prereq: PSCI 1001 or 3022.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4216 - International Politics: Human Rights

Summer 2010 Registration P SC 4216

The system of nation states, concepts of national interest, goals of foreign policies, conduct of diplomacy, and the bearing of these elements on the problem of human rights. Presentation and evaluation of the solutions that have been offered for the securing of justice and the maintenance of peace.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4217 - Human Rights in Theory and Practice

Summer 2010 Registration **P SC 4217**

Explores the ideas of human rights and the practical efforts to actualize rights in society. Students study the theories of rights and the evolution of rights in history, as well as work with a service organization. Cross-listed with PSCI 5217. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4225 - Democracy and Democratization

Summer 2010 Registration **P SC 4225**

Examines the conditions under which countries turn from authoritarianism towards democracy and become stable democratic regimes. Also examines the impact of foreign and international factors on new democracies. Cross-listed with PSCI 5225. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4226 - The United Nations in World Affairs

Summer 2010 Registration **P SC 4226**

Current operation and future potential of the United Nations as a complex actor in world affairs, both expressing conflicting interests of its participants and promoting universal goals, including world peace, human rights, and environmental protection. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4236 - American Foreign Policy

Summer 2010 Registration **P SC 4236**

Examines the postwar events, controversies, and most recent challenges in U.S. foreign policy. Analyses of the major sources of U.S. foreign policy, such as ideology, national interests, and national power. Attention to the pattern and process of foreign policy-making. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4266 - International Law

Summer 2010 Registration **P SC 4266**

Investigates the body of law that regulates relations between nations and provides a framework for solving common problems and disputes between nations. Prereq: Upper division political science major. Cross-listed with PSCI 5266. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4286 - International Relations: War or Peace?

Summer 2010 Registration **P SC 4286**

Presents alternative theoretical frameworks for the explanation of war and peace. Investigations of the efficacy of international law, just-war norms and the UN in preventing or containing conflict. Prereq: PSCI 1001. Cross-listed with PSCI 5286. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4726 - Russian and Chinese Foreign Policy

Summer 2010 Registration **P SC 4726**

Foreign policies of Russia and China; relations with Western powers and the Third World; interaction of domestic developments and foreign policy; role of national interest, ideology, and elite personalities. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4736 - The Middle East in World Affairs

Summer 2010 Registration **P SC 4736**

Evolution and revolution in the Middle East. The character of nationalism in the area. Analysis of inter-regional and international problems affecting the Middle East, with special emphasis on current Arab-Israeli relations. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4807 - Revolution and Political Violence

Summer 2010 Registration **P SC 4807**

Study, discussion, and evaluation of alternative frameworks for the analysis of revolution and political violence. The theoretical material is firmly couched in case situations such as Western, class, colonial, urban, international, historical, racial, religious, and intergenerational violence. The class develops its own theoretical model(s). **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4995 - Travel Study Topics

Summer 2010 Registration **P SC 4995**

Students study various topics at an off-campus location, either a foreign country or another city or region in the United States, led by a Downtown Denver Campus instructor. Prereq: PSCI 1001 or 3022 or permission of instructor. Cross-listed with PSCI 5995. **Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

* If not taken to fulfill the introductory major requirements.

Economics, Development and Environment

Students taking this concentration will develop an understanding of economic processes in an international context. The courses offer comparative approaches and cultural perspectives on development and environment.

Note: Students in this concentration must take

ECON 2012 - Principles of Economics: Macroeconomics as one of their three introductory courses.

Required economics course

ECON 2022 - Principles of Economics: Microeconomics

Summer 2010 Registration **ECON 2022**

Topics include price determination in a market system composed of households and firms; resource allocation and efficiency of various market structures, plus others at the discretion of the instructor. *Note:* Complementary to and normally taken following ECON 2012. ECON 2012 is not a prerequisite for ECON 2022. **Semester Hours:** 3to 3GT

Pathways Category Key: GT-SS1

Registration is changing. Visit our website for details ucdenver.edu/registration.

Choose three upper division courses from the following:

ANTH 4010 - Global Health Studies I: The Biocultural Basis of Health

Summer 2010 Registration **ANTH 4010**

This course is concerned with the underlying biological and cultural determinants of health throughout the human life cycle in global and cross-cultural perspective. *Note:* The first of a two-course sequence in medical anthropology and global health studies; the second is ANTH 4020. Prereq: Upper division and/or graduate standing. Cross-listed with ANTH 5014, HBSC 4010 and 5010. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 4070 - Culture of Development and Globalization

Summer 2010 Registration **ANTH 4070**

Anthropological critiques of development and globalization point out that they have occurred without regard for the diversity of human culture and human need. Beginning with this analysis, this course goes one step further by examining culture and values of development and how they affect the way development gets done. Prereq: Upper division standing and permission of instructor. Cross-listed with ANTH 5070. **Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 4140 - Principles of Economic Anthropology

Summer 2010 Registration **ANTH 4140**

Both formalist and substantivist perspectives are used to examine economic organization in a cross-cultural perspective. Special attention is focused on gift-giving in pre-stratified societies, craft specialization in middle-range societies, specialized economies in non-market-oriented ancient states and economic organization in modern world systems. Prereq: ANTH 2102 or equivalent. Cross-listed with ANTH

5140.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 4170 - Culture and the Environment

Summer 2010 Registration **ANTH 4170**

Examines the historical origins of Western and non-Western ideas of the environment and the place of people within it. The imposition of Western ideas on non-Western groups regarding environmental policy is also examined, with special attention given to practices of conservation, development and transnational monetary policy. Prereq:

ANTH 2102 or equivalent. Cross-listed with ANTH 5170.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 4390 - Laboratory Methods in Archaeology

Summer 2010 Registration **ANTH 4390**

Methods and theories of archaeology are used to scrutinize the collection and interpretation of data and the relationships of archaeology to other disciplines. Core materials emphasize the critique of basic archaeological assumptions. Note: Course content varies slightly each time it is offered, in response to student needs and the availability of projects (e.g., laboratory work, urban excavation, survey and mapping).

May be repeated for credit when topics change. Prereq: ANTH 1302 or equivalent.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 4081 - Intermediate Macroeconomic Theory

Summer 2010 Registration **ECON 4081**

National income and employment theory. Primary emphasis placed on determination of employment and prices. Problems of unemployment and inflation analyzed and appropriate policies considered. Prereq: ECON 2012, 2022 and 3801.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 4230 - Law and Economics

Summer 2010 Registration **ECON 4230**

Applies economic theory to legal decision making. Topics include property law, tort law, contract law, the common law, crime and punishment, comparisons to traditional forms of legal decision making and the economic approach to politics. Prereq: ECON 2022. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 4410 - International Trade

Summer 2010 Registration **ECON 4410**

Trade theory identifies who wins and loses from trade and why there are usually overall gains. Explores issues in immigration, globalization, income inequality, tariffs, dumping, the WTO, the environment, wages, and growth strategies among others. Prereq: ECON 2022. Cross-listed with ECON 5410. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 4420 - International Finance

Summer 2010 Registration **ECON 4420**

The international adjustment process, including the foreign exchange market, balance of payments disequilibria, price and income adjustment, fiscal and monetary policy, and the international monetary system. Prereq: ECON 2012. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 4540 - Environmental Economics

Summer 2010 Registration **ECON 4540**

Economic approach to environmental problems: relationship between ownership structures, externalities and environmental damage; poverty, population pressure, and environmental degradation; valuation of environmental amenities; sustainability of economic activity; cost-benefit analysis applied to the environment; evaluation of alternative instruments for environmental control. Prereq: ECON 2022. Cross-listed with ECON 5540. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 4770 - Economic Development--Theory and Problems

Summer 2010 Registration **ECON 4770**

Introduces theory and practice of economic development. Topics include development and growth models, economic planning, income distribution, human and capital resources, foreign investment and the multinationals, technology transfer, trade and development. Discussions of current issues regarding world debt, economic stabilization,

the new protectionism, empirical studies, and examples of development in various countries. Prereq: ECON 2012 or ECON 2022. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 3300 - Population and Resources in the World Environment

Summer 2010 Registration **GEOG 3300**

Increasing world human populations are examined in the context of regional and global resources. Opposing viewpoints are studied, and students are required to complete a case study of a self-selected issue analyzing viewpoints associated with relevant opposing opinions. Prereq: upper division standing. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 3411 - Globalization and Regional Development

Summer 2010 Registration **GEOG 3411**

Addresses global political-restructuring and its implications for regional development in the U.S. Both historical and contemporary processes of globalization are examined. Topics include: the environmental basis of American industrial growth, the relationship between technological change and geographical shifts, the rise and decline of Fordism, the transfer of Japanese manufacturing methods to the U.S., the role of regional and national industrial policy, and the social consequences of globalization for labor and communities. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 3420 - Political Ecology

Summer 2010 Registration **GEOG 3420**

Addresses the political economy of development in the third world, focusing on contemporary issues of agrarian change, ecological degradation, deforestation and urbanization. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 3430 - Geography of Tourism

Summer 2010 Registration **GEOG 3430**

Geographic analysis of trends in recreation, travel, and tourism, and their economic, social, and environmental impacts. Examines growth and change in resorts and tourist destination areas. Prereq: GEOG 1302 or 3411. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4265 - Sustainability in Resources Management

Summer 2010 Registration **GEOG 4265**

Sustainability and sustainable development are the dominant economic, environmental and social issues of the 21st century. Follows a multi-disciplinary approach to these concepts. Case studies demonstrate their implementation in different geographical, ecological and socio-economic conditions worldwide. Prereq: ENVS 1042 or permission of instructor. Cross-listed with GEOG 5265. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

INTB 3000 - Global Perspectives

Summer 2010 Registration **INTB 3000**

Globalization brings both opportunities and anxieties that need to be fully explored, discussed and understood both by the business and non-business student. This interdisciplinary course is designed to stimulate thought, perspective, discussion and debate for business and non-business students on issues ranging from globalization; political economy and geopolitics; the environment; cultures; finances; economic integration; trade; global regions; emerging markets; human rights; terrorism and conflict; leadership, ethics and values; entrepreneurship, to future trends in global issues. The Global Perspective course is designed (1) to increase and promote both business and non-business students' capacity for international understanding and international enterprise through the study and discussion of global business environment-related issues from multiple points of views in a neutral forum. (2) It is to provide students with the awareness that global issues cannot be viewed in isolation, that they are all interrelated. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4085 - Comparative Public Policy

Summer 2010 Registration **P SC 4085**

Comparison of public policy making in such areas as health care, environment, family assistance, and employment in the United States and at least two other countries.

Prereq: Graduate standing or permission of instructor. Cross-listed with PSCI

5085. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4126 - Introduction to International Political Economy

Summer 2010 Registration **P SC 4126**

A short introduction to international economy, including classic readings of international political economy (such as Smith, Ricardo, Marx, Lenin), and more recent work on globalization, applying related theories to the current world economy. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4235 - Politics and Markets in Latin America

Summer 2010 Registration P SC 4235

Explores political economic development in Latin America within the context of the world system. Includes the study of colonization, land tenure, foreign investment, authoritarianism, militarism, social and revolutionary movements, human rights and democratization. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4248 - Gender, Globalization and Development

Summer 2010 Registration P SC 4248

Analyzes the effects of globalization on the gendered processes of international development and strategies to empower women to achieve gender justice across race, class and national divisions. Cross-listed with PSCI 5245 and WGST 4248. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4326 - Advanced International Political Economy: Globalization

Summer 2010 Registration P SC 4326

Engages the current debate about globalization. Conceptualizes globalization and evaluates the pros and cons of global trade and finance for developed and developing countries. Develops a model for a sustainable and just global economy. Prereq: PSCI 4126. Cross-listed with PSCI 5326. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4365 - Global Ecological Crises

Summer 2010 Registration P SC 4365

Overview of global ecological problems such as climate change, transboundary pollutions, and loss of bio-diversity in an attempt to understand the political, economic, and cultural forces behind these problems and the status of legal and policy initiatives to address them. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4555 - International Women's Resistance

Summer 2010 Registration P SC 4555

Examines local and international struggles of women to build peace and justice by

resisting systems of inequality such as colonialism, racism, patriarchy, globalization, and religious intolerance. Cross-listed with PSCI 5555, ETST 4555 and WGST 4555. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

International Commerce

The objective of this concentration is to give students an introduction to international business practices.

ECON 2012 and ECON 2022 are prerequisites for most of these courses. Note that the first three courses are prerequisites for MGMT 4400 and MKTG 4200. Students opting for this concentration must take both MGMT 4400 and MKTG 4200. Students must meet Business School entrance requirements for the international commerce concentration, with a 3.0 GPA overall or in the last 24 hours.

Note: This concentration requires 15 hours, not 12.

ACCT 2200 - Financial Accounting and Financial Statement Analysis

Summer 2010 Registration **ACCT 2200**

The financial accounting process, the role of the profession and the analysis of financial statements. Principal focus on interpretation of financial statements, with emphasis on asset and liability valuation problems and the determination of net income. Prereq: MATH 1070 and sophomore standing. A grade of 'C' or better is required in this course to proceed to ACCT 2220. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

(MATH 1070 or MATH 1110 prerequisite and sophomore standing).

MGMT 3000 - Managing Individuals and Teams

Summer 2010 Registration **MGMT 3000**

Focuses on helping students understand how to manage individuals and groups effectively. Students are encouraged to know themselves better and how their behavior affects how they deal with organizational situations; they also learn how individuals differ and how to design, manage and work in a team. This is a business core course therefore a grade of a 'c' or better must be earned to satisfy graduation requirements.

Prereq: Junior standing. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MKTG 3000 - Principles of Marketing

Summer 2010 Registration **MKTG 3000**

Focuses on the basic marketing concepts of Buyer Behavior, Marketing Research, Marketing Planning and Implementation and the marketing process of product, price,

distribution and promotion. This is a business core course therefore a grade of a 'C' or better must be earned to satisfy graduation requirements. Prereq: Junior standing. **Semester Hours:** 3 to 3 **When Offered:** FASPRSUM
Registration is changing. Visit our website for details ucdenver.edu/registration.

MGMT 4400 - Environments of International Business

Summer 2010 Registration **MGMT 4400**

An overview of the environmental complexities that arise when business activities and firms cross national borders. Key international business environmental complexities associated with country differences, cross-border trade and investment, and global monetary system are examined. Prereq: MGMT 3000 and junior standing. Cross-listed with INTB 4400. **Semester Hours:** 3 to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MKTG 4200 - International Marketing

Summer 2010 Registration **MKTG 4200**

Studies managerial marketing policies and practices of firms marketing their products in foreign countries. Analytical survey of institutions, functions, policies, and practices in international marketing. Relates marketing activities to market structure and environment. Prereq: MKTG 3000. **Semester Hours:** 3 to 3 **When Offered:** FALL SPR
Registration is changing. Visit our website for details ucdenver.edu/registration.

* Students must have junior standing to take the 3000-level courses and must be formally admitted to the international studies program to take the 4000-level courses.

Regional Societies and History

Students in this concentration are expected to develop a historical understanding of how nations and political systems develop. To understand why international actors behave in a given way, one needs to understand the historical background of those actors; this concentration will familiarize students with that background.

ANTH 4220 - Community in Global Context

Summer 2010 Registration **ANTH 4220**

Presents the community study method from the perspective of anthropology and as a widely applicable research technique in planning, development and other areas of public affairs. Also includes analyses of case studies and student field research. Prereq: Introductory course in cultural anthropology. Cross-listed with ANTH 5220. **Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 4250 - Culture Change in the Modern World

Summer 2010 Registration **ANTH 4250**

Processes and dilemmas of culture change using macro-level theories as well as models of change for communities and individuals. Conceptual and practical problems of modernity relating to globalization, urbanization, environmental degradation and technological change. Prereq: At least one course in cultural anthropology. **Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 4740 - Ethnography of Mexico and Central America

Summer 2010 Registration **ANTH 4740**

Geographic affiliations, culture, history, traditional ways of life and culture change in Mexico and Central America. Cross-listed with ANTH 5740. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 4995 - Travel Study

Summer 2010 Registration **ANTH 4995**

A flexible format that permits courses to be taught in various areas of the world. Cultures of the Himalayas. Concerned broadly with contemporary Himalayan culture. Focuses on Tibetan cultures and the Tibetan diaspora, and the Nepalese (Newari) culture of the Katmandu Valley. The goals for this course are: to acquaint the student with social, political and cultural features of this part of the world; to teach, through directed field experiences, how cultural anthropology is practiced; to understand how the process of tourism differs from the study of anthropology; how tourism, however it is practiced, changes in fundamental ways those subject to it. The Arts of Self and Society in Contemporary China. An intensive introduction to contemporary conditions and issues in the People's Republic of China, including social relations, popular culture, eating practices, religious practices and everyday life. Uses a combination of readings, lectures, field trips to local sites and ethnographic field projects. Usually situated in Kunming, Yunnan province, in southwest China, but the location may vary. Note: Students enroll additionally in Chinese language classes at levels from beginning to advanced. Prereq: Permission of instructor. Cross-listed with ANTH 5995. **Semester Hours:** 3to 9

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 3120 - Geography of Europe

Summer 2010 Registration **GEOG 3120**

An analysis of the physical environment, resource utilization, economic development and cooperation in Europe. A cultural and political geography which focuses on continuity and change in Eastern and Western Europe. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 3130 - Central America and the Caribbean

Summer 2010 Registration **GEOG 3130**

Surveys the physical environment and cultural development of Central America and the Caribbean Islands. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 3140 - Geography of South America

Summer 2010 Registration **GEOG 3140**

The physical environment, cultural development, and political instability within the area are analyzed. Influence of the landscape and climate, as well as Iberian cultural and land tenure patterns on historic settlement and modern growth are discussed. Problems associated with population, economics, politics, education, and geography are emphasized. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 3150 - Middle East

Summer 2010 Registration **GEOG 3150**

Physical, cultural, and economic approach to the arid lands of the Middle East, including Arab land of the Sahara. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 3350 - Colonial Latin America

Summer 2010 Registration **HIST 3350**

Surveys the creation of colonial empires by Spain and Portugal, 1492-1808. Topics include Native American responses to European incursions, women in colonial society, and slavery in Latin America. Cross-listed with ETST 3350. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 3500 - African History in Novels and Films

Summer 2010 Registration **HIST 3500**

Introduces modern Africa through the eyes of creative artists. Various topics, such as

childhood, religion, and colonialism, are presented from various points of view--African and non-African.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 3995 - Travel Study Topics

Summer 2010 Registration **HIST 3995**

Created for students doing travel study in a foreign country; register through the Office of International Education.**Semester Hours:** 1to 15
Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4024 - Nineteenth Century Europe

Summer 2010 Registration **HIST 4024**

A general study of the evolution of Europe from 1789 to 1900. Covers the French Revolution, industrialization, romanticism, nationalism, realism, socialism, and imperialism in the context of European history. Cross-listed with HIST 5024.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4025 - Twentieth Century Europe

Summer 2010 Registration **HIST 4025**

A general study of the evolution of Europe since 1900. Covers militarism, fascism, communism, and existentialism in the context of European history. Cross-listed with HIST 5025.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4027 - The Enlightenment: Eighteenth Century Intellectual History

Summer 2010 Registration **HIST 4027**

Studies the transformation of the European and American intellectual world in the late 17th and 18th centuries. Focuses on the novel ideas, institutions and discursive practices of the philosophies in Europe and America. Themes include the popularization of scientific thinking, rationalism, deism and secularization, the public sphere, popular sovereignty and confidence in the future. Cross-listed with HIST 5027.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4028 - After the Revolutions: Nineteenth Century Intellectual History

Summer 2010 Registration **HIST 4028**

Romanticism and other 19th century reactions to the dislocation engendered by the bourgeois revolutions and industrialization. Focuses on intellectual and cultural

responses to social and economic change, ideologies, and social theories. Topics include romanticism, conservatism, liberalism, Marxism, the neo-enlightenment, ideas of progress and Darwinism. Cross-listed with HIST 5028. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4029 - Fin de Siecle: Late Nineteenth and Early Twentieth Century Intellectual History

Summer 2010 Registration **HIST 4029**

The crisis of confidence in Europe and America in the late 19th and early 20th centuries. Focuses on aesthetic and philosophical disillusionment and attempts to reorient European and American thinking, as well as upon reactions to World War I. Topics include Nietzsche, psychoanalysis, surrealism, and other intellectual and artistic movements. Prereq: Previous introductory history course or other introductory humanities course. Cross-listed with HIST 5029. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4046 - Victorians and Victorianism

Summer 2010 Registration **HIST 4046**

Taking an interdisciplinary perspective, this course examines English people and English life during the reign of Queen Victoria, 1837-1901. What were the defining features of the Victorian age? What did it mean to be "Victorian?" When and why did the Victorian paradigm break down? Cross-listed with HIST 5046. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4051 - Great Britain: 1760-1914

Summer 2010 Registration **HIST 4051**

Studies Britain's long 19th century, with a focus on the social consequences of industrialization, state growth and imperialism. Examines who benefited and who lost as a result of the social, economic, political, and cultural changes of the era. Cross-listed with HIST 5051. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4062 - Modern France, 1789 to the Present

Summer 2010 Registration **HIST 4062**

Considers the shaping of modern France from the 18th century Bourbon Monarchy and aristocratic society to today's liberal democracy, in which multiculturalism, globalization

and supranational institutions call into question the very nature of French identity. Cross-listed with HIST 5062.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4071 - Modern Germany

Summer 2010 Registration **HIST 4071**

Surveys the major political, institutional, social, economic, and cultural developments that have occurred in Germany since the late 18th century. Cross-listed with HIST 5071.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4074 - Post-War Germany

Summer 2010 Registration **HIST 4074**

Historical survey of Germany since the second world war, with an emphasis on culture and society. Cross-listed with HIST 5074.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4082 - Reform and Revolution in Russia: The 1860s to 1917

Summer 2010 Registration **HIST 4082**

Emphasis upon Russia's attempts to modernize, beginning with great reforms of the 1860s and 1870s; increasing polarization of government and opposition groups. Examines governmental point of view through several monographs and revolutionary theory, including those of Marx, Engels, Lenin and Trotsky. Cross-listed with HIST 5082.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4083 - Russia Since 1917

Summer 2010 Registration **HIST 4083**

Studies the development of the Soviet Union from its formation in the October Revolution, through the Civil War, the new economic policy, industrialization, collectivism, the Stalinist purges, up to the present. Cross-listed with HIST 5083.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4086 - Eastern Europe

Summer 2010 Registration **HIST 4086**

Studies the countries of Eastern Europe from their origins in the Middle Ages to the present. Cross-listed with HIST 5086.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4303 - Sex and Gender in Modern Britain

Summer 2010 Registration **HIST 4303**

Examines modern British history by focusing on sex and gender as central aspects in people's lives. Considers the ways gender shapes the realms of politics, economics, society and culture in Britain from the 18th century to the present. Cross-listed with HIST 5303 and WGST 4303. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4411 - Modern Mexico

Summer 2010 Registration **HIST 4411**

Designed to familiarize students with the critical issues in Mexican political, economic and social history. Traces the emergence of independence and the difficult consolidation of an independent nation state. Cross-listed with HIST 5411, ETST 4411. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4414 - Nationalism and State Building in Latin America, 1750-1850

Summer 2010 Registration **HIST 4414**

Explores the problems of nationalism and post-colonial state building by examining the late colonial and early national periods of Latin American history. The course discusses the impact of the enlightenment, the events of the Wars of Independence, and the quandaries faced by the new nations. Cross-listed with HIST 5414. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4415 - Social Revolutions in Latin America

Summer 2010 Registration **HIST 4415**

A theoretical framework and an empirical basis for understanding the large-scale social movements that have influenced the course of Latin American nations. Cross-listed with HIST 5415. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4421 - Modern China

Summer 2010 Registration **HIST 4421**

Surveys Chinese history in the modern era. Includes examination of Western domination of China; revolution and internal fragmentation of China; Japanese attacks and World War II; and civil war and the communist revolution. Cross-listed with HIST

5421.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4451 - Southern Africa

Summer 2010 Registration **HIST 4451**

An in-depth history of the clash of peoples and cultures in Africa south of the Zambezi River. African and Afrikaner political, economic and cultural development in a single land and the consequences of several competing nationalisms existing side by side are examined. Apartheid and African opposition to it are analyzed. Cross-listed with HIST 5451.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4455 - African Struggle for Independence

Summer 2010 Registration **HIST 4455**

An assessment of African leadership from the colonial era to the present. Cross-listed with HIST 5455.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4460 - The Islamic World's Golden Age

Summer 2010 Registration **HIST 4460**

The Islamic world's golden age before European expansion was characterized by sophisticated business institutions, scholarship, new technologies, and art. This class asks: What roles did Islam play in connecting diverse societies across broad regions? What characterized these territories? Cross-listed with HIST 5460.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4461 - The Modern Middle East

Summer 2010 Registration **HIST 4461**

Cross-listed with HIST 5461.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4621 - Explorers and Exploration

Summer 2010 Registration **HIST 4621**

Examines the history of travel and exploration from the 13th century to the present. Readings draw primarily from first-person accounts to understand why people voyage, what they hope to discover, and what happens to them along the way. Cross-listed with HIST 5621.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 3125 - Introduction to Latin American Society

Summer 2010 Registration P SC 3125

Explores the central characteristics of political-economic systems and cultures of Latin America. Prepares students to follow developments in the region with greater understanding and to pursue advanced study. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4155 - Political Systems of the Middle East and North Africa

Summer 2010 Registration P SC 4155

Comparative analysis of political processes in the Middle East and North Africa. Islamic political theory and its contemporary manifestations. The role of nationalism and the quest for modernity in the political development of this region. Parties and programmed modernization in transitional politics. Violent and nonviolent change. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4165 - Islamic Politics and Culture

Summer 2010 Registration P SC 4165

Comprehensive, in-depth study of Islam and Muslims. Islam is viewed as a "way of life" with social, economic, psychological, spiritual, and political implications. Among topics to be examined are: women in Islam, Jihad, fundamentalism, Islamic movements, Islam and the West. Cross-listed with RLST 3100. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

RLST 3100 - Islamic Politics and Culture

Summer 2010 Registration RLST 3100

Comprehensive, in-depth study of Islam and Muslims. Islam is viewed as a "way of life" with social, economic, psychological, spiritual, and political implications. Among topics to be examined are: women in Islam, Jihad, fundamentalism, Islamic movements, Islam and the West. Cross-listed with PSCI 4165. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4175 - Politics and Governments of the Pacific Rim

Summer 2010 Registration P SC 4175

Examines the domestic governments and political economies of selected Pacific Rim countries--especially Japan, Korea, Taiwan, China, Singapore, and Malaysia--and of these countries involvement in the international political economy and U.S. foreign

policy.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4505 - The Post-Soviet World: Origins and Present Condition

Summer 2010 Registration **P SC 4505**

Central and East Europe, Russia, and Central Asia, from earliest times to the present. Equal emphasis on economics, culture and politics. Particular attention to recent developments in the former Soviet Union.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4554 - Chicano and Latino Politics

Summer 2010 Registration **P SC 4554**

Analysis of the social, cultural, and economic factors that affect political behavior of Latinos. Special attention is paid to the Mexican American cultural heritage and to relations between Mexican Americans and Anglo Americans. Cross-listed with ETST 4558.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4615 - Politics and Government of China

Summer 2010 Registration **P SC 4615**

Political and governmental changes within China, from the 19th century to the present. Primary emphasis on contemporary political systems and sociopolitical problems. China's struggle for independence and economic development. The Chinese revolutions, Maoist communism, and the post-Maoist period.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

RLST 3400 - Asian Philosophies and Religions

Summer 2010 Registration **RLST 3400**

We in the Western world encounter a vastly different world, a radically different "universe of meaning," when we examine the traditions of the East. Even what we tacitly assume to be "real" is claimed by the Hindus and Buddhists of India to be a grand illusion. The world of China is, again, very different from India. An examination of Tibetan and Japanese religious forms will conclude our study of Asian thought. Cross-listed with PHIL 3666.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

PHIL 3666 - Asian Philosophies and Religions

Summer 2010 Registration **PHIL 3666**

We in the Western world encounter a vastly different world, a radically different "universe of meaning," when we examine the traditions of the East. Even what we tacitly assume to be "real" is claimed by the Hindus and Buddhists of India to be a grand illusion. The world of China is, again, very different from India. An examination of Tibetan and Japanese religious forms will conclude our study of Asian thought. Cross-listed with RLST 3400. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

RLST 3500 - Religions of India

Summer 2010 Registration **RLST 3500**

Examines the transcendentalist philosophy of India, which rests at the foundation of the great Eastern religious traditions of Hinduism and Buddhism. The Indian ideas of God, the soul, time, the nature of the universe, and its ultimate goal are examined. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

RLST 3660 - Chinese Philosophy and Culture

Summer 2010 Registration **RLST 3660**

China is a fascinating world with its own characteristic orientation to philosophical questions. Chinese thinkers produced the "Flowering of a Hundred Schools of Thought" in the Axial Age, the same period of time in which philosophy was coming to birth in ancient Greece. Covers some of the Chinese schools, including Confucianism, Taoism, Mohism, Legalism, Chinese "Logic", and the later schools of Neo-Confucianism, Neo-Taoism and Chinese Buddhism. Cross-listed with PHIL 3981. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

PHIL 3981 - Chinese Philosophy and Culture

Summer 2010 Registration **PHIL 3981**

China is a fascinating world with its own characteristic orientation to philosophical questions. Chinese thinkers produced the "Flowering of a Hundred Schools of Thought" in the Axial Age, the same period of time in which philosophy was coming to birth in ancient Greece. Covers some of the Chinese schools, including Confucianism, Taoism, Mohism, Legalis, Chinese "logic," and the later schools of Neo-Confucianism, Neo-Taoism and Chinese Buddhism. Cross-listed with RLST 3660. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

International Studies Capstone Course

All majors must take a 3-semester-hour seminar focusing on a global issue. Currently the designated capstone courses are:

HIST 4417 - Commodities and Globalization: Dessert in World History

Summer 2010 Registration **HIST 4417**

Traces the impact of "dessert commodities" (sugar, cacao, vanilla and coffee) on Latin America during an early period of globalization (nineteenth century). Explores cultural shifts in North Atlantic countries that created the incessant demand for dessert. Prereq: Senior or graduate student standing. Cross-listed with HIST 5417. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4126 - Introduction to International Political Economy

Summer 2010 Registration **P SC 4126**

A short introduction to international economy, including classic readings of international political economy (such as Smith, Ricardo, Marx, Lenin), and more recent work on globalization, applying related theories to the current world economy. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

[Return to International Studies](#)

Management Emphasis—BS in Business Administration

The management curriculum provides the foundation for careers in supervision and general management in a wide variety of organizations. It develops skills in management practice through an understanding of general management principles, individual and group behavior, organizational change and design and human resources management.

Required Foundation Courses

MKTG 4050 - Applied Marketing Management

Summer 2010 Registration **MKTG 4050**

The course is designed to enhance the student's ability to formulate and implement a marketing plan and to better understand the relationship of marketing to other business functions. Emphasized application of marketing concepts through the use of cases, simulations or projects. Prereq: MKTG 3000 and DSCI 2010. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

Required Emphasis Courses

MGMT 3010 - Managing People for a Competitive Advantage

Summer 2010 Registration **MGMT 3010**

Provides an overview of the management of human resources in organizations. Areas of study include recruitment, selection, training, career development, performance appraisal, compensation and employee or labor relations. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MGMT 4350 - Leading Organizational Change

Summer 2010 Registration **MGMT 4350**

Focuses on the tasks and skills of a leader in leading organizational changes. Topics include: diagnosing problems, creating urgency, building the change team, creating a vision, implementing change strategies, sustaining the momentum and making change stick. These tasks and skills are studied in various organizational change contexts. Prereq: MGMT 3000 with a grade of 'c' or better and MGMT 4370. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MGMT 4370 - Organization Design

Summer 2010 Registration **MGMT 4370**

Examines how to structure organizations to perform effectively. Addresses the effects of computer-based information technologies (e.g. intranets, extranets, and the internet) on firm structure, strategy, and culture. Emphasis is placed on the role of the task, technology, and the environment as constraints on organizational design. Prereq: MGMT 3000. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

Choose two:

Any upper-division MGMT course (3 semester hours)

BLAW 4120 - Legal Issues for Entrepreneurs

Summer 2010 Registration **BLAW 4120**

Skills in legal and factual analysis and the application of ethical theories are addressed with an emphasis on applicability for entrepreneurs. The cases are drawn from a variety of functional areas such as accounting, information systems, finance, management, marketing and production. Topics include securities, venture capital, employment law and consumer law. Cross-listed with ENTP 3120. **Semester Hours:** 3to 3**When Offered:** FASPRSUM

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENTP 3000 - Principles of Entrepreneurship

Summer 2010 Registration **ENTP 3000**

Focuses on the concepts, skills, know-how, practical information, attitudes and alternatives that are relevant for start-up companies. The materials are designed to enhance the student's capacity to anticipate HR, financial, marketing problems through the application of proper planning. The primary objective of the course is to teach participants the practical aspects of entrepreneurship in order to change the odds of success. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 18 Hours

These 6 hours must be in addition to MGMT courses that were used to satisfy the international business or diversity requirements.

Management/Information Systems (MGIS)

Within the management curriculum students can choose to add additional courses in information systems to complement their individual interests as well as prior education and work experiences.

Required Information System courses

ISMG 4500 - Database Management and Applications

Summer 2010 Registration **ISMG 4500**

The success of today's business often hinges on the ability to turn mountains of data into critical information and to utilize the critical information to make the right decisions quickly and efficiently. This course introduces students to the basic principles of data management and utilization. Topics include data modeling, normalization and database design, query formulation using SQL and QBE and interface design. Actual database management systems products (e.g. Oracle and Access) are utilized to demonstrate the design of database applications in management, marketing, finance, accounting and other business areas. Each student will also design a working database system as a

project. Prereq: ISMG 3000. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 4600 - Systems Analysis and Design

Summer 2010 Registration **ISMG 4600**

Provides an understanding of the system development and maintenance process. It enables students to evaluate and choose a system development methodology. Topics include: systems development life cycle phases, structured analysis and design, object-oriented analysis and design; prototyping, joint application development (JAD) and structured walk-through; communication, interviewing, interpersonal and presentation skills; risk and feasibility analysis, project management, systems operations and support.

Prereq: ISMG 3000. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 4900 - Project Management and Practice

Summer 2010 Registration **ISMG 4900**

Covers the factors necessary for successful management of enhancement projects. Both technical and behavioral aspects of project management are discussed. The focus is on management of development for enterprise-level systems. Topics include: managing the system lifecycle; requirements determination, logical design, physical design, testing, implementation; metrics for project management; managing expectations: superiors, users, team members and others related to the project; determining skill requirement and staffing the project; cost-effectiveness analysis; reporting and presentation techniques; effective management of both behavioral and technical aspects of the project; change management. Note: Successful completion of this course meets the educational requirements to sit for both the PMP and CAPM exams. Prereq: ISMG 2200. Cross-listed with CSCI 4900 and MGMT 4900. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 9 Hours

Marketing Emphasis—BS in Business Administration

Marketing is concerned with directing the activities of the organization toward the satisfaction of customer wants and needs. This involves understanding customers, identifying those wants and needs that the organization can best serve, guiding the

development of specific products or services, planning and implementing ways to take products or services to the market, securing the customer's order and finally, monitoring customer response in order to guide future activities.

In most organizations, marketing is a major functional area that provides a wide variety of career opportunities in such fields as personal selling and sales management, advertising and sales promotion, public relations, marketing research, physical distribution, product management, market management, marketing information systems and retail management. Increasingly, career opportunities exist in service businesses and nonprofit organizations.

Required Foundation Courses

BLAW 4120 - Legal Issues for Entrepreneurs

Summer 2010 Registration **BLAW 4120**

Skills in legal and factual analysis and the application of ethical theories are addressed with an emphasis on applicability for entrepreneurs. The cases are drawn from a variety of functional areas such as accounting, information systems, finance, management, marketing and production. Topics include securities, venture capital, employment law and consumer law. Cross-listed with ENTP 3120. **Semester Hours:** 3to 3**When Offered:** FASPRSUM

Registration is changing. Visit our website for details ucdenver.edu/registration.

MGMT 4370 - Organization Design

Summer 2010 Registration **MGMT 4370**

Examines how to structure organizations to perform effectively. Addresses the effects of computer-based information technologies (e.g. intranets, extranets, and the internet) on firm structure, strategy, and culture. Emphasis is placed on the role of the task, technology, and the environment as constraints on organizational design. Prereq: MGMT 3000. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Required Emphasis Courses

MKTG 3100 - Marketing Research

Summer 2010 Registration **MKTG 3100**

Provides practical experience in research methodologies, planning an investigation, designing a questionnaire, selecting a sample, interpreting results and making a report. Techniques focus on attitude surveys, behavioral experiments, and qualitative research. Prereq: MKTG 3000 and DSCI 2010. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MKTG 4050 - Applied Marketing Management

Summer 2010 Registration **MKTG 4050**

The course is designed to enhance the student's ability to formulate and implement a marketing plan and to better understand the relationship of marketing to other business functions. Emphasized application of marketing concepts through the use of cases, simulations or projects. Prereq: MKTG 3000 and DSCI 2010. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.
MKTG required 3 courses (9 semester hours): CHOOSE FROM:

Electives

Choose three:

MKTG 3200 - Buyer Behavior

Summer 2010 Registration **MKTG 3200**

Focuses on improving the student's understanding of consumer and organizational buying behavior as a basis for better formulation and implementation of marketing strategy. Blends concepts from the behavioral sciences with empirical evidence and introduces buyer research techniques. Prereq: MKTG 3000. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MKTG 4000 - Advertising

Summer 2010 Registration **MKTG 4000**

Analyzes principles and practices in advertising from a managerial viewpoint. Considers the reasons to advertise, product and market analysis as the planning phase of the advertising program, media selection, creation and production of advertisements, copy testing, and development of advertising budgets. Prereq: MKTG 3000. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MKTG 4200 - International Marketing

Summer 2010 Registration **MKTG 4200**

Studies managerial marketing policies and practices of firms marketing their products in foreign countries. Analytical survey of institutions, functions, policies, and practices in international marketing. Relates marketing activities to market structure and environment. Prereq: MKTG 3000. **Semester Hours:** 3to 3**When Offered:** FALL SPR
Registration is changing. Visit our website for details ucdenver.edu/registration.

MKTG 4220 - Asian Business Development and Marketing

Summer 2010 Registration **MKTG 4220**

This course investigates methods of Business Development and Marketing in the Asian Business Environment. It seeks to examine and explain methods of determining market potential and techniques tapping this market potential in this dynamic and rapidly growing business environment the course uses a combination of experienced guest speakers, Asian business cases and projects to develop the marketing skills in students to successfully compete in Asia. Prereq: MKTG 3000. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MKTG 4580 - International Transportation

Summer 2010 Registration **MKTG 4580**

Analysis of international transportation (primarily sea and air) in world economy. Detailed study of cargo documentation and freight rate patterns. Included are liability patterns, logistics, economics, and national policies of transportation. Prereq: MKTG 3000. **Semester Hours:** 3to 3**When Offered:** FALL SPR
Registration is changing. Visit our website for details ucdenver.edu/registration.

MKTG 4700 - Personal Selling and Sales Management

Summer 2010 Registration **MKTG 4700**

Introduces the student to principles of personal selling and issues in managing the field sales force. Focuses on models of personal selling, recruiting, selection, training, compensation, supervision, and motivation, as well as organizing the field sales force, sales analysis, forecasting and budgeting. Prereq: MKTG 3000. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MKTG 4950 - Special Topics

Summer 2010 Registration **MKTG 4950**

Courses offered on an irregular basis for the purpose of presenting new subject matter in marketing. Prerequisites vary depending upon the particular topic and instructor

requirements. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 21 Hours

In addition to the three required courses beyond the core, students may select marketing electives, business electives and nonbusiness electives that support their particular career orientations. The marketing faculty advisor can assist the student in choosing an appropriate set of electives to fit career objectives.

Marketing courses that were used to satisfy the international business requirement cannot be applied to the marketing area of emphasis.

Marketing/Information Systems (MKIS)

Within the marketing curriculum students can choose to add courses in information systems to complement their individual interests as well as prior education and work experiences.

Required Information System Courses

ISMG 4500 - Database Management and Applications

Summer 2010 Registration **ISMG 4500**

The success of today's business often hinges on the ability to turn mountains of data into critical information and to utilize the critical information to make the right decisions quickly and efficiently. This course introduces students to the basic principles of data management and utilization. Topics include data modeling, normalization and database design, query formulation using SQL and QBE and interface design. Actual database management systems products (e.g. Oracle and Access) are utilized to demonstrate the design of database applications in management, marketing, finance, accounting and other business areas. Each student will also design a working database system as a project. Prereq: ISMG 3000. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 4600 - Systems Analysis and Design

Summer 2010 Registration **ISMG 4600**

Provides an understanding of the system development and maintenance process. It enables students to evaluate and choose a system development methodology. Topics include: systems development life cycle phases, structured analysis and design, object-

oriented analysis and design; prototyping, joint application development (JAD) and structured walk-through; communication, interviewing, interpersonal and presentation skills; risk and feasibility analysis, project management, systems operations and support.

Prereq: ISMG 3000. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 4900 - Project Management and Practice

Summer 2010 Registration **ISMG 4900**

Covers the factors necessary for successful management of enhancement projects. Both technical and behavioral aspects of project management are discussed. The focus is on management of development for enterprise-level systems. Topics include: managing the system lifecycle; requirements determination, logical design, physical design, testing, implementation; metrics for project management; managing expectations: superiors, users, team members and others related to the project; determining skill requirement and staffing the project; cost-effectiveness analysis; reporting and presentation techniques; effective management of both behavioral and technical aspects of the project; change management. Note: Successful completion of this course meets the educational requirements to sit for both the PMP and CAPM exams. Prereq: ISMG 2200. Cross-listed with CSCI 4900 and MGMT 4900. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Required Emphasis Courses

MKTG 3100 - Marketing Research

Summer 2010 Registration **MKTG 3100**

Provides practical experience in research methodologies, planning an investigation, designing a questionnaire, selecting a sample, interpreting results and making a report. Techniques focus on attitude surveys, behavioral experiments, and qualitative research.

Prereq: MKTG 3000 and DSCI 2010. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MKTG 4050 - Applied Marketing Management

Summer 2010 Registration **MKTG 4050**

The course is designed to enhance the student's ability to formulate and implement a marketing plan and to better understand the relationship of marketing to other business functions. Emphasized application of marketing concepts through the use of cases, simulations or projects. Prereq: MKTG 3000 and DSCI 2010. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 4760 - Customer Relationship Management

Summer 2010 Registration **ISMG 4760**

This marketing-theory driven course examines customer relationship management (CRM) as a key strategic process for organizations. Composed of people, technology and processes, effective CRM optimizes the selection or identification, acquisition, growth and retention of desired customers to maximize profit. Besides presenting an overview of the CRM process, its strategic role in the organization and its place in marketing, students have an opportunity to create simulated CRM database using popular software package that help to illustrate what CRM can do, its advantages and limitations. Prereq: MKTG 3000 and ISMG 3000. Cross-listed with MKTG 4760. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

or

MKTG 4760 - Customer Relationship Management

Summer 2010 Registration **MKTG 4760**

This marketing-theory driven course examines customer relationship management (CRM) as a key strategic process for organizations. Composed of people, technology and processes, effective CRM optimizes the selection or identification, acquisition, growth and retention of desired customers to maximize profit. Besides presenting an overview of the CRM process, its strategic role in the organization and its place in marketing, students have an opportunity to create simulated CRM database using popular software package that help to illustrate what CRM can do, its advantages and limitations. Prereq: MKTG 3000. Cross-listed with ISMG 4760. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Choose two:

MKTG 3200 - Buyer Behavior

Summer 2010 Registration **MKTG 3200**

Focuses on improving the student's understanding of consumer and organizational buying behavior as a basis for better formulation and implementation of marketing strategy. Blends concepts from the behavioral sciences with empirical evidence and introduces buyer research techniques. Prereq: MKTG 3000. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MKTG 4000 - Advertising

Summer 2010 Registration **MKTG 4000**

Analyzes principles and practices in advertising from a managerial viewpoint. Considers the reasons to advertise, product and market analysis as the planning phase of the

advertising program, media selection, creation and production of advertisements, copy testing, and development of advertising budgets. Prereq: MKTG 3000.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MKTG 4220 - Asian Business Development and Marketing

Summer 2010 Registration **MKTG 4220**

This course investigates methods of Business Development and Marketing in the Asian Business Environment. It seeks to examine and explain methods of determining market potential and techniques tapping this market potential in this dynamic and rapidly growing business environment the course uses a combination of experienced guest speakers, Asian business cases and projects to develop the marketing skills in students to successfully compete in Asia. Prereq: MKTG 3000.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MKTG 4700 - Personal Selling and Sales Management

Summer 2010 Registration **MKTG 4700**

Introduces the student to principles of personal selling and issues in managing the field sales force. Focuses on models of personal selling, recruiting, selection, training, compensation, supervision, and motivation, as well as organizing the field sales force, sales analysis, forecasting and budgeting. Prereq: MKTG 3000.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MKTG 4720 - Internet Marketing

Summer 2010 Registration **MKTG 4720**

Distinctly influences the way marketers conduct marketing activities. The Internet media promises to establish marketing theories, identifies obsolete situations, explores how marketing functions have irreversibly changed as a result of the internet, and outlines basic marketing strategies for successful online marketing. Prereq: MKTG 3000.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MKTG 4950 - Special Topics

Summer 2010 Registration **MKTG 4950**

Courses offered on an irregular basis for the purpose of presenting new subject matter in marketing. Prerequisites vary depending upon the particular topic and instructor requirements.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 24 Hours

Marketing courses that were used to satisfy the international business requirement cannot be applied to the marketing area of emphasis.

Mathematics BS

Degree Requirements

Required Core Courses for All Mathematics Majors

MATH 1401 - Calculus I

Summer 2010 Registration **MATH 1401**

First course of a three-semester sequence (MATH 1401, 2411, 2421) in calculus. Topics covered include limits, derivatives, applications of derivatives, and the definite integral.

Note: Students cannot receive credit for both MATH 1080 and 1401. Prereq: MATH 1120 or 1130 and satisfactory score on the placement exam. **Semester Hours:** 4to 4**GT**

Pathways Category Key: GT-MA1

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 2411 - Calculus II

Summer 2010 Registration **MATH 2411**

The second of a three-semester sequence (MATH 1401, 2411, 2421) in calculus. Topics covered include exponential, logarithmic, and trigonometric functions, techniques of integration, indeterminate forms, improper integrals and infinite series. Prereq: MATH 1401. **Semester Hours:** 4to 4**GT** **Pathways Category Key:** GT-MA1

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 2421 - Calculus III

Summer 2010 Registration **MATH 2421**

The third of a three-semester sequence in calculus (MATH 1401, 2411 and 2421).

Topics include vectors, vector-valued functions, partial differentiation, differentiation, multiple integration, and vector calculus. Prereq: MATH 2411. **Semester Hours:** 4to 4**GT**

Pathways Category Key: GT-MA1

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 3000 - Introduction to Abstract Mathematics

Summer 2010 Registration **MATH 3000**

Students learn to prove and critique proofs of theorems by studying elementary topics in abstract mathematics, including logic, sets, functions, equivalence relations and elementary combinatorics. Prereq: MATH 1401. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 3191 - Applied Linear Algebra

Summer 2010 Registration **MATH 3191**

Topics include systems of equations, Gaussian elimination with partial pivoting, LU--decomposition of matrices, matrix algebra, determinants, vector spaces, linear transformations, eigenvalues and applications. Note: No co-credit with MATH 3195.

Prereq: MATH 2411. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 3200 - Elementary Differential Equations

Summer 2010 Registration **MATH 3200**

First and second order differential equations, Laplace transforms, systems of equations, with an emphasis on modeling and applications. Note: No co-credit with MATH 3195.

Prereq: MATH 2411; coreq is MATH 3191. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

MATH 4408 - Applied Graph Theory

Summer 2010 Registration **MATH 4408**

Introduces discrete structures and applications of graph theory to computer science, engineering, operations research, social science, and biology. Topics include connectivity, coloring, trees, Euler and Hamiltonian paths and circuits, matching and covering problems, shortest route and network flows. Prereq: CSCI/MATH 2511 or MATH 3000. Cross-listed with CSCI 4408. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 3250 - Problem Solving Tools

Summer 2010 Registration **MATH 3250**

Students learn and refine both problem solving techniques and computer programming skills. Examples, exercises, and projects are taken from a wide range of mathematical topics including algebra, calculus, linear algebra and probability. Note: This course will not count toward a graduate degree in applied mathematics. Prereq: MATH 2421.

Cross-listed with MATH 5250. **Semester Hours:** 3to 3**When Offered:** *SPRING*

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 3800 - Probability and Statistics for Engineers

Summer 2010 Registration **MATH 3800**

Basic probability theory, discrete and continuous random variables, point and interval estimation, test of hypotheses, one-way analysis of variance, and simple linear regression. Note: no co-credit with MATH 4810. Prereq: MATH 2411; coreq: MATH 2421. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

MATH 4810 - Probability

Summer 2010 Registration **MATH 4810**

Examines elementary theory of probability, including independence, conditional probability, and Bayes' theorem; random variables, expectations and probability distributions; joint and conditional distributions; functions of random variables; limit theorems, including the central limit theorem. Prereq: MATH 2421 and 3191. Cross-listed with MATH 5310. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 4779 - Math Clinic

Summer 2010 Registration **MATH 4779**

The clinic is intended to illustrate the applicability and utility of mathematical concepts. Research problems investigated originate from a variety of sources--industry, government agencies, educational institutions, or nonprofit organizations. Prereq: consult Schedule Planner or instructor. Cross-listed with MATH 5779. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

TOTAL REQUIRED CORE: 30 HOURS

Core Areas

Choose one course from each of the following three areas:

Analysis

Choose one:

MATH 3200 - Elementary Differential Equations

Summer 2010 Registration **MATH 3200**

First and second order differential equations, Laplace transforms, systems of equations, with an emphasis on modeling and applications. Note: No co-credit with MATH 3195.

Prereq: MATH 2411; coreq is MATH 3191. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 4201 - Topology

Summer 2010 Registration **MATH 4201**

Metric spaces and topological spaces, compactness, separation properties, and connectedness. Prereq: MATH 3000. **Semester Hours:** 3to 3 **When Offered:** *SPRING*

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 4310 - Introduction to Real Analysis I

Summer 2010 Registration **MATH 4310**

Calculus of one variable, the real number system, continuity, differentiation, integration theory, sequence and series. Prereq: MATH 2421 and 3000. **Semester Hours:** 4to 4

When Offered: *FALL*

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 4450 - Complex Variables

Summer 2010 Registration **MATH 4450**

Infrequent. Topics include complex algebra, Cauchy-Riemann equations, Laurent expansions, theory of residues, complex integration, and introduction to conformal mapping. Prereq: MATH 2421 and MATH 3000. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 4650 - Numerical Analysis I

Summer 2010 Registration **MATH 4650**

Methods and analysis of techniques used to resolve continuous mathematical problems on the computer. Solution of linear and nonlinear equations, interpolation and integration. Prereq: MATH 2411, 3191 or 3195, and programming experience. Cross-listed with CSCI 4650, 5660, and MATH 5660. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 4733 - Partial Differential Equations

Summer 2010 Registration **MATH 4733**

Infrequent. Initial/Boundary value problems for first-order, wave, heat and Laplace Equations; maximum principles; Fourier Series and applications. Prereq: MATH 2421 and 3200. Cross-listed with MATH 5733. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

Modeling

Choose one:

MATH 4387 - Regression Analysis, Modeling and Time Series

Summer 2010 Registration **MATH 4387**

Topics include linear and multiple regression, basic experimental designs, one-way analysis of variance. Emphasis is on practical aspects and applications of linear models to the analysis of data in business engineering, behavioral, biological and physical sciences. Prereq: MATH 3191 and 3800/4820. Cross-listed with MATH 5387. **Semester Hours:** 3to 3 **When Offered:** FALL
Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 4791 - Continuous Modeling

Summer 2010 Registration **MATH 4791**

Every other year. Surveys mathematical problems that arise in natural sciences and engineering. Topics may include population models, epidemic models, mechanics, heat transfer and diffusion, tomography, pharmaco-kinetics, traffic flow, fractal models, wave phenomena, and natural resource management. Most models discussed are based on differential and integral equations. Emphasis is formulation and validation of models as well as methods of solution. Prereq: MATH 3191 and 3200. Cross-listed with MATH 5791. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 4792 - Probabilistic Modeling

Summer 2010 Registration **MATH 4792**

Every other year. Markov chains; Poisson processes, continuous time Markov chains, elementary topics in queuing theory, and some mathematical aspects of Monte Carlo simulation, including random variate generation, variance reduction, and output analysis. Prereq: MATH 4810, 5310 and some programming experience. Cross-listed with MATH 5792. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 4793 - Discrete Math Modeling

Summer 2010 Registration **MATH 4793**

Every other year. Focuses on the use of graph theory and combinatorics to solve problems in a wide variety of disciplines. Applications are selected from computer science, communication networks, economics, operations research, and the social, biological and environmental sciences. Prereq: MATH 3191 and 4408. Cross-listed with MATH 5793. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 4794 - Optimization Modeling

Summer 2010 Registration **MATH 4794**

Every other year. Principles of model formulation and analysis are developed by presenting a wide variety of applications, both for natural phenomena and social systems. Examples of optimization models to represent natural phenomena include principles of least time and energy. Examples in social systems include resource allocation, environmental control and land management. Specific applications vary, but are chosen to cover a wide scope that considers dichotomies, such as discrete vs. continuous, static vs. dynamic, and deterministic vs. stochastic. Some computer modeling language (like GAMS) is taught. Prereq: MATH 2421 and 3191. Cross-listed with MATH 5794. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Discrete Math

Choose one:

MATH 3140 - Introduction to Modern Algebra

Summer 2010 Registration **MATH 3140**

Studies the fundamental algebraic structures used in modern mathematics. Topics include groups, rings, fields and polynomials. Prereq: MATH 3000. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 3301 - Introduction to Operations Research I - Deterministic Systems

Summer 2010 Registration **MATH 3301**

A mathematical approach to decision making based on optimization. Topics include

linear programming, network flows and production models. Prereq: MATH 3191 or 3195. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 4408 - Applied Graph Theory

Summer 2010 Registration **MATH 4408**

Introduces discrete structures and applications of graph theory to computer science, engineering, operations research, social science, and biology. Topics include connectivity, coloring, trees, Euler and Hamiltonian paths and circuits, matching and covering problems, shortest route and network flows. Prereq: CSCI/MATH 2511 or MATH 3000. Cross-listed with CSCI 4408. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 4409 - Applied Combinatorics

Summer 2010 Registration **MATH 4409**

Every other year. Major emphasis is on applied combinatorics and combinatorial algorithms, with applications in computer science and operations. Topics include general counting methods, generating functions, recurrence relations, inclusion-exclusion, and block designs. Prereq: MATH 4408 and 3140. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

TOTAL CORE AREAS: 9 HOURS

Electives Mathematics Majors Must Complete

Mathematics majors must take three upper-division mathematics courses, excluding MATH 3040, chosen to provide depth and breadth. Depth is obtained by taking a two-semester sequence of upper-division courses, one of which may be a course taken for the core area requirement.

Portfolio, Interview, Survey

In the semester of graduation, students must:

- submit a portfolio consisting of two papers, typically written for previous courses, that demonstrate mathematical and writing proficiency
- participate in an exit interview, which may be scheduled by the department administrative assistant
- complete a senior survey, available from the department administrative assistant

Math Majors Considering Graduate Study

Mathematics majors who are considering graduate study in mathematics should plan to take the following courses as part of their major:

MATH 4310 - Introduction to Real Analysis I

Summer 2010 Registration **MATH 4310**

Calculus of one variable, the real number system, continuity, differentiation, integration theory, sequence and series. Prereq: MATH 2421 and 3000. **Semester Hours:** 4to

4When Offered: *FALL*

Registration is changing. Visit our website for details ucdenver.edu/registration.

-and-

MATH 4320 - Introduction to Real Analysis II

Summer 2010 Registration **MATH 4320**

Convergence, uniform convergence; Taylor's theorem; calculus of several variables including continuity, differentiation and integration; Picard's theorem in ordinary differential equations and Fourier series. Prereq: MATH 4310. **Semester Hours:** 4to

4When Offered: *SPRING*

Registration is changing. Visit our website for details ucdenver.edu/registration.

Required Courses for Each Option

PURE MATHEMATICS OPTION

All core courses, with MATH 3200 chosen (30 semester hours), plus the following:

MATH 3140 - Introduction to Modern Algebra

Summer 2010 Registration **MATH 3140**

Studies the fundamental algebraic structures used in modern mathematics. Topics include groups, rings, fields and polynomials. Prereq: MATH 3000. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 4201 - Topology

Summer 2010 Registration **MATH 4201**

Metric spaces and topological spaces, compactness, separation properties, and

connectedness. Prereq: MATH 3000. **Semester Hours:** 3to 3**When Offered:** *SPRING*
Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

MATH 4110 - Theory of Numbers

Summer 2010 Registration **MATH 4110**

Every other year. Topics include divisibility, prime numbers, congruencies, number theoretic functions, quadratic reciprocity, and special diophantine equations, with applications in engineering. Prereq: MATH 3000. Cross-listed with MATH 5110. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

MATH 4409 - Applied Combinatorics

Summer 2010 Registration **MATH 4409**

Every other year. Major emphasis is on applied combinatorics and combinatorial algorithms, with applications in computer science and operations. Topics include general counting methods, generating functions, recurrence relations, inclusion-exclusion, and block designs. Prereq: MATH 4408 and 3140. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 4310 - Introduction to Real Analysis I

Summer 2010 Registration **MATH 4310**

Calculus of one variable, the real number system, continuity, differentiation, integration theory, sequence and series. Prereq: MATH 2421 and 3000. **Semester Hours:** 4to 4**When Offered:** *FALL*

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 4320 - Introduction to Real Analysis II

Summer 2010 Registration **MATH 4320**

Convergence, uniform convergence; Taylor's theorem; calculus of several variables including continuity, differentiation and integration; Picard's theorem in ordinary differential equations and Fourier series. Prereq: MATH 4310. **Semester Hours:** 4to 4**When Offered:** *SPRING*

Registration is changing. Visit our website for details ucdenver.edu/registration.

Two approved math electives (6 semester hours)

Pure Mathematics Option Total: 50 Hours

APPLIED MATHEMATICS OPTION

All core courses with MATH 3200 and 4810 chosen (30 semester hours), plus the following:

MATH 3301 - Introduction to Operations Research I - Deterministic Systems

Summer 2010 Registration **MATH 3301**

A mathematical approach to decision making based on optimization. Topics include linear programming, network flows and production models. Prereq: MATH 3191 or 3195. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

MATH 3302 - Operations Research II

Summer 2010 Registration **MATH 3302**

Elementary stochastic processes and standard nondeterministic operations research models: Markov chains, Poisson processes, renewal processes, queuing theory, inventory models, Markov decision processes, simulation. Prereq: MATH 3191 and 3800. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

MATH 4408 - Applied Graph Theory

Summer 2010 Registration **MATH 4408**

Introduces discrete structures and applications of graph theory to computer science, engineering, operations research, social science, and biology. Topics include connectivity, coloring, trees, Euler and Hamiltonian paths and circuits, matching and covering problems, shortest route and network flows. Prereq: CSCI/MATH 2511 or MATH 3000. Cross-listed with CSCI 4408. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 4650 - Numerical Analysis I

Summer 2010 Registration **MATH 4650**

Methods and analysis of techniques used to resolve continuous mathematical problems on the computer. Solution of linear and nonlinear equations, interpolation and integration. Prereq: MATH 2411, 3191 or 3195, and programming experience. Cross-listed with CSCI 4650, 5660, and MATH 5660. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Two modeling courses, chosen from:

MATH 4387 - Regression Analysis, Modeling and Time Series

Summer 2010 Registration **MATH 4387**

Topics include linear and multiple regression, basic experimental designs, one-way analysis of variance. Emphasis is on practical aspects and applications of linear models to the analysis of data in business engineering, behavioral, biological and physical sciences. Prereq: MATH 3191 and 3800/4820. Cross-listed with MATH 5387.

Semester Hours: 3 to 3 **When Offered:** FALL

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 4791 - Continuous Modeling

Summer 2010 Registration **MATH 4791**

Every other year. Surveys mathematical problems that arise in natural sciences and engineering. Topics may include population models, epidemic models, mechanics, heat transfer and diffusion, tomography, pharmaco-kinetics, traffic flow, fractal models, wave phenomena, and natural resource management. Most models discussed are based on differential and integral equations. Emphasis is formulation and validation of models as well as methods of solution. Prereq: MATH 3191 and 3200. Cross-listed with MATH 5791.

Semester Hours: 3 to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 4792 - Probabilistic Modeling

Summer 2010 Registration **MATH 4792**

Every other year. Markov chains; Poisson processes, continuous time Markov chains, elementary topics in queuing theory, and some mathematical aspects of Monte Carlo simulation, including random variate generation, variance reduction, and output analysis. Prereq: MATH 4810, 5310 and some programming experience. Cross-listed with MATH 5792.

Semester Hours: 3 to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 4793 - Discrete Math Modeling

Summer 2010 Registration **MATH 4793**

Every other year. Focuses on the use of graph theory and combinatorics to solve problems in a wide variety of disciplines. Applications are selected from computer science, communication networks, economics, operations research, and the social, biological and environmental sciences. Prereq: MATH 3191 and 4408. Cross-listed with MATH 5793.

Semester Hours: 3 to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 4794 - Optimization Modeling

Summer 2010 Registration **MATH 4794**

Every other year. Principles of model formulation and analysis are developed by presenting a wide variety of applications, both for natural phenomena and social systems. Examples of optimization models to represent natural phenomena include principles of least time and energy. Examples in social systems include resource allocation, environmental control and land management. Specific applications vary, but are chosen to cover a wide scope that considers dichotomies, such as discrete vs. continuous, static vs. dynamic, and deterministic vs. stochastic. Some computer modeling language (like GAMS) is taught. Prereq: MATH 2421 and 3191. Cross-listed with MATH 5794. **Semester Hours:** 3 to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Two approved math electives: **6 semester hours**

Applied Mathematics Option Total: 48 Hours

COMPUTER SCIENCE OPTION

All core courses with MATH 4408 chosen (30 semester hours), plus the following:

CSCI 2421 - Data Structures and Program Design

Summer 2010 Registration **C SC 2421**

Topics include a first look at an algorithm, data structures, abstract data types, and basic techniques such as sorting, searching, and recursion. Programming exercises are assigned through the semester. Prereq: ENGL 1020, CSCI 2312. **Semester Hours:** 3 to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 3140 - Introduction to Modern Algebra

Summer 2010 Registration **MATH 3140**

Studies the fundamental algebraic structures used in modern mathematics. Topics include groups, rings, fields and polynomials. Prereq: MATH 3000. **Semester Hours:** 3 to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 4650 - Numerical Analysis I

Summer 2010 Registration **MATH 4650**

Methods and analysis of techniques used to resolve continuous mathematical problems on the computer. Solution of linear and nonlinear equations, interpolation and

integration. Prereq: MATH 2411, 3191 or 3195, and programming experience. Cross-listed with CSCI 4650, 5660, and MATH 5660. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 4660 - Numerical Analysis II

Summer 2010 Registration **MATH 4660**

Numerical differentiation and integration, numerical solution of ordinary differential equations, and numerical solutions of partial differential equations as time allows. Prereq: MATH 3195 or both 3191 and 3200; MATH or CSCI 4650 or 5660; or programming experience. Cross-listed with MATH 5661, CSCI 4660 and 5661. **Semester Hours:** 3to 3 **When Offered:** FALL SUM
Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

MATH 4674 - Parallel Computing and Architectures

Summer 2010 Registration **MATH 4674**

Infrequent. Examines a range of topics involved in using parallel operations to improve computational performance. Parallel architectures, parallel algorithms, parallel programming languages, interconnection networks, and their relation to specific computer architectures. Prereq: MATH 4650. Cross-listed with MATH 5674. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.
One modeling course, chosen from:

MATH 4387 - Regression Analysis, Modeling and Time Series

Summer 2010 Registration **MATH 4387**

Topics include linear and multiple regression, basic experimental designs, one-way analysis of variance. Emphasis is on practical aspects and applications of linear models to the analysis of data in business engineering, behavioral, biological and physical sciences. Prereq: MATH 3191 and 3800/4820. Cross-listed with MATH 5387. **Semester Hours:** 3to 3 **When Offered:** FALL
Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 4791 - Continuous Modeling

Summer 2010 Registration **MATH 4791**

Every other year. Surveys mathematical problems that arise in natural sciences and engineering. Topics may include population models, epidemic models, mechanics, heat transfer and diffusion, tomography, pharmaco-kinetics, traffic flow, fractal models, wave phenomena, and natural resource management. Most models discussed are based on differential and integral equations. Emphasis is formulation and validation of models as

well as methods of solution. Prereq: MATH 3191 and 3200. Cross-listed with MATH 5791.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 4792 - Probabilistic Modeling

Summer 2010 Registration **MATH 4792**

Every other year. Markov chains; Poisson processes, continuous time Markov chains, elementary topics in queuing theory, and some mathematical aspects of Monte Carlo simulation, including random variate generation, variance reduction, and output analysis. Prereq: MATH 4810, 5310 and some programming experience. Cross-listed with MATH 5792.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 4793 - Discrete Math Modeling

Summer 2010 Registration **MATH 4793**

Every other year. Focuses on the use of graph theory and combinatorics to solve problems in a wide variety of disciplines. Applications are selected from computer science, communication networks, economics, operations research, and the social, biological and environmental sciences. Prereq: MATH 3191 and 4408. Cross-listed with MATH 5793.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 4794 - Optimization Modeling

Summer 2010 Registration **MATH 4794**

Every other year. Principles of model formulation and analysis are developed by presenting a wide variety of applications, both for natural phenomena and social systems. Examples of optimization models to represent natural phenomena include principles of least time and energy. Examples in social systems include resource allocation, environmental control and land management. Specific applications vary, but are chosen to cover a wide scope that considers dichotomies, such as discrete vs. continuous, static vs. dynamic, and deterministic vs. stochastic. Some computer modeling language (like GAMS) is taught. Prereq: MATH 2421 and 3191. Cross-listed with MATH 5794.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

Two approved math electives: **6 semester hours**

One upper division computer science elective approved by advisor: **3 semester hours**

Computer Science Option Total: 54 Hours

DISCRETE MATHEMATICS OPTION

This option allows students and advisors to create a program that differs from the pre-approved option.

Such a program must be approved by the advisor at least one year before graduation.

All core courses, with MATH 4408 chosen (30 semester hours) plus the following:

MATH 3140 - Introduction to Modern Algebra

Summer 2010 Registration **MATH 3140**

Studies the fundamental algebraic structures used in modern mathematics. Topics include groups, rings, fields and polynomials. Prereq: MATH 3000. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 4201 - Topology

Summer 2010 Registration **MATH 4201**

Metric spaces and topological spaces, compactness, separation properties, and connectedness. Prereq: MATH 3000. **Semester Hours:** 3to 3 **When Offered:** *SPRING*

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

MATH 4310 - Introduction to Real Analysis I

Summer 2010 Registration **MATH 4310**

Calculus of one variable, the real number system, continuity, differentiation, integration theory, sequence and series. Prereq: MATH 2421 and 3000. **Semester Hours:** 4to 4 **When Offered:** *FALL*

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 4409 - Applied Combinatorics

Summer 2010 Registration **MATH 4409**

Every other year. Major emphasis is on applied combinatorics and combinatorial algorithms, with applications in computer science and operations. Topics include general counting methods, generating functions, recurrence relations, inclusion-exclusion, and block designs. Prereq: MATH 4408 and 3140. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 4793 - Discrete Math Modeling

Summer 2010 Registration **MATH 4793**

Every other year. Focuses on the use of graph theory and combinatorics to solve problems in a wide variety of disciplines. Applications are selected from computer science, communication networks, economics, operations research, and the social, biological and environmental sciences. Prereq: MATH 3191 and 4408. Cross-listed with MATH 5793. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

MATH 4794 - Optimization Modeling

Summer 2010 Registration **MATH 4794**

Every other year. Principles of model formulation and analysis are developed by presenting a wide variety of applications, both for natural phenomena and social systems. Examples of optimization models to represent natural phenomena include principles of least time and energy. Examples in social systems include resource allocation, environmental control and land management. Specific applications vary, but are chosen to cover a wide scope that considers dichotomies, such as discrete vs. continuous, static vs. dynamic, and deterministic vs. stochastic. Some computer modeling language (like GAMS) is taught. Prereq: MATH 2421 and 3191. Cross-listed with MATH 5794. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Choose one course from the following

MATH 3210 - Higher Geometry I

Summer 2010 Registration **MATH 3210**

Studies the foundations of modern geometry by examining axiomatic systems for various geometrics, with an emphasis on non-Euclidean hyperbolic geometry. Prereq: MATH 3000. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 4110 - Theory of Numbers

Summer 2010 Registration **MATH 4110**

Every other year. Topics include divisibility, prime numbers, congruencies, number theoretic functions, quadratic reciprocity, and special diophantine equations, with applications in engineering. Prereq: MATH 3000. Cross-listed with MATH 5110. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 4220 - Higher Geometry II

Summer 2010 Registration **MATH 4220**

Studies affine and projective geometries. Coordinates are introduced in this framework. Planes and higher dimensional spaces are examined. Prereq: MATH 3191. **Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

One Math elective above MATH 3000, excluding 3040: **3 semester hours**

Discrete Mathematics Option Total: 51-52 Hours

PROBABILITY AND STATISTICS OPTION

All core courses with MATH 3200 and 4810 chosen (30 semester hours), plus the following:

MATH 4650 - Numerical Analysis I

Summer 2010 Registration **MATH 4650**

Methods and analysis of techniques used to resolve continuous mathematical problems on the computer. Solution of linear and nonlinear equations, interpolation and integration. Prereq: MATH 2411, 3191 or 3195, and programming experience. Cross-listed with CSCI 4650, 5660, and MATH 5660. **Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 4387 - Regression Analysis, Modeling and Time Series

Summer 2010 Registration **MATH 4387**

Topics include linear and multiple regression, basic experimental designs, one-way analysis of variance. Emphasis is on practical aspects and applications of linear models to the analysis of data in business engineering, behavioral, biological and physical sciences. Prereq: MATH 3191 and 3800/4820. Cross-listed with MATH 5387. **Semester Hours: 3to 3** **When Offered: FALL**

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

MATH 4792 - Probabilistic Modeling

Summer 2010 Registration **MATH 4792**

Every other year. Markov chains; Poisson processes, continuous time Markov chains, elementary topics in queuing theory, and some mathematical aspects of Monte Carlo simulation, including random variate generation, variance reduction, and output analysis. Prereq: MATH 4810, 5310 and some programming experience. Cross-listed with MATH

5792.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 4820 - Statistics

Summer 2010 Registration **MATH 4820**

Point and confidence interval estimation, principles of maximum likelihood, sufficiency and completeness, tests of simple and composite hypothesis, linear models and multiple regression, analysis of variance. Prereq: MATH 3800. MATH 4810 highly recommended, but not required. Cross-listed with MATH 5320.**Semester Hours:** 3to 3**When Offered:** *SPRING*

Registration is changing. Visit our website for details ucdenver.edu/registration.

One course from the discrete mathematics area: **3 semester hours**

Two approved math electives: **6 semester hours**

Probability and Statistics Option Total: 48 Hours

ACTUARIAL SCIENCE OPTION

All core courses with MATH 3200 and 4810 chosen (30 semester hours), plus the following:

MATH 3301 - Introduction to Operations Research I - Deterministic Systems

Summer 2010 Registration **MATH 3301**

A mathematical approach to decision making based on optimization. Topics include linear programming, network flows and production models. Prereq: MATH 3191 or 3195.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

MATH 3302 - Operations Research II

Summer 2010 Registration **MATH 3302**

Elementary stochastic processes and standard nondeterministic operations research models: Markov chains, Poisson processes, renewal processes, queuing theory, inventory models, Markov decision processes, simulation. Prereq: MATH 3191 and 3800.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

MATH 4408 - Applied Graph Theory

Summer 2010 Registration **MATH 4408**

Introduces discrete structures and applications of graph theory to computer science, engineering, operations research, social science, and biology. Topics include connectivity, coloring, trees, Euler and Hamiltonian paths and circuits, matching and covering problems, shortest route and network flows. Prereq: CSCI/MATH 2511 or MATH 3000. Cross-listed with CSCI 4408. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 4387 - Regression Analysis, Modeling and Time Series

Summer 2010 Registration **MATH 4387**

Topics include linear and multiple regression, basic experimental designs, one-way analysis of variance. Emphasis is on practical aspects and applications of linear models to the analysis of data in business engineering, behavioral, biological and physical sciences. Prereq: MATH 3191 and 3800/4820. Cross-listed with MATH 5387. **Semester Hours:** 3to 3 **When Offered:** FALL
Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 4650 - Numerical Analysis I

Summer 2010 Registration **MATH 4650**

Methods and analysis of techniques used to resolve continuous mathematical problems on the computer. Solution of linear and nonlinear equations, interpolation and integration. Prereq: MATH 2411, 3191 or 3195, and programming experience. Cross-listed with CSCI 4650, 5660, and MATH 5660. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 4820 - Statistics

Summer 2010 Registration **MATH 4820**

Point and confidence interval estimation, principles of maximum likelihood, sufficiency and completeness, tests of simple and composite hypothesis, linear models and multiple regression, analysis of variance. Prereq: MATH 3800. MATH 4810 highly recommended, but not required. Cross-listed with MATH 5320. **Semester Hours:** 3to 3 **When Offered:** SPRING

Registration is changing. Visit our website for details ucdenver.edu/registration.

One modeling course, chosen from:

MATH 4792 - Probabilistic Modeling

Summer 2010 Registration **MATH 4792**

Every other year. Markov chains; Poisson processes, continuous time Markov chains, elementary topics in queuing theory, and some mathematical aspects of Monte Carlo simulation, including random variate generation, variance reduction, and output analysis.

Prereq: MATH 4810, 5310 and some programming experience. Cross-listed with MATH 5792. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

MATH 5350 - Mathematical Theory of Interest

Summer 2010 Registration **MATH 5350**

Rates of interest, term structure of interest rates, force of interest, yield rate, principal, equation of value, annuity, perpetuity, stocks, bonds, other financial instruments. Prereq: MATH 4810/5310. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

(MATH 5350 strongly recommended)

One MATH elective above 3000: **3 semester hours**

Actuarial Science Option Total: 45 Hours

Suggested minor for actuarial science major option:

Actuaries need a background in business, particularly accounting, economics and finance. You are strongly advised to do a minor in one of these areas. Recommended classes are:

ACCT 2200 - Financial Accounting and Financial Statement Analysis

Summer 2010 Registration **ACCT 2200**

The financial accounting process, the role of the profession and the analysis of financial statements. Principal focus on interpretation of financial statements, with emphasis on asset and liability valuation problems and the determination of net income. Prereq:

MATH 1070 and sophomore standing. A grade of 'C' or better is required in this course to proceed to ACCT 2220. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 2012 - Principles of Economics: Macroeconomics

Summer 2010 Registration **ECON 2012**

Covers topics of inflation, unemployment, national income, growth and problems of the national economy, stabilization policy, plus others at the discretion of the instructor.

Purpose is to teach fundamental principles, to open the field of economics in the way most helpful to further a more detailed study of special problems, and to give those not intending to specialize in the subject an outline of the general principles of

economics. **Semester Hours:** 3to 3 **GT Pathways Category Key:** GT-SS1
Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 2022 - Principles of Economics: Microeconomics

Summer 2010 Registration **ECON 2022**

Topics include price determination in a market system composed of households and firms: resource allocation and efficiency of various market structures, plus others at the discretion of the instructor. Note: Complementary to and normally taken following ECON 2012. ECON 2012 is not a prerequisite for ECON 2022. **Semester Hours:** 3to 3 **GT Pathways Category Key:** GT-SS1

Registration is changing. Visit our website for details ucdenver.edu/registration.

FNCE 3000 - Principles of Finance

Summer 2010 Registration **FNCE 3000**

This course provides an introduction to financial markets and institutions, interest rates and the time value of money, principles of security valuation, concepts of risk and return, costs of capital and capital budgeting. Note: This course is required in the Business Core. A grade of 'C' or better must be earned to receive credit as a core course and to take subsequent courses for which it is a prerequisite. Prereq: MATH 1070 or MATH 1080 and MATH 1110 and DSCI 2010, ACCT 2200, ECON 2012, ECON 2022 and junior standing. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATHEMATICS EDUCATION OPTION

All core courses with MATH 3800 and 4408 chosen (30 semester hours), plus the following:

MATH 3140 - Introduction to Modern Algebra

Summer 2010 Registration **MATH 3140**

Studies the fundamental algebraic structures used in modern mathematics. Topics include groups, rings, fields and polynomials. Prereq: MATH 3000. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 3210 - Higher Geometry I

Summer 2010 Registration **MATH 3210**

Studies the foundations of modern geometry by examining axiomatic systems for various geometries, with an emphasis on non-Euclidean hyperbolic geometry. Prereq: MATH

3000.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 4010 - History of Mathematics

Summer 2010 Registration **MATH 4010**

A history of the development of mathematical techniques and ideas from early civilization to the present, including the inter-relationships of mathematics and sciences.

Prereq: MATH 1401. Cross-listed with MATH 5010.**Semester Hours:** 3to 3**When**

Offered: *SPRING*

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 4201 - Topology

Summer 2010 Registration **MATH 4201**

Metric spaces and topological spaces, compactness, separation properties, and connectedness. Prereq: MATH 3000.**Semester Hours:** 3to 3**When Offered:** *SPRING*

Registration is changing. Visit our website for details ucdenver.edu/registration.

One modeling course, chosen from:

MATH 4387 - Regression Analysis, Modeling and Time Series

Summer 2010 Registration **MATH 4387**

Topics include linear and multiple regression, basic experimental designs, one-way analysis of variance. Emphasis is on practical aspects and applications of linear models to the analysis of data in business engineering, behavioral, biological and physical sciences. Prereq: MATH 3191 and 3800/4820. Cross-listed with MATH 5387.**Semester**

Hours: 3to 3**When Offered:** *FALL*

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 4791 - Continuous Modeling

Summer 2010 Registration **MATH 4791**

Every other year. Surveys mathematical problems that arise in natural sciences and engineering. Topics may include population models, epidemic models, mechanics, heat transfer and diffusion, tomography, pharmaco-kinetics, traffic flow, fractal models, wave phenomena, and natural resource management. Most models discussed are based on differential and integral equations. Emphasis is formulation and validation of models as well as methods of solution. Prereq: MATH 3191 and 3200. Cross-listed with MATH 5791.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 4792 - Probabilistic Modeling

Summer 2010 Registration **MATH 4792**

Every other year. Markov chains; Poisson processes, continuous time Markov chains, elementary topics in queuing theory, and some mathematical aspects of Monte Carlo simulation, including random variate generation, variance reduction, and output analysis.

Prereq: MATH 4810, 5310 and some programming experience. Cross-listed with MATH 5792. **Semester Hours:** 3 to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 4793 - Discrete Math Modeling

Summer 2010 Registration **MATH 4793**

Every other year. Focuses on the use of graph theory and combinatorics to solve problems in a wide variety of disciplines. Applications are selected from computer science, communication networks, economics, operations research, and the social, biological and environmental sciences. Prereq: MATH 3191 and 4408. Cross-listed with MATH 5793. **Semester Hours:** 3 to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 4794 - Optimization Modeling

Summer 2010 Registration **MATH 4794**

Every other year. Principles of model formulation and analysis are developed by presenting a wide variety of applications, both for natural phenomena and social systems. Examples of optimization models to represent natural phenomena include principles of least time and energy. Examples in social systems include resource allocation, environmental control and land management. Specific applications vary, but are chosen to cover a wide scope that considers dichotomies, such as discrete vs. continuous, static vs. dynamic, and deterministic vs. stochastic. Some computer modeling language (like GAMS) is taught. Prereq: MATH 2421 and 3191. Cross-listed with MATH 5794. **Semester Hours:** 3 to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Approved math elective: **3 semester hours**

Mathematics Education Option Total: 48 Hours

Note:

Certification by the School of Education and Human Development is required for public school teaching. Contact the school for details.

Mechanical Engineering BS

Typical Curriculum for BS (Mechanical Engineering—see note 1)

Freshman Year

First Semester

CHEM 1130 - Engineering General Chemistry

Summer 2010 Registration **CHEM 1130**

A one-semester non-laboratory version of general chemistry for engineers and those science majors who do not require laboratory credit and do not plan to take a second semester of chemistry. Prereq: One year of high school chemistry or Chem 1000 and Math 1110 (or high school equivalent). **Semester Hours:** 5 to 5

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 1020 - Core Composition I

Summer 2010 Registration **ENGL 1020**

Provides opportunities to write for different purposes and audiences, with an emphasis on learning how to respond to various rhetorical situations; improving critical thinking, reading, and writing abilities; understanding various writing processes; and gaining a deeper knowledge of language conventions. **Semester Hours:** 3 to 3 **GT Pathways**

Category Key: GT-C01

Registration is changing. Visit our website for details ucdenver.edu/registration.

MECH 1025 - CAD and Graphics for Mechanical Engineering

Summer 2010 Registration **M E 1025**

Introduction to 3-D computer-aided design software, solid modeling, industry-standard engineering drawing practices, and engineering graphics. Applications to mechanical engineering. Prereq: High School Geometry and Algebra. **Semester Hours:** 3 to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 1401 - Calculus I

Summer 2010 Registration **MATH 1401**

First course of a three-semester sequence (MATH 1401, 2411, 2421) in calculus. Topics covered include limits, derivatives, applications of derivatives, and the definite integral.

Note: Students cannot receive credit for both MATH 1080 and 1401. Prereq: MATH

1120 or 1130 and satisfactory score on the placement exam. **Semester Hours:** 4to 4**GT Pathways Category Key:** GT-MA1
Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 15 Hours

Second Semester

MATH 2411 - Calculus II

Summer 2010 Registration **MATH 2411**

The second of a three-semester sequence (MATH 1401, 2411, 2421) in calculus. Topics covered include exponential, logarithmic, and trigonometric functions, techniques of integration, indeterminate forms, improper integrals and infinite series. Prereq: MATH 1401. **Semester Hours:** 4to 4**GT Pathways Category Key:** GT-MA1
Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 2311 - General Physics I: Calculus-Based

Summer 2010 Registration **PHYS 2311**

Covers vector displacement, uniform and accelerated motion, force, momentum, energy, rotating systems, oscillations, and an introduction to thermodynamics. Emphasis is on basic principles. Coreq: MATH 1401. **Semester Hours:** 4to 4
Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 2321 - General Physics Lab I

Summer 2010 Registration **PHYS 2321**

Semester Hours: 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

Core Curriculum Electives (*see note 3*) (6 semester hours)

Total: 15 Hours

Sophomore Year

First Semester

MATH 2421 - Calculus III

Summer 2010 Registration **MATH 2421**

The third of a three-semester sequence in calculus (MATH 1401, 2411 and 2421). Topics include vectors, vector-valued functions, partial differentiation, differentiation, multiple integration, and vector calculus. Prereq: MATH 2411. **Semester Hours:** 4to 4**GT**

Pathways Category Key: GT-MA1

Registration is changing. Visit our website for details ucdenver.edu/registration.

MECH 2023 - Statics

Summer 2010 Registration **M E 2023**

A vector treatment of force systems and their resultants; equilibrium of trusses, beams, frames, and machines, including internal forces and three-dimensional configurations, static friction, properties of areas, distributed loads and hydrostatics. Prereq: PHYS 2311. Coreq: MATH 2411. Cross-listed with CVEN 2121. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 2331 - General Physics II: Calculus-Based

Summer 2010 Registration **PHYS 2331**

Covers electrostatics, magnetic fields, electromagnetic waves (including light), and optics. Prereq: PHYS 2311. Coreq: MATH 2411. **Semester Hours:** 4to 4
Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 2341 - General Physics Lab II

Summer 2010 Registration **PHYS 2341**

Prereq: PHYS 2321. **Semester Hours:** 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

Core Curriculum Electives (see note 3) (6 semester hours)

Total: 18 Hours

Second Semester

ENGL 2030 - Core Composition II

Summer 2010 Registration **ENGL 2030**

Focuses on academic and other types of research-based writing and builds on the work completed in ENGL 1020. Focuses on critical thinking, reading and writing as well as working with primary and secondary source material to produce a variety of research-

based essays. Emphasis on using both print-based and electronic-based information. Prereq: ENGL 1020. **Semester Hours:** 3to 3 **GT Pathways Category Key:** GT-C02 Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGR 3012 - Thermodynamics

Summer 2010 Registration **ENGR 3012**

Introduces thermodynamic properties and state relationships, processes and cycles with work and heat transfer. Applications of the first and second laws to energy-related engineering systems. Prereq: MATH 1401 and PHYS 2311. **Semester Hours:** 3to 3 Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 3195 - Linear Algebra and Differential Equations

Summer 2010 Registration **MATH 3195**

Presents the essential ideas and methods of linear algebra and differential equations, emphasizing the connections between and the applications of both subjects. The course is designed for students in the sciences and engineering. Note: No co-credit with MATH 3200 and MATH 3191. Prereq: MATH 2411. **Semester Hours:** 4to 4 Registration is changing. Visit our website for details ucdenver.edu/registration.

MECH 2033 - Dynamics

Summer 2010 Registration **M E 2033**

A vector treatment of dynamics of particles and rigid bodies, including rectilinear translation, central-force, and general motion of particles, kinematics of rigid bodies, the inertia tensor, plane motion of rigid bodies, energy and momentum methods for particles, systems of particles, and rigid bodies. Prereq: MECH 2023 or CVEN 2121. Cross-listed with CVEN 3111. **Semester Hours:** 3to 3 Registration is changing. Visit our website for details ucdenver.edu/registration.

MECH 3030 - Electric Circuits and Systems

Summer 2010 Registration **M E 3030**

Basic electrical engineering concepts for non-majors. Basic study of circuit analysis (RLC and Op-amps), transformers and motor equations, and simple electronic circuits (diodes and transistors). Prereq: MATH 2421 and PHYS 2331. Cross-listed with ELEC 3030. **Semester Hours:** 3to 3 Registration is changing. Visit our website for details ucdenver.edu/registration.

MECH 3032 - Electric Circuits and Systems Lab

Summer 2010 Registration **M E 3032**

Basic electrical engineering lab for MECH majors. Coreq: MECH 3030 or ELEC

3030.**Semester Hours:** 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 17 Hours

Junior Year

First Semester

MECH 3010 - Elementary Numerical Methods and Programming

Summer 2010 Registration **M E 3010**

A development of basic numerical methods used to solve engineering problems. Introduction to MATLAB to implement numerical simulations. Coreq: MATH 3195 or (MATH 3191 and MATH 3200).**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MECH 3021 - Introduction to Fluid Mechanics

Summer 2010 Registration **M E 3021**

Applies exact and approximate theories to engineering problems in fluids. Examples include potential flow theory, Euler's equations for in viscid fluids, Bernoulli's equations, Navier-Stokes equations, and pipe flow. Prereq: MECH 2033 or CVEN 3111 and MATH 2421.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MECH 3022 - Thermodynamics II

Summer 2010 Registration **M E 3022**

Generalized thermodynamic cycles; general thermodynamic cycle considerations, compressor, expander, heat exchanger processes, refrigeration cycles, mixtures and combustion. Prereq: ENGR 3012 and MATH 2421.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MECH 3027 - Measurements

Summer 2010 Registration **M E 3027**

Principles of digital and analog measurements; systems for sensing, transporting, modifying, and outputting information; systematic and random error analysis. The laboratory includes a variety of instruments and components illustrating fundamental

experimental measurement techniques and methods. Prereq: MATH 3195 or (MATH 3191 and MATH 3200), MECH 3030 and MECH 3032. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MECH 3028 - Laboratory of Mechanical Measurements

Summer 2010 Registration **M E 3028**

Modern techniques for Mechanical measurements. Laboratory includes techniques for the calibration of transducers and analysis of Statistical uncertainty. Data Acquisition Systems used for Signal acquisition and measurement of common mechanical quantities, such as displacement, velocity, acceleration and force. Design and characterization of a second order measurement system based on strain gages. Coreq: MECH 3027. **Semester Hours:** 1to 1
Registration is changing. Visit our website for details ucdenver.edu/registration.

MECH 3043 - Strength of Materials

Summer 2010 Registration **M E 3043**

Application of exact and approximate theories of stress and displacement to engineering problems in solids. Examples include torsion of rods and bending of beams. Combined stresses, principal stresses and energy methods are examined. Prereq: MECH 2023, CVEN 2121. Cross-listed with CVEN 3121. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 16 Hours

Second Semester

MECH 3023 - System Dynamics I: Vibrations

Summer 2010 Registration **M E 3023**

Modeling of dynamical systems. Analysis of single and multiple degree of freedom systems. Introduction to continuous systems. Prereq: CVEN 3111 or MECH 2033, MATH 3195 or MATH 3191 and MATH 3200 and MECH 3010. Coreq: CVEN 3121 or MECH 3043. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MECH 3024 - Introduction to Materials Science

Summer 2010 Registration **M E 3024**

The development of the physical principles relating the structural features of materials to their observed properties. Prereq: PHYS 2311. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MECH 3031 - Fluids/Thermal Laboratory

Summer 2010 Registration M E 3031

Laboratory exercise in compressible and incompressible fluid flow; steady state and transient heat transfer. Prereq: ENGR 3012. Coreq: MECH 3021. **Semester Hours:** 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

MECH 3034 - Properties of Engineering Materials

Summer 2010 Registration M E 3034

Experiments to determine material properties and the effect of processing on properties important in mechanical design. Materials include metal, polymers, and composites. Loadings include tension, compression, and bending under static, dynamic impact and creep states. Coreq: MECH 3024 or (MECH 3043 or CVEN 3121). **Semester Hours:** 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

MECH 3035 - Design of Mechanical Elements

Summer 2010 Registration M E 3035

Review of mechanics of materials and stress analysis; detailed design of various machine elements such as fasteners, springs, brakes and gears. Includes design project. Prereq: MECH 3043, CVEN 3121. Coreq: MECH 3024. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MECH 3042 - Heat Transfer

Summer 2010 Registration M E 3042

Basic laws of heat transfer by conduction, convection, and radiation with engineering design applications. Includes design project. Prereq: ENGR 3012 and MATH 2421. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MECH 3065 - Intermediate Dynamics

Summer 2010 Registration M E 3065

An in-depth study of Newtonian dynamics with constraints. Mechanism synthesis using graphical and analytic techniques. Prereq: MECH 2033 or CVEN 3111 and MECH 3010. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 17 Hours

Senior Year

First Semester

MECH 3145 - Manufacturing Processes Design

Summer 2010 Registration M E 3145

Basic manufacturing background will be provided to engineering students in order to: (1) apply manufacturing specifications to the design of mechanical devices, and (2) communicate with technical personnel in a production environment. Topics cover metal casting, bulk and sheet metal forming, material removal and joining and fastening processes. Prereq: MECH 1025. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MECH 4023 - System Dynamics II: Controls

Summer 2010 Registration M E 4023

Introduces the Laplace Transformation. Control system analysis using root locus and frequency response methods. Basic compensation techniques are be covered. Prereq: MECH 3023. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MECH 4035 - Senior Design I

Summer 2010 Registration M E 4035

Group and individual projects to design engineering components and systems. Design methodology, product specs, creativity, design reviews, communication, presentations, and report writing are emphasized. MECH 4035 and MECH 4045 form a one year sequence and must be taken consecutively. Prereq: MECH 3035 and MECH 3042. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.
MECH Technical Electives (see *note 5*) (6 semester hours)

Total: 15 Hours

Second Semester

MECH 4045 - Senior Design II

Summer 2010 Registration M E 4045

Student teams manufacture and construct and/or redesign mechanical parts or

assemblies that they designed in previous course (MECH 4035). A proposal, oral progress reports, and a final written report and demonstration are required. MECH 4035 and MECH 4045 form a one year sequence and must be taken consecutively. Prereq: MECH 4035. **Semester Hours:** 3 to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MECH Technical Electives (6 semester hours)

Core Curriculum Electives (*see note 3*) (6 semester hours)

Total: 15 Hours

Notes

1. Students enrolled prior to fall 2006 may choose either the new core curriculum or the old core curriculum.
2. The communication requirements include ENGL 1020 and ENGL 2030.
3. Common core requirements of the College of Engineering and Applied Science. Refer to the "Undergraduate Core Curriculum in Engineering" in this catalog or to the "Common Core Requirements" guide available from your advisor for further information.
4. CVEN 2121 and CVEN 3111 may be substituted for MECH 2023 and MECH 2033 respectively.
5. Not all courses may be offered every semester. Students should check the current *Schedule Planner*.

Program Total: 128 Hours

Students should check with departmental advisors to determine their degree requirements. The particular curriculum to be satisfied by each student is the one published in the catalog *current* at the time of their matriculation. For additional information, see the departmental advisor.

Students should refer to the section in this chapter on "Academic Policies" of the College of Engineering and Applied Science. In addition to planning for sequences of courses based on prerequisites, students should plan to complete sophomore-level courses before taking junior level courses and should have completed their junior-level mechanical engineering courses before starting their senior-level mechanical engineering electives. All students should see their advisors at least once each semester.

Music BS

Undergraduate Degree Requirements

The BS in music has a competitive application process. Please refer to the MEIS Web site at <http://cam.ucdenver.edu/meis> for additional guidelines and information. To be eligible for an audition-based BS in music, students must complete 54 semester hours of music foundation courses and then select one of the three emphasis areas: recording arts, music business or performance. Students must pass a music audition as part of the application process and pass varying levels of performance proficiency as part of their curricula. Students must complete all major courses with a C/2.0 or higher.

Music Foundation Courses

MUSC 2470 - Music Applications on the Computer

Summer 2010 Registration **MUS 2470**

Introduces the use of computers in the music industry. Topics include basic computer operation, computer hardware, desktop publishing for music business, music notation, MIDI sequencing and digital audio. Students individually create several computer lab projects. **Semester Hours:** 3 to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MUSC 2540 - Audio Production I

Summer 2010 Registration **MUS 2540**

Operating principles and performance characteristics of microphones, amplifiers, speaker systems, equalizers, mixers and multi-track recorders; acoustics of music, auditoriums and recording studios. **Semester Hours:** 3 to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MUSC 2700 - Introduction to Music Business

Summer 2010 Registration **MUS 2700**

Introduces music as a business and a product, emphasizing music publishing, recording, broadcasting, marketing, licensing and legal aspects. **Semester Hours:** 3 to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MUSC 3210 - Music and Entertainment Marketing

Summer 2010 Registration **MUS 3210**

In this course students learn the essential elements of marketing as applied to the music and entertainment industry. Course topics include: marketing principles, theories and tools utilized in the music and entertainment businesses and specific industry practices and applications. Prereq: MUSC 2700. **Semester Hours:** 3 to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

or

MUSC 3220 - Artist Management

Summer 2010 Registration **MUS 3220**

Students learn the theory and practice of artist management as it relates to developing a career through entrepreneurship, establishing business structures for the artist, and concepts including: promotion, live performance, recording, contracts, and essential business practices. Prereq: MUSC 2700 **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1023 - Piano Class I

Summer 2010 Registration **PMUS 1023**

This course focuses on beginning note reading in both treble and bass clefs, learning one octave major key scales, basic harmonization, and beginning improvisation. Students perform in both individual and group settings. Note: This course is restricted to Music-Majors only. Prereq: Acceptance to the MEIS program **Semester Hours:** 1to 1
Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1024 - Piano Class II

Summer 2010 Registration **PMUS 1024**

Continuation of PMUS 1023. This course focuses on more advanced note reading, technique, chord vocabulary, sight reading, and improvisation. Introduction of minor scales. Performances in both individual and group settings. Note: This course is restricted to Music-Majors only. Prereq: Acceptance to the MEIS program, PMUS 1023 or approval of instructor **Semester Hours:** 1to 1
Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1025 - Piano Class III

Summer 2010 Registration **PMUS 1025**

Continuation of PMUS 1024. This course assumes general fluency in major and minor scales. Focus on expanding chord vocabulary, sight reading, transposition, and performing more advanced repertoire. Performances in both individual and group settings. Note: This course is restricted to Music-Majors only. Prereq: Acceptance to the MEIS Program, PMUS 1023 and PMUS 1024, or approval of instructor. **Semester Hours:** 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1026 - Piano Class IV

Summer 2010 Registration **PMUS 1026**

Continuation of PMUS 1025. This course assumes fluency in major and minor scales. Focus on harmonizing with complex chords, playing by ear, improvisation, and playing repertoire in broader range of key signatures. Students perform in both individual and group settings. Note: This course is restricted to Music-Majors only. Course meets in Roland Piano Lab. Prereq: Acceptance to the MEIS program, PMUS 1023, PMUS 1024 and PMUS 1025, or approval of instructor. **Semester Hours:** 1to 1
Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1100 - Music Theory I

Summer 2010 Registration **PMUS 1100**

Study of harmonic procedures as derived from the common practice period, and their relationship to contemporary concepts. Coreq: PMUS 1110 and PMUS 1023. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1110 - Ear Training and Sight Singing I

Summer 2010 Registration **PMUS 1110**

Laboratory course designed to help students listen to music analytically and to apply the harmonic principles learned in PMUS 1100 to the performance of music. Coreq: PMUS 1100 and PMUS 1023. **Semester Hours:** 1to 1
Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1200 - Music Theory II

Summer 2010 Registration **PMUS 1200**

Continuation of PMUS 1100. Prereq: PMUS 1110 and PMUS 1100. Coreq: PMUS 1210 and PMUS 1023. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1210 - Ear Training and Sight Singing II

Summer 2010 Registration **PMUS 1210**

Laboratory course designed to help students listen to music analytically and to apply the harmonic principles learned in PMUS 1200 to the performance of music. Prereq: PMUS 1100 and PMUS 1110. Coreq: PMUS 1200 and PMUS 1023. **Semester Hours:** 1to 1
Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1500 - General Recital

Summer 2010 Registration **PMUS 1500**

May be taken on a pass/fail basis only. Co-requisite for all applied music courses for

music majors and minors. Attendance at musical performances is required. **Semester Hours:** 0 to 0

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1500 - General Recital

PMUS 1500 - General Recital

PMUS 1500 - General Recital

PMUS 1502 through PMUS 1762 (24 instruments) 2 cr/each. Students must take 2 semesters of 1000-level lessons.

PMUS 2502 through PMUS 2562 (24 instruments) 2 cr/each. Students must take 2 semesters of 2000-level lessons.

PMUS 1410 through PMUS 4430 (15 ensembles)

PMUS 2100 - Music Theory III

Summer 2010 Registration **PMUS 2100**

Exposes students to the theoretical aspects of Western European classical music from the Baroque period to the Classical period. Emphasis is placed on the melodic aspects of classical music including the creation of melody and the combining of melodies into polyphonic structures. Prereq: PMUS 1200 and PMUS 1210. Coreq: PMUS 2110 and PMUS 1023. **Semester Hours:** 3 to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 2110 - Ear Training and Sight Singing III

Summer 2010 Registration **PMUS 2110**

A laboratory course designed to help students listen to music analytically and to apply the harmonic principles learned in PMUS 2100 to the performance of music. Prereq: PMUS 1200 and PMUS 1210. Coreq: PMUS 2100 and PMUS 1023. **Semester Hours:** 1 to 1 **When Offered:** FALL

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 2200 - Contemporary Styles

Summer 2010 Registration **PMUS 2200**

Surveys classical, jazz, and popular styles of the 20th century. Prereq: PMUS 2100. **Semester Hours:** 3 to 3 **When Offered:** SPRING

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 3830 - History and Literature of Music I

Summer 2010 Registration **PMUS 3830**

This course provides a historical perspective of Western music literature from the

medieval through the classical era. Prereq: Any semester of music theory. **Semester Hours: 3to 3**
Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 3831 - History and Literature of Music II

Summer 2010 Registration **PMUS 3831**

This course provides a historical perspective of Western music literature from the Romantic era through the present day. Prereq: Any semester of music theory. **Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS ____ - UD Music History Elective* (3 semester hours)

Total: 54 Hours

* UD = upper division (3000- or 4000- level course)

Performance Emphasis Courses

Students must successfully pass a Sophomore Proficiency on their primary instrument or voice in order to be accepted into the Performance emphasis. Students are required to successfully complete a Junior Recital, in addition to the 2-credit PMUS 4200 Senior Recital. Contact the MEIS Office for more information at 303-556-2279.

PMUS 1500 - General Recital

Summer 2010 Registration **PMUS 1500**

May be taken on a pass/fail basis only. Co-requisite for all applied music courses for music majors and minors. Attendance at musical performances is required. **Semester Hours: 0to 0**

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1500 - General Recital

PMUS 1500 - General Recital

PMUS 1500 - General Recital

PMUS 3502 through PMUS 3762 (24 instruments) 3 cr/each. Students must take 2 semesters of 3000-level lessons.

PMUS 4502 through PMUS 4762 (24 instruments) 3cr/each. Students must take 2 semesters of 4000-level lessons.

PMUS 3300 - Advanced Jazz Improvisation

Summer 2010 Registration **PMUS 3300**

Explores the techniques and concepts of instrumental jazz/commercial improvisation and sight reading. Major concepts include understanding and interpreting the

construction of jazz harmonic nomenclature and the mastery of the melodic elements of improvisation. Prereq: PMUS 1310 or permission of the instructor.**Semester Hours:** 2to 2

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1410 through PMUS 4430 (15 ensembles)

Performance students must take a minimum of 8 ensembles (8 semester hours), one with every semester of applied lessons.

PMUS 4200 - Senior Recital

Summer 2010 Registration **PMUS 4200**

This course is for music performance students to prepare for their capstone senior recital and to prepare materials for their required portfolio. Prereq: Permission of instructor.**Semester Hours:** 2to 2

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 22 Hours

Music Business Emphasis Courses

MUSC 2560 - Audio Production II

Summer 2010 Registration **MUS 2560**

Studies aesthetics and technology of electronic music, voltage controlled and MIDI sound synthesis, and multi-track analog recording and signal processing. Team lab recording projects. Prereq: MUSC 2540 or permission of instructor.**Semester Hours:** 4to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

MUSC 3720 - Law and the Music Industry

Summer 2010 Registration **MUS 3720**

Students will learn how to use and analyze music law principles through a review of essential court case studies. Students will be tested on lecture material and provided with an opportunity to complete research papers for a more in-depth examination. Prereq: MUSC 2700 (Intro to Music Business), MUSC 3220 (Artist Management), Jr. standing.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MUSC 4740 - Music Business Analysis

Summer 2010 Registration **MUS 4740**

Students learn to analyze specific managerial situations unique to the music and entertainment industries and will understand aspects of finance, taxation, and

management science. Prereq: MUSC 3210 (Music and Ent Mktg.), MUSC 3220 (Artist Mgmt.). **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 25 Hours

Recording Emphasis Courses

Students must be accepted into the recording arts emphasis before being able to take any of the upper-division courses in this area. Please consult a CAM advisor for details.

MUSC 2560 - Audio Production II

Summer 2010 Registration **MUS 2560**

Studies aesthetics and technology of electronic music, voltage controlled and MIDI sound synthesis, and multi-track analog recording and signal processing. Team lab recording projects. Prereq: MUSC 2540 or permission of instructor. **Semester Hours:** 4to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

MUSC 3540 - Recording Studio Maintenance and Calibration

Summer 2010 Registration **MUS 3540**

A basic course in calibration, alignment, and minor repair necessary for functional operation of the recording studio. Prereq: Admittance to Recording Arts/Tech focus. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MUSC 3550 - Critical Listening for Recording Arts

Summer 2010 Registration **MUS 3550**

Students will be trained to recognize: boosts and cuts in different bands of frequencies at increasingly small increments, types of distortion, parameters for compression, delay, reverb and stereo imaging. Students will develop a vocabulary for describing sounds and improving auditory memory. Prereq: Admittance to Recording Arts/Tech focus. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MUSC 4505 - Audio Post Production I

Summer 2010 Registration **MUS 4505**

Reviews all aspects of audio synchronized with picture, including music, sound effects, narration, and dialog replacement. Topics studied with respect to film, video and multi-media. Prereq: Admittance to Recording Arts/Tech focus. Cross-listed with MSRA

5505.**Semester Hours:** 4to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

MUSC 4575 - Surround Sound

Summer 2010 Registration **MUS 4575**

This lecture-lab course deals with surround sound in film, digital TV and DVDs. Topics include monitoring, microphone techniques, recording, mixing, mastering, delivery formats and psychoacoustics. Students work on two lab projects in the semester.

Prereq: MUSC 4550 and admittance to Recording Arts/Tech focus. Cross-listed with MSRA 5575.**Semester Hours:** 4to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

MUSC 4550 - Audio Production III

Summer 2010 Registration **MUS 4550**

Advanced studies in sound recording and reinforcement, aesthetics and techniques of multi-track digital recording and stereo imaging. Team lab recording projects. Prereq: Admittance to Recording Arts/Tech focus. Cross-listed with MSRA 5550.**Semester**

Hours: 4to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

MUSC 4580 - Audio Production Seminar

Summer 2010 Registration **MUS 4580**

Faculty and majors of the music engineering program assemble to discuss and demonstrate issues of artistic and technical applications of recording technology.

Student projects, faculty, and guest lectures provide topical focus. (Music facility fee applies.) Prereq: Admittance to Recording Arts/Tech focus. Cross-listed with MSRA 5580.

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MUSC 4580 - Audio Production Seminar (Senior Project)

MUS ____ - Recording Arts Elective (1 semester hours)

PHYS 3620 - Sound and Music

Summer 2010 Registration **PHYS 3620**

Considers the basic nature of sound waves, the ear and hearing, and musical instruments. Although this course is mainly descriptive, some high school algebra will be

used. Prereq: MATH 1070 or equivalent. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 28 Hours

Music Industry Studies Emphasis— BS in Music

Undergraduate Degree Requirements

The music program has a competitive entrance process. Please refer to the CAM Web site for details and information. To be eligible for a BS in music, emphasis in music industry studies (MIS), students must complete the 14 semester hours of music performance courses, 20 semester hours of musicianship courses, 13 semester hours of music industry studies core courses and 26 semester hours of music business or music technology courses. While no audition is required as part of the application process, students are required to complete performance and musicianship courses. Students must pass their major courses with a C (2.0) or better.

Music Performance, Musicianship and MIS Core Courses

MUSC 2300 - Introduction to Songwriting

Summer 2010 Registration **MUS 2300**

Studies the craft of songwriting. Emphasis is on the creation of original melodies and lyrics. A variety of non-classical contemporary musical styles are considered. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MUSC 2470 - Music Applications on the Computer

Summer 2010 Registration **MUS 2470**

Introduces the use of computers in the music industry. Topics include basic computer operation, computer hardware, desktop publishing for music business, music notation, MIDI sequencing and digital audio. Students individually create several computer lab projects. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MUSC 2540 - Audio Production I

Summer 2010 Registration **MUS 2540**

Operating principles and performance characteristics of microphones, amplifiers, speaker systems, equalizers, mixers and multi-track recorders; acoustics of music, auditoriums and recording studios. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MUSC 2560 - Audio Production II

Summer 2010 Registration **MUS 2560**

Studies aesthetics and technology of electronic music, voltage controlled and MIDI sound synthesis, and multi-track analog recording and signal processing. Team lab recording projects. Prereq: MUSC 2540 or permission of instructor. **Semester Hours:** 4to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

MUSC 2700 - Introduction to Music Business

Summer 2010 Registration **MUS 2700**

Introduces music as a business and a product, emphasizing music publishing, recording, broadcasting, marketing, licensing and legal aspects. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1023 - Piano Class I

Summer 2010 Registration **PMUS 1023**

This course focuses on beginning note reading in both treble and bass clefs, learning one octave major key scales, basic harmonization, and beginning improvisation. Students perform in both individual and group settings. Note: This course is restricted to Music-Majors only. Prereq: Acceptance to the MEIS program **Semester Hours:** 1to 1
Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1024 - Piano Class II

Summer 2010 Registration **PMUS 1024**

Continuation of PMUS 1023. This course focuses on more advanced note reading, technique, chord vocabulary, sight reading, and improvisation. Introduction of minor scales. Performances in both individual and group settings. Note: This course is restricted to Music-Majors only. Prereq: Acceptance to the MEIS program, PMUS 1023 or approval of instructor **Semester Hours:** 1to 1
Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1025 - Piano Class III

Summer 2010 Registration **PMUS 1025**

Continuation of PMUS 1024. This course assumes general fluency in major and minor scales. Focus on expanding chord vocabulary, sight reading, transposition, and performing more advanced repertoire. Performances in both individual and group settings. Note: This course is restricted to Music-Majors only. Prereq: Acceptance to the MEIS Program, PMUS 1023 and PMUS 1024, or approval of instructor. **Semester Hours: 1to 1**

Registration is changing. Visit our website for details ucdenver.edu/registration.
or

PMUS 1040 - Class Guitar

Summer 2010 Registration **PMUS 1040**

Designed to provide each student with a basic knowledge of the fretboard. The course material focuses on beginning note reading, basic chord forms and elementary improvisation. Students have the opportunity to perform in both individual and group settings. **Semester Hours: 1to 1**

Registration is changing. Visit our website for details ucdenver.edu/registration.
or

PMUS 1050 - Voice Class I

Summer 2010 Registration **PMUS 1050**

Fundamentals of voice production: posture, breath management and support, tone, resonance, diction, phrasing and interpretation. Development of technique, confidence, and control through group and solo singing. Development of repertoire that includes contemporary and commercial vocal styles. **Semester Hours: 1to 1**

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1026 - Piano Class IV

Summer 2010 Registration **PMUS 1026**

Continuation of PMUS 1025. This course assumes fluency in major and minor scales. Focus on harmonizing with complex chords, playing by ear, improvisation, and playing repertoire in broader range of key signatures. Students perform in both individual and group settings. Note: This course is restricted to Music-Majors only. Course meets in Roland Piano Lab. Prereq: Acceptance to the MEIS program, PMUS 1023, PMUS 1024 and PMUS 1025, or approval of instructor. **Semester Hours: 1to 1**

Registration is changing. Visit our website for details ucdenver.edu/registration.
or

PMUS 1041 - Class Guitar II

Summer 2010 Registration **PMUS 1041**

This group guitar class is designed to go beyond PMUS 1040 and provide students with an advanced knowledge of the fretboard. The course material focuses on advanced position note reading, complex chord forms and scale vocabulary. Students have the opportunity to perform in both individual and group settings. Prereq: PMUS 1040.

Semester Hours: 1 to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

or

PMUS 1060 - Voice Class II

Summer 2010 Registration **PMUS 1060**

Fundamentals of voice production: posture, breath management and support, tone, resonance, diction, phrasing and interpretation. Extension of PMUS 1050, with opportunity to continue to develop individual skills in singing. Development of technique, confidence, and control through group and solo singing. Development of repertoire that includes contemporary and commercial vocal styles. Prereq: PMUS 1050.

Semester Hours: 1 to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1100 - Music Theory I

Summer 2010 Registration **PMUS 1100**

Study of harmonic procedures as derived from the common practice period, and their relationship to contemporary concepts. Coreq: PMUS 1110 and PMUS 1023.

Semester Hours: 3 to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1110 - Ear Training and Sight Singing I

Summer 2010 Registration **PMUS 1110**

Laboratory course designed to help students listen to music analytically and to apply the harmonic principles learned in PMUS 1100 to the performance of music. Coreq: PMUS 1100 and PMUS 1023.

Semester Hours: 1 to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1200 - Music Theory II

Summer 2010 Registration **PMUS 1200**

Continuation of PMUS 1100. Prereq: PMUS 1110 and PMUS 1100. Coreq: PMUS 1210

and PMUS 1023. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1210 - Ear Training and Sight Singing II

Summer 2010 Registration **PMUS 1210**

Laboratory course designed to help students listen to music analytically and to apply the harmonic principles learned in PMUS 1200 to the performance of music. Prereq: PMUS 1100 and PMUS 1110. Coreq: PMUS 1200 and PMUS 1023. **Semester Hours:** 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1310 - Sight Reading and Improvisation

Summer 2010 Registration **PMUS 1310**

Explores the techniques and concepts of instrumental jazz/commercial improvisation and beginning sight reading. Major concepts include understanding and interpreting the construction of jazz harmonic nomenclature and the mastery of the melodic elements of improvisation. Prereqs: PMUS 1100, PMUS 1110, PMUS 1200, PMUS 1210, PMUS 1023. **Semester Hours:** 2to 2

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1500 - General Recital

Summer 2010 Registration **PMUS 1500**

May be taken on a pass/fail basis only. Co-requisite for all applied music courses for music majors and minors. Attendance at musical performances is required. **Semester Hours:** 0to 0

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1500 - General Recital

PMUS 1801 through PMUS 1823 MIS Applied Lessons (23 instruments)

PMUS 1410 through PMUS 4430 (15 ensembles)

PMUS 2200 - Contemporary Styles

Summer 2010 Registration **PMUS 2200**

Surveys classical, jazz, and popular styles of the 20th century. Prereq: PMUS 2100. **Semester Hours:** 3to 3 **When Offered:** *SPRING*

Registration is changing. Visit our website for details ucdenver.edu/registration.

or

MUSC 2220 - Commercial Electronic Music Composition

Summer 2010 Registration **MUS 2220**

An investigation, analysis and application of contemporary electronic music compositional and production techniques in relation to commercial music and historical context. Prereq: PMUS 1200, PMUS 1210 and MUSC 2300. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

or

MUSC 3310 - Songwriting II

Summer 2010 Registration **MUS 3310**

Presents concepts of songwriting that build upon those presented in MUSC 2300. Students are expected to understand and discuss musical concepts and lyric structure and use these concepts in the creation of original songs. Prereq: MUSC 2300, PMUS 1200, PMUS 1210 and PMUS 1023. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 3830 - History and Literature of Music I

Summer 2010 Registration **PMUS 3830**

This course provides a historical perspective of Western music literature from the medieval through the classical era. Prereq: Any semester of music theory. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 3831 - History and Literature of Music II

Summer 2010 Registration **PMUS 3831**

This course provides a historical perspective of Western music literature from the Romantic era through the present day. Prereq: Any semester of music theory. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

_____ - Electives in Performance (2 semester hours)

Total: 50 Hours

Students select either music business or music technology and complete all listed courses and elective credits.

Music Business Focus Courses

MUSC 3720 - Law and the Music Industry

Summer 2010 Registration **MUS 3720**

Students will learn how to use and analyze music law principles through a review of

essential court case studies. Students will be tested on lecture material and provided with an opportunity to complete research papers for a more in-depth examination. Prereq: MUSC 2700 (Intro to Music Business), MUSC 3220 (Artist Management), Jr. standing. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MUSC 4740 - Music Business Analysis

Summer 2010 Registration **MUS 4740**

Students learn to analyze specific managerial situations unique to the music and entertainment industries and will understand aspects of finance, taxation, and management science. Prereq: MUSC 3210 (Music and Ent Mktg.), MUSC 3220 (Artist Mgmt.). **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 26 Hours

Music Technology Focus Courses

Students must be accepted into the MIS/tech focus before being able to take any of the upper-division courses in this area. Please consult CAM advisor for more details.

MUSC 3540 - Recording Studio Maintenance and Calibration

Summer 2010 Registration **MUS 3540**

A basic course in calibration, alignment, and minor repair necessary for functional operation of the recording studio. Prereq: Admittance to Recording Arts/Tech focus. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MUSC 3550 - Critical Listening for Recording Arts

Summer 2010 Registration **MUS 3550**

Students will be trained to recognize: boosts and cuts in different bands of frequencies at increasingly small increments, types of distortion, parameters for compression, delay, reverb and stereo imaging. Students will develop a vocabulary for describing sounds and improving auditory memory. Prereq: Admittance to Recording Arts/Tech focus. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MUSC 4505 - Audio Post Production I

Summer 2010 Registration **MUS 4505**

Reviews all aspects of audio synchronized with picture, including music, sound effects,

narration, and dialog replacement. Topics studied with respect to film, video and multi-media. Prereq: Admittance to Recording Arts/Tech focus. Cross-listed with MSRA 5505.**Semester Hours:** 4to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

or

MUSC 4575 - Surround Sound

Summer 2010 Registration **MUS 4575**

This lecture-lab course deals with surround sound in film, digital TV and DVDs. Topics include monitoring, microphone techniques, recording, mixing, mastering, delivery formats and psychoacoustics. Students work on two lab projects in the semester.

Prereq: MUSC 4550 and admittance to Recording Arts/Tech focus. Cross-listed with MSRA 5575.**Semester Hours:** 4to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

MUSC 4550 - Audio Production III

Summer 2010 Registration **MUS 4550**

Advanced studies in sound recording and reinforcement, aesthetics and techniques of multi-track digital recording and stereo imaging. Team lab recording projects. Prereq:

Admittance to Recording Arts/Tech focus. Cross-listed with MSRA 5550.**Semester Hours:** 4to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

MUSC 4580 - Audio Production Seminar

Summer 2010 Registration **MUS 4580**

Faculty and majors of the music engineering program assemble to discuss and demonstrate issues of artistic and technical applications of recording technology.

Student projects, faculty, and guest lectures provide topical focus. (Music facility fee applies.) Prereq: Admittance to Recording Arts/Tech focus. Cross-listed with MSRA 5580.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MUSC 4580 - Audio Production Seminar (Senior Project)

PHYS 3620 - Sound and Music

Summer 2010 Registration **PHYS 3620**

Considers the basic nature of sound waves, the ear and hearing, and musical instruments. Although this course is mainly descriptive, some high school algebra will be used. Prereq: MATH 1070 or equivalent.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

_____ - Music Technology Electives (3 semester hours)

Total: 26 Hours

Philosophy BA

Students must declare a major by the time they have completed 60 semester hours of course work. A total of 36 semester hours must be completed for the philosophy major, at least 18 of which must be taken at the Downtown Campus. A minimum grade of C (2.0) is required in each course. For those students who qualify for and fulfill the requirements for graduation with honors, a total of at least 39 hours is required.

A total of 18 upper-division semester hours are required for the major, and no more than 6 hours below the 3000 level may be counted toward the major. Courses taken at other institutions must be approved by an advisor in the Department of Philosophy to be applied toward the major.

Unless otherwise noted, registration for 4000-level courses in philosophy require a minimum grade of C (2.0) in every prior philosophy course and completion of at least PHIL 3002 or PHIL 3022 or permission of instructor.

Program Requirements

Required Courses

PHIL 3002 - Ancient Greek Philosophy

Summer 2010 Registration **PHIL 3002**

History of ancient Greek thought, including traditional myth, pre-Socratic fragments, Plato's dialogues, and Aristotle's systematic philosophy. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 3022 - Modern Philosophy

Summer 2010 Registration **PHIL 3022**

History of philosophy from Descartes through Kant. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

(It is recommended, but not required, that PHIL 3002 be taken before PHIL 3022)

PHIL 3440 - Introduction to Symbolic Logic

Summer 2010 Registration **PHIL 3440**

Covers truth functional and quantificational logic through polyadic first order predicate calculus and theory of identity. Attention is given to such problems in metatheory as proofs of the completeness and consistency of systems of logic. Cross-listed with MATH 3440. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 4760 - Kant

Summer 2010 Registration **PHIL 4760**

A close study of Immanuel Kant's revolutionary thought, focusing on Kant's ontology, epistemology, and ethical theory, as they are articulated in his Critique of Pure Reason and Critique of Practical Reason. Prereq: PHIL 3002 or 3022, a minimum grade of "C" in each previous philosophy course, or permission of instructor. Cross-listed with PHIL 5830. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 12 Hours

Additional distribution requirements

(All are upper-division courses)

One course in social/political philosophy

One course in ethics

One course in Continental philosophy

One course in EITHER American or analytic philosophy

One course with specific focus in the history of philosophy (may be fulfilled by a course in a single figure)

Total: 15 Hours

Electives

Choose three:

One upper-division elective (may include courses from previous lists that are not counted toward those requirements)

Two electives at any level

Total: 9 Hours

Major Total: 36 Hours

Course work required for graduation with honors:

3-6 semester hours taken over two semesters of:

PHIL 4950 - Honors Thesis

Summer 2010 Registration **PHIL 4950**

Semester Hours: 3 to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

Physics BS

Program Requirements

Students must declare their intention to major in physics by the time they have completed 60 semester hours and complete between 47 and 51 semester hours (depending on the track chosen) in physics and related topics. Additionally, all tracks require 16 semester hours in math ancillary courses. No grade below a C (2.0) can be used to meet the requirements for the major. At least 12 semester hours of the requirements for the major must be completed at the Downtown Campus.

A senior thesis, usually from participation in research, is *required* for all students wishing to graduate with departmental honors. All other students are encouraged to do research leading to a project report or senior thesis.

Required Courses Common to All Tracks

Required Physics Courses

PHYS 2311 - General Physics I: Calculus-Based

Summer 2010 Registration **PHYS 2311**

Covers vector displacement, uniform and accelerated motion, force, momentum, energy, rotating systems, oscillations, and an introduction to thermodynamics. Emphasis is on basic principles. Coreq: MATH 1401. **Semester Hours:** 4to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 2331 - General Physics II: Calculus-Based

Summer 2010 Registration **PHYS 2331**

Covers electrostatics, magnetic fields, electromagnetic waves (including light), and optics. Prereq: PHYS 2311. Coreq: MATH 2411. **Semester Hours:** 4to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 2371 - Topic-Driven Physics Lab

Summer 2010 Registration **PHYS 2371**

A focused topic is used to show how many fundamental ideas in physics provide the basis for current applications and research. A laboratory component further illustrates the ideas and develops essential skills in physics experimentation. Coreq: PHYS 2331. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 2711 - Vibrations and Waves

Summer 2010 Registration **PHYS 2711**

Introduces vibrations and waves associated with physical phenomena. Analytic and numerical methods in physical contexts. Topics include harmonic oscillators, resonance, coupled oscillators, nonlinear oscillators, waves in elastic media, sound waves, pulses and dispersion. Prereq: PHYS 2331 and MATH 2411. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 2811 - Modern Physics I

Summer 2010 Registration **PHYS 2811**

Presents a study of the events and discoveries that occurred during the latter part of the 19th and the first part of the 20th centuries which led to the discovery of quantum mechanics; namely, special relativity, particle nature of radiation, wave properties of particles, models of the atom, and the introduction of quantum mechanics. Prereq: PHYS 2331 and MATH 2411. **Semester Hours:** 4to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 3120 - Methods of Mathematical Physics

Summer 2010 Registration **PHYS 3120**

Typically covers calculus of variations, special functions, partial differential equations, integral transforms, linear vector spaces, and tensor analysis. Prereq: MATH 2421 and 3195 (or equivalent) or permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 3711 - Junior Laboratory I

Summer 2010 Registration **PHYS 3711**

Advanced laboratory in classical and modern physics. Prereq: PHYS 2811. **Semester Hours:** 2to 2
Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 3811 - Quantum Mechanics

Summer 2010 Registration **PHYS 3811**

A course in which both wave and matrix mechanics are developed and applied to selected problems in atomic physics. Prereq: PHYS 2811 and 3211. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

Note: The department will accept the following combination of independent study and introductory lab courses in lieu of PHYS 2371. However, PHYS 2371 is strongly recommended because it provides explicit preparation for upper division lab courses.

PHYS 1840 - Independent Study: PHYS

Summer 2010 Registration **PHYS 1840**

Students must check with a faculty member before taking this course. **Semester Hours:** 1to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 2321 - General Physics Lab I

Summer 2010 Registration **PHYS 2321**

Semester Hours: 1to 1
Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 2341 - General Physics Lab II

Summer 2010 Registration **PHYS 2341**

Prereq: PHYS 2321. **Semester Hours:** 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total physics courses required for all tracks: 26 Hours

Required Ancillary Courses

MATH 1401 - Calculus I

Summer 2010 Registration **MATH 1401**

First course of a three-semester sequence (MATH 1401, 2411, 2421) in calculus. Topics covered include limits, derivatives, applications of derivatives, and the definite integral.

Note: Students cannot receive credit for both MATH 1080 and 1401. Prereq: MATH 1120 or 1130 and satisfactory score on the placement exam. **Semester Hours:** 4to 4GT

Pathways Category Key: GT-MA1

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 2411 - Calculus II

Summer 2010 Registration **MATH 2411**

The second of a three-semester sequence (MATH 1401, 2411, 2421) in calculus. Topics covered include exponential, logarithmic, and trigonometric functions, techniques of integration, indeterminate forms, improper integrals and infinite series. Prereq: MATH 1401. **Semester Hours:** 4to 4GT

Pathways Category Key: GT-MA1

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 2421 - Calculus III

Summer 2010 Registration **MATH 2421**

The third of a three-semester sequence in calculus (MATH 1401, 2411 and 2421).

Topics include vectors, vector-valued functions, partial differentiation, differentiation, multiple integration, and vector calculus. Prereq: MATH 2411. **Semester Hours:** 4to 4GT

Pathways Category Key: GT-MA1

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 3195 - Linear Algebra and Differential Equations

Summer 2010 Registration **MATH 3195**

Presents the essential ideas and methods of linear algebra and differential equations, emphasizing the connections between and the applications of both subjects. The course is designed for students in the sciences and engineering. Note: No co-credit with MATH

3200 and MATH 3191. Prereq: MATH 2411. **Semester Hours:** 4to 4
Registration is changing. Visit our website for details ucdenver.edu/registration.

Note: The department will accept the following combination of math courses in place of MATH 3195:

MATH 3191 - Applied Linear Algebra

Summer 2010 Registration **MATH 3191**

Topics include systems of equations, Gaussian elimination with partial pivoting, LU--decomposition of matrices, matrix algebra, determinants, vector spaces, linear transformations, eigenvalues and applications. Note: No co-credit with MATH 3195.
Prereq: MATH 2411. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 3200 - Elementary Differential Equations

Summer 2010 Registration **MATH 3200**

First and second order differential equations, Laplace transforms, systems of equations, with an emphasis on modeling and applications. Note: No co-credit with MATH 3195.
Prereq: MATH 2411; coreq is MATH 3191. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

Total ancillary math courses required for all tracks: 16 Hours

Total required semester hours for all physics major tracks: 42 Hours

Pure and Applied Physics (Track 1)

Take in addition to the courses common to all tracks:

PHYS 3211 - Analytical Mechanics

Summer 2010 Registration **PHYS 3211**

Topics include the Lagrange and Hamiltonian formulations, the two-body problem, rigid body motion, and small oscillations. Prereq: PHYS 2711, MATH 2421 and 3195 or equivalent. Coreq: PHYS 3120. **Semester Hours:** 4to 4
Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 3411 - Thermal Physics

Summer 2010 Registration **PHYS 3411**

Covers the basic concepts of the three related disciplines of thermodynamics, statistical mechanics, and kinetic theory. Prereq: PHYS 2331, 2811 and MATH 2421; Coreq: MATH 3195 or equivalent. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 3721 - Junior Laboratory II

Summer 2010 Registration **PHYS 3721**

Advanced laboratory in classical and modern physics. Prereq: PHYS 3711. **Semester Hours:** 2to 2

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 4331 - Principles of Electricity and Magnetism

Summer 2010 Registration **PHYS 4331**

Elements of mathematical theory of electricity and magnetism, including electrostatics, magnetostatics, polarized media, direct and alternating current theory, and introduction to electromagnetic fields and waves. Prereq: PHYS 2331 and 3120. **Semester Hours:** 4to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 4711 - Senior Laboratory I

Summer 2010 Registration **PHYS 4711**

Individual project laboratory with emphasis on modern methods of physical experimentation. Prereq: PHYS 3721. **Semester Hours:** 2to 2

Registration is changing. Visit our website for details ucdenver.edu/registration.
(or a course in computational physics approved by advisor)

* *Note:* Students who must *retake* PHYS 4331 may fulfill this requirement by obtaining a C or better in

PHYS 4351 - Bioelectromagnetism

Summer 2010 Registration **PHYS 4351**

The fundamental theory of electric and magnetic fields is developed and applied to problems of biology and medicine. Examples in medical diagnostics and treatment are built upon rigorous application of Maxwell's equations and constitutive models of electromagnetic properties of biomaterials. Prereq: PHYS 2331 and 3120. **Semester**

Hours: 4to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

Elective Physics Courses

Six semester hours of physics-related electives at 3000-level or above approved by advisor, including up to 3 hours of independent study

Total Track 1 Specific Courses: 21 Hours

Biophysics and Medical Physics (Track 2)

Take in addition to the courses common to all tracks:

PHYS 3251 - Biophysics of the Body

Summer 2010 Registration **PHYS 3251**

Fundamental ideas of mechanics are used to model the form and function of the human body, including statistics, locomotion, energy, and fluid flow. Topics from analytical mechanics are included to ensure student knowledge of Lagrangian and Hamiltonian formalisms. **Semester Hours:** 4to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 3411 - Thermal Physics

Summer 2010 Registration **PHYS 3411**

Covers the basic concepts of the three related disciplines of thermodynamics, statistical mechanics, and kinetic theory. Prereq: PHYS 2331, 2811 and MATH 2421; Coreq: MATH 3195 or equivalent. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 4351 - Bioelectromagnetism

Summer 2010 Registration **PHYS 4351**

The fundamental theory of electric and magnetic fields is developed and applied to problems of biology and medicine. Examples in medical diagnostics and treatment are built upon rigorous application of Maxwell's equations and constitutive models of electromagnetic properties of biomaterials. Prereq: PHYS 2331 and 3120. **Semester Hours:** 4to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

(recommended option)

-OR-

PHYS 4331 - Principles of Electricity and Magnetism

Summer 2010 Registration **PHYS 4331**

Elements of mathematical theory of electricity and magnetism, including electrostatics, magnetostatics, polarized media, direct and alternating current theory, and introduction to electromagnetic fields and waves. Prereq: PHYS 2331 and 3120. **Semester Hours:** 4to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

Biophysics electives (8-9 hours)

Biophysics electives at the 3000-level or above approved by advisor (including up to 3 semester hours independent study and/or two courses, PHYS 3151 and PHYS 3161, listed below)

-OR-

The following four courses (an option primarily for pre-med physics majors):

BIOL 2051 - General Biology I

Summer 2010 Registration **BIOL 2051**

Introduces four major areas of study: (1) the chemistry of biological systems; (2) the structure and function of the cell; (3) cellular energy transformations (photosynthesis and respiration); and (4) genetics (mitosis, meiosis, patterns of inheritance, molecular genetics). Note: Biology and health science (pre-med, pre-vet, pre-physical therapy, etc.) majors must also take the accompanying laboratory - BIOL 2071. Prereq: CHEM 1000 or high school chemistry required. **Semester Hours:** 3to 3 **GT Pathways Category Key:** GT-SC1

Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 2061 - General Biology II

Summer 2010 Registration **BIOL 2061**

This course is a continuation of BIOL 2051. Introduces four major areas of study: (1) evolution, (2) animal structure and function, (3) plant structure and function and (4) ecology. Note: Biology and health science (pre-med, pre-vet, nursing, etc.) majors must also take the accompanying laboratory - BIOL 2081. Prereq: BIOL 2051 or equivalent with a grade of "C" (2.0) or higher. **Semester Hours:** 3to 3 **GT Pathways Category Key:** GT-SC1

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 3151 - Biophysics Outlook I

Summer 2010 Registration **PHYS 3151**

Designed as a companion to General Biology I (but can take stand-alone), this course

explores how biophysics concepts and experimental methods add to the knowledge of life's processes at the molecular and cellular level. Prereq: PHYS 2311 and PHYS 2331. **Semester Hours:** 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 3161 - Biophysics Outlook II

Summer 2010 Registration **PHYS 3161**

Designed as a companion to General Biology I (but can take stand-alone), this course explores how biophysics concepts and experimental methods contribute to the understanding of the structure and function of plants, animals & ecological systems.

Prereq: PHYS 2311 and PHYS 2331. **Semester Hours:** 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 3721 - Junior Laboratory II

Summer 2010 Registration **PHYS 3721**

Advanced laboratory in classical and modern physics. Prereq: PHYS 3711. **Semester Hours:** 2to 2

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

The following two courses (an option primarily for pre-med physics majors):

BIOL 2071 - General Biology Laboratory I

Summer 2010 Registration **BIOL 2071**

Introduces the basic scientific approach and report preparation through exercises and experiments in cell biology, basic biochemical techniques, genetics, molecular genetics and applications of biotechnology. Note: Exercises corresponding to topics in BIOL 2051. Coreq: BIOL 2051. **Semester Hours:** 1to 1 **GT Pathways Category Key:** GT-SC1

Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 2081 - General Biology Laboratory II

Summer 2010 Registration **BIOL 2081**

Study of evolution, plant and animal anatomy, developmental biology; includes two off-campus ecology field trips. Note: Exercises corresponding to topics in BIOL 2061.

Prereq: BIOL 2071 or equivalent with a grade of "C" (2.0) or higher; Coreq: BIOL 2061. **Semester Hours:** 1to 1 **GT Pathways Category Key:** GT-SC1

Registration is changing. Visit our website for details ucdenver.edu/registration.

Numerical modeling or probability and statistics course approved by advisor: **3 semester hours**

Total Track 2 Specific Courses: 25 Hours

Major Total: 63-67 Hours

Pre-Med Students

Note: courses above marked * are generally required for medical school admissions. In addition, the following are generally required for medical school admissions but NOT for the biophysics and medical physics track:

CHEM 2031 - General Chemistry I

Summer 2010 Registration **CHEM 2031**

Topics include chemical structure, atomic and molecular properties, molecular geometry and bonding, and gas laws. Prepares students to take upper division chemistry courses. Note: a beginning course for science majors, medical technologists, pre-medical and pre-dental students. Prereq: One year of high school chemistry or CHEM 1000 and MATH 1110 (or high school equivalent); Coreq: CHEM 2038. **Semester Hours:** 3to 3**GT Pathways Category Key:** GT-SC1

Registration is changing. Visit our website for details ucdenver.edu/registration.

CHEM 2038 - General Chemistry Laboratory I

Summer 2010 Registration **CHEM 2038**

Students perform laboratory experiments on topics covered in CHEM 2031 and gain experience in observing, recording, and interpreting physical and chemical phenomena. Note: Laboratory to accompany CHEM 2031. Coreq: CHEM 2031. **Semester Hours:** 1to 1**GT Pathways Category Key:** GT-SC1

Registration is changing. Visit our website for details ucdenver.edu/registration.

CHEM 2061 - General Chemistry II

Summer 2010 Registration **CHEM 2061**

(Continuation of CHEM 2031.) Topics include kinetics, equilibria and thermodynamics. Prereq: CHEM 2031; Coreq: CHEM 2068. **Semester Hours:** 3to 3**GT Pathways Category Key:** GT-SC1

Registration is changing. Visit our website for details ucdenver.edu/registration.

CHEM 2068 - General Chemistry Laboratory II

Summer 2010 Registration **CHEM 2068**

Students gain experience with laboratory technique and elementary chemical instrumentation. Note: Laboratory to accompany CHEM 2061 and a continuation of

CHEM 2038. Prereq: CHEM 2038; Coreq: CHEM 2061. **Semester Hours:** 2to 2GT
Pathways Category Key: GT-SC1
Registration is changing. Visit our website for details ucdenver.edu/registration.

CHEM 3411 - Organic Chemistry I

Summer 2010 Registration **CHEM 3411**

Lecture course designed to introduce the study of structure, reactions, properties, and mechanisms of organic molecules. Prereq: CHEM 2061. **Semester Hours:** 4to 4
Registration is changing. Visit our website for details ucdenver.edu/registration.

CHEM 3418 - Organic Chemistry Laboratory I

Summer 2010 Registration **CHEM 3418**

Laboratory course to augment concepts of CHEM 3411, illustrating the practical aspects of organic chemistry. Prereq: CHEM 2068; Prereq or Coreq: CHEM 3411. **Semester Hours:** 1to 1
Registration is changing. Visit our website for details ucdenver.edu/registration.

CHEM 3421 - Organic Chemistry II

Summer 2010 Registration **CHEM 3421**

Lecture course designed to introduce the study of structure, reaction, properties and mechanisms of organic molecules. Note: Continuation of CHEM 3411. Prereq: CHEM 3411. **Semester Hours:** 4to 4
Registration is changing. Visit our website for details ucdenver.edu/registration.

CHEM 3428 - Organic Chemistry Laboratory II

Summer 2010 Registration **CHEM 3428**

Laboratory course to augment concepts of CHEM 3421, illustrating the practical aspects of organic chemistry. Prereq: CHEM 3418; Prereq or Coreq: CHEM 3421. **Semester Hours:** 1to 1
Registration is changing. Visit our website for details ucdenver.edu/registration.

Total additional pre-med (but not required for Track 2): 19 hours

Political Science BA

Undergraduate students must declare their intention to major in political science by the time they have completed 60 semester hours, and must complete a minimum of 36

semester hours in political science, of which at least 21 must be upper-division courses. Fifteen of the 36 hours must be taken from Downtown Campus faculty. Courses are distributed among the primary fields as listed in this section, i.e., American politics, comparative politics, international relations, political theory and public policy and administration. To count for the major, all course work must be completed with a grade of C (2.0) or better. Two cognate courses (which don't count toward the 36 hours) from the list below must also be completed.

Traditional Option

Required Core

PSCI 1001 - Introduction to Political Science: The Quest for Freedom and Justice

Summer 2010 Registration **P SC 1001**

Introduces the study of politics, its human importance, and its relationship to social institutions. Analysis of the relationship between individual political behavior and characteristics of the political system. Development of key concepts such as power, legitimacy, authority, political socialization, and revolution. Note: Required of all PSCI majors. **Semester Hours:** 3to 3 **GT Pathways Category Key:** GT-SS1
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 1101 - American Political System

Summer 2010 Registration **P SC 1101**

General introduction to the American political system with emphasis upon citizen involvement, the relationships among the various levels and branches of government, formal and informal institutions, processes, and behavior. Note: Required of all PSCI majors. **Semester Hours:** 3to 3 **GT Pathways Category Key:** GT-SS1
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 3011 - Research Methods

Summer 2010 Registration **P SC 3011**

Design of political/social research, both qualitative and quantitative. Applications of statistical techniques and procedures to social and political phenomena. Use of computer and the Internet. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

PSCI 4011 - GIS in Political Science

Summer 2010 Registration **P SC 4011**

Computer lab course developing methodological skills in Geographic Information

Systems (GIS) in political contexts. Geospatial computerized mapping skills are important in political fields such as urban planning, electoral analysis, environmental justice, demographics, public health, and criminal justice. Designed for beginners.

Cross-listed with PSCI 5011. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 9 Hours

Choose two:

PSCI 4207 - Theories of Social and Political Change

Summer 2010 Registration P SC 4207

Conservative, radical, and incremental approaches to change. Role of psychological and sociological factors in political change. Comparative perspectives on change. Self-perpetuation processes of power systems and their vulnerabilities. Requisites of system maintenance and system change. Selected case studies. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4407 - Early Political Thought

Summer 2010 Registration P SC 4407

Main currents of political thought in their historical setting from Plato to Machiavelli, with a critical evaluation of those elements of continuing worth. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4417 - Modern Political Thought

Summer 2010 Registration P SC 4417

Main currents of political thought in their historical setting from the 17th century to the present. Development of the student's own political theory. PSCI 4407 is not a prerequisite for PSCI 4417. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4427 - Law, Politics and Justice

Summer 2010 Registration P SC 4427

Analysis of the relationship of politics, law, and justice, particularly the degree to which moral norms and political concerns should and do influence legal standards and their perceived legitimacy. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4437 - Coercion and the State

Summer 2010 Registration **P SC 4437**

An analysis of: (1) the historical emergence of the modern state; (2) the theoretical justifications for the concentration of political power and the activist state; (3) the internationalization of the European state system; and (4) anarchist and Fourth World challenges. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4457 - American Political Thought

Summer 2010 Registration **P SC 4457**

American law, politics, and conflict. History and development of American political theories and ideas from Native American roots through the colonial period to the present. Political theory and practice in the U.S. today. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 6 Hours

One 4000-level course in each of three fields:

American politics, comparative politics, and international relations

Total: 9 Hours

Experiential-Learning Requirement *

Choose one:

PSCI 3914 - The Urban Citizen

Summer 2010 Registration **P SC 3914**

Course emphasis is community, the individual, and the good life. Experiential learning and classroom discussions about capacities of urban citizens. Focus is on social, political, and economic resources that individuals command, issues of equality and inequality, and possibilities of constructive change. Prereq: A willingness to spend a semester working and studying together as a team in both the classroom and the community. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 3939 - Internship/Cooperative Education

Summer 2010 Registration **P SC 3939**

Designed experiences involving application of political concepts and skills in supervised employment situations. Prereq: Junior or senior standing and 3.0 GPA. **Semester**

Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4217 - Human Rights in Theory and Practice

Summer 2010 Registration **P SC 4217**

Explores the ideas of human rights and the practical efforts to actualize rights in society. Students study the theories of rights and the evolution of rights in history, as well as work with a service organization. Cross-listed with PSCI 5217. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4934 - CU at the Capitol

Summer 2010 Registration **P SC 4934**

Examines current year legislative session of Colorado General Assembly. Study of various elected leaders; Colorado party system; Governor-Assembly relations; citizen and lobbyist influence; corruption and virtue in politics; current affairs. Each student will be placed in a state government internship. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

Experiential learning project in any P SC class: **3 semester hours**

* Students with significant volunteer experience in the community or for whom the experiential-learning requirement poses a hardship may petition the chair to waive the requirement (36 hours still required).

Total: 3 Hours

Electives

Three political science elective courses

Total: 9 Hours

Political Science Total: 36 Hours

Required Cognate Courses

In addition to the 36 hours above, choose two of the following cognate courses:

ECON 2012 - Principles of Economics: Macroeconomics

Summer 2010 Registration **ECON 2012**

Covers topics of inflation, unemployment, national income, growth and problems of the

national economy, stabilization policy, plus others at the discretion of the instructor. Purpose is to teach fundamental principles, to open the field of economics in the way most helpful to further a more detailed study of special problems, and to give those not intending to specialize in the subject an outline of the general principles of economics. **Semester Hours:** 3to 3 **GT Pathways Category Key:** GT-SS1
Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 2022 - Principles of Economics: Microeconomics

Summer 2010 Registration **ECON 2022**

Topics include price determination in a market system composed of households and firms: resource allocation and efficiency of various market structures, plus others at the discretion of the instructor. Note: Complementary to and normally taken following ECON 2012. ECON 2012 is not a prerequisite for ECON 2022. **Semester Hours:** 3to 3 **GT Pathways Category Key:** GT-SS1
Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 1016 - World History to 1500

Summer 2010 Registration **HIST 1016**

Surveys the rise of civilizations and their interactions from prehistoric to modern times. The emphasis is on the understanding of the various styles or characteristics of civilizations within a global context. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 1026 - World History Since 1500

Summer 2010 Registration **HIST 1026**

Surveys the interactions of the world's civilizations in modern times. The emphasis is on understanding the concept of modernization within a global context. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 1211 - Western Civilization I

Summer 2010 Registration **HIST 1211**

Introduces ancient Mediterranean civilization and the birth of Europe. Covers topics on economics and society, political organization, intellectual history, and art from 3000 B.C. to A.D. 1500. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 1212 - Western Civilization II

Summer 2010 Registration **HIST 1212**

Introduces modern European civilization and its spread over the world. Covers topics on economics and society, political organization, intellectual history, and art from A.D. 1500 to the 20th century. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 1361 - U.S. History to 1876

Summer 2010 Registration **HIST 1361**

Provides an introduction to the major forces, events and individuals that shaped the historical development of American society, beginning with the European settlement of America and concluding with the Civil War, reconstruction and the early growth of an industrial order. **Semester Hours:** 3to 3 **GT Pathways Category Key:** GT-HI1

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 1362 - U.S. History Since 1876

Summer 2010 Registration **HIST 1362**

Provides an introduction to the major forces, events, and individuals that shaped the historical development of American society from the Civil War to the present. **Semester Hours:** 3to 3 **GT Pathways Category Key:** GT-HI1

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 6 Hours

Major Total: 42 Hours

Public Policy Option

This option was designed for students who specifically desire to pursue careers in public policy and/or public administration in the public or nonprofit sectors. Grounded in basic political science theory and familiarity with American, comparative and international politics, this BA track emphasizes the specifically political aspects of public policy processes and settings. Cases will emphasize key policy issues confronting U.S. local, state and national decision makers and citizens. A focus on politics and the policy-making process will prepare students conceptually and methodologically to move

beyond partisan politics to address how leaders can best mobilize resources to achieve constituent goals consistent with the public interest.

Required Core

PSCI 1001 - Introduction to Political Science: The Quest for Freedom and Justice

Summer 2010 Registration **P SC 1001**

Introduces the study of politics, its human importance, and its relationship to social institutions. Analysis of the relationship between individual political behavior and characteristics of the political system. Development of key concepts such as power, legitimacy, authority, political socialization, and revolution. Note: Required of all PSCI majors. **Semester Hours:** 3to 3 **GT Pathways Category Key:** GT-SS1
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 1101 - American Political System

Summer 2010 Registration **P SC 1101**

General introduction to the American political system with emphasis upon citizen involvement, the relationships among the various levels and branches of government, formal and informal institutions, processes, and behavior. Note: Required of all PSCI majors. **Semester Hours:** 3to 3 **GT Pathways Category Key:** GT-SS1
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 3011 - Research Methods

Summer 2010 Registration **P SC 3011**

Design of political/social research, both qualitative and quantitative. Applications of statistical techniques and procedures to social and political phenomena. Use of computer and the Internet. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 9 Hours

One 4000-level course in each of the following three fields:

American Politics

PSCI 4002 - Topics in Political Science

Summer 2010 Registration **P SC 4002**

Specialized areas of politics. Note: May be taken more than once for credit when topics

vary. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4014 - Media and Politics

Summer 2010 Registration P SC 4014

Explores the impact of the news media on the American political system, including public policy and citizen participation, and addresses trends in news coverage and media ownership, and their impact on public opinion. Prereq: PSCI 1001 and 1101 or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4024 - Legislatures and Legislation

Summer 2010 Registration P SC 4024

Structure and organization of legislatures, informal influences, and the process of statute law making. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4025 - Local Governance and Globalization

Summer 2010 Registration P SC 4025

Introduces international political economy, consequences of globalization for localities, interplay between wealth and power among nations, multinational corporations, NGOs and the UN, and impact of their actions on local governments. Topics include development, aid, trade, outsourcing, eco-sustainability and global equity. Prereq: Graduate standing or permission of instructor. Cross-listed with PSCI 5025. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4044 - The Presidency

Summer 2010 Registration P SC 4044

An overview of the historical, constitutional, and functional aspects of the presidency. Focuses on the powers and vulnerabilities of the presidency and on the style and politics of the current president. Prereq: PSCI 1101. Cross-listed with PSCI 5044. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4094 - Seminar: American Politics

Summer 2010 Registration P SC 4094

Foundations of U.S. politics and contemporary political issues. Federal/state/community relations. Relationship among the three branches of the Federal government. Colorado

controversies arising under the U.S. Constitution. Cross-listed with PSCI 5014. **Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4124 - Denver Politics

Summer 2010 Registration P SC 4124

Surveys Denver's dominant political and economic forces and community agendas that compete with the downtown growth machine. Examines urban renewal strategies, gentrification and grass-roots resistance, and the role of officials in shaping Denver's distribution of wealth and life-opportunities. **Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4324 - Politics, Public Policy and Leadership

Summer 2010 Registration P SC 4324

Role of politics in public and nonprofit sectors. Theories of administration and policy-making, emphasizing the role of leadership in public outcomes. Hands-on approach to case studies and use of students' policy experiences in practical application of theories. Cross-listed with PSCI 5324. **Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4354 - Environmental Politics

Summer 2010 Registration P SC 4354

Political, legal, and economic forces in environmental law and policy. Special emphasis on air and water pollution and on threats to public and agricultural land. Environmental groups and their opponents. **Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4374 - Public Priorities for the 21st Century

Summer 2010 Registration P SC 4374

Identification of and planning for social, political, and economic trends in American society likely to transform governmental, nonprofit, and private entities. Rigorous examination of and debate on competing priorities such as liberty, security, welfare, equality, diversity, growth and ecology. Cross-listed with PSCI 5374. **Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4477 - Constitutional Law I

Summer 2010 Registration P SC 4477

Nature and scope of the following American constitutional principles as developed by the

U.S. Supreme Court: federalism, jurisdiction of the federal courts, separation of powers, the taxing power, and the commerce power. Case method. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4487 - Constitutional Law II

Summer 2010 Registration P SC 4487

Continuation of PSCI 4477, with emphasis on the war powers of the president, citizenship, the Bill of Rights, and the Civil War amendments. (Case method.) Note: PSCI 4477 is not a prerequisite for PSCI 4487. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4545 - Immigration Politics

Summer 2010 Registration P SC 4545

Introduces students to central theories of migration and a survey of immigration law and policy in the 20th century. Highlights experiences of Mexican and Latin American immigrants and related topics, including: U.S.-Mexican foreign relations, bilingual education, undocumented immigration and globalization. Cross-listed with PSCI 5545. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

Comparative Politics and International Relations

PSCI 4085 - Comparative Public Policy

Summer 2010 Registration P SC 4085

Comparison of public policy making in such areas as health care, environment, family assistance, and employment in the United States and at least two other countries. Prereq: Graduate standing or permission of instructor. Cross-listed with PSCI 5085. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4124 - Denver Politics

Summer 2010 Registration P SC 4124

Surveys Denver's dominant political and economic forces and community agendas that compete with the downtown growth machine. Examines urban renewal strategies, gentrification and grass-roots resistance, and the role of officials in shaping Denver's distribution of wealth and life-opportunities. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4185 - Corruption in the U.S. and Abroad

Summer 2010 Registration P SC 4185

Explores the causes and consequences of administrative and political corruption in developed and developing countries, and evaluates various anti-corruption strategies.

Prereq: PSCI 1001 or 3022. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4226 - The United Nations in World Affairs

Summer 2010 Registration P SC 4226

Current operation and future potential of the United Nations as a complex actor in world affairs, both expressing conflicting interests of its participants and promoting universal goals, including world peace, human rights, and environmental protection. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4236 - American Foreign Policy

Summer 2010 Registration P SC 4236

Examines the postwar events, controversies, and most recent challenges in U.S. foreign policy. Analyses of the major sources of U.S. foreign policy, such as ideology, national interests, and national power. Attention to the pattern and process of foreign policy-making. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4266 - International Law

Summer 2010 Registration P SC 4266

Investigates the body of law that regulates relations between nations and provides a framework for solving common problems and disputes between nations. Prereq: Upper division political science major. Cross-listed with PSCI 5266. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4326 - Advanced International Political Economy: Globalization

Summer 2010 Registration P SC 4326

Engages the current debate about globalization. Conceptualizes globalization and evaluates the pros and cons of global trade and finance for developed and developing countries. Develops a model for a sustainable and just global economy. Prereq: PSCI 4126. Cross-listed with PSCI 5326. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4645 - Comparative Political Leadership

Summer 2010 Registration P SC 4645

Comparative study of historical, socio-cultural, and psychological bases of political leadership. Leadership types in peasant societies, empires, and revolutionary movements. Dilemmas of democratic versus authoritarian leadership in modernizing and industrial states. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Public Policy and Administration

PSCI 4009 - Politics of the Budgetary Process

Summer 2010 Registration P SC 4009

Develops each student's understanding of budgeting and financial management in the public and nonprofit sectors. An overview of public sector and nonprofit fiscal management is provided, along with thorough exploration of the political influences that affect financial decision-making. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4024 - Legislatures and Legislation

Summer 2010 Registration P SC 4024

Structure and organization of legislatures, informal influences, and the process of statute law making. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4084 - Local Government and Administration

Summer 2010 Registration P SC 4084

Policy and administrative challenges faced by local government in the 21st century. Emphasis on cities under federalism, alternative forms of city governance, and new challenges from increasingly diverse constituents. Issues of poverty, public safety, health, transportation, environment, corruption, and accountability. Cross-listed with PSCI 5084. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4274 - Conflict Resolution and Public Consent Building

Summer 2010 Registration P SC 4274

Alternative strategies for resolving or mediating conflicts facing public or nonprofit organizations and for building public consent, with emphasis on personal, interpersonal, organizational, interest-group, cross-cultural, and roots of conflict and bases for consent.

Cross-listed with PSCI 5274. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4414 - Organizational Change Agents

Summer 2010 Registration P SC 4414

Explores strategies for changing public and nonprofit organizations and of ways leadership abilities can be used for this purpose. Analysis of obstacles to organizational change and of methods for overcoming them. Principles of change applied to real-life contexts. Cross-listed with PSCI 5514. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4644 - Ethical Responsibilities of Leaders

Summer 2010 Registration P SC 4644

Explores concepts of ethical decision making within the context of public leadership in both the public and non-profit sectors. Universal and individual ethical standards are examined. Cross-listed with PSCI 5644. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 9 Hours

Elective courses

Choose any two additional courses from the list above, plus choose one other upper or lower division PSCI course.

Total: 9 Hours

Two political theory courses

PSCI 4427 - Law, Politics and Justice

Summer 2010 Registration P SC 4427

Analysis of the relationship of politics, law, and justice, particularly the degree to which moral norms and political concerns should and do influence legal standards and their perceived legitimacy. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4437 - Coercion and the State

Summer 2010 Registration P SC 4437

An analysis of: (1) the historical emergence of the modern state; (2) the theoretical

justifications for the concentration of political power and the activist state; (3) the internationalization of the European state system; and (4) anarchist and Fourth World challenges. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 6 Hours

Experiential-Learning Requirement *

Choose one:

PSCI 3939 - Internship/Cooperative Education

Summer 2010 Registration **P SC 3939**

Designed experiences involving application of political concepts and skills in supervised employment situations. Prereq: Junior or senior standing and 3.0 GPA. **Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4934 - CU at the Capitol

Summer 2010 Registration **P SC 4934**

Examines current year legislative session of Colorado General Assembly. Study of various elected leaders; Colorado party system; Governor-Assembly relations; citizen and lobbyist influence; corruption and virtue in politics; current affairs. Each student will be placed in a state government internship. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

* Students with significant volunteer experience in the community or for whom the experiential-learning requirement poses a hardship may petition the chair to waive the requirement (36 hours still required).

Total: 3 Hours

Two cognate courses

ECON 2012 - Principles of Economics: Macroeconomics

Summer 2010 Registration **ECON 2012**

Covers topics of inflation, unemployment, national income, growth and problems of the national economy, stabilization policy, plus others at the discretion of the instructor.

Purpose is to teach fundamental principles, to open the field of economics in the way most helpful to further a more detailed study of special problems, and to give those not

intending to specialize in the subject an outline of the general principles of economics. **Semester Hours:** 3to 3**GT Pathways Category Key:** GT-SS1
Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 2022 - Principles of Economics: Microeconomics

Summer 2010 Registration **ECON 2022**

Topics include price determination in a market system composed of households and firms: resource allocation and efficiency of various market structures, plus others at the discretion of the instructor. Note: Complementary to and normally taken following ECON 2012. ECON 2012 is not a prerequisite for ECON 2022. **Semester Hours:** 3to 3**GT Pathways Category Key:** GT-SS1
Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 6 Hours

Public Policy Option Total: 42 Hours

Psychology BA

Students should consult with the advisor when they declare a psychology major, which must be done once they have completed 60 semester hours of course work. Psychology BA major requirements include at least 37 and not more than 48 semester hours in psychology. Of these, at least 15 hours must be in upper-division courses completed at the Downtown Campus. No grade below C (2.0) will be accepted toward the major requirements. Note that a prior college-level algebra course is strongly recommended for PSYC 2090.

PSYC 3939, Internship/Cooperative Education, does NOT count toward the 37-hour minimum or the 15-hour upper-division requirement, but it does count as elective psychology credit.

Program Requirements

Required Courses

PSYC 1000 - Introduction to Psychology I

Summer 2010 Registration **PSY 1000**

Introduces the scientific study of behavior, including an overview of the biological basis of behavior, sensation or perception, states of consciousness, learning and memory, thinking and language, intelligence, motivation and emotion. **Semester Hours:** 3to 3**GT**

Pathways Category Key: GT-SS3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 1005 - Introduction to Psychology II

Summer 2010 Registration **PSY 1005**

Introduces the scientific study of behavior, including an overview of the history of psychology, development, personality, psychological disorders, therapy, health psychology and social behavior. PSYC 1000 is not a prerequisite for this course.

Semester Hours: 3to 3**GT Pathways Category Key:** GT-SS3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 2090 - Statistics and Research Methods

Summer 2010 Registration **PSY 2090**

Introduces statistics and research methods in the field of psychology. Note: Intended for those who plan to major in psychology. Completion of college algebra or equivalent is recommended. Prereq: PSYC 1000.

Semester Hours: 4to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 2220 - Biological Basis of Behavior

Summer 2010 Registration **PSY 2220**

Introduces the biological basis of behavior. This course will feature concepts like neurons, synaptic and hormonal transmission, and physiological set-points. Behavior of simple (invertebrate) and complex organisms (vertebrates) will be related to the activity of specific brain neural networks. Prereq: PSYC 1000 or BIOL 2051.

Semester Hours: 3to 3**GT Pathways Category Key:** GT-SC2

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 13 Hours

Choose three, including one or both PSYC 3222 and PSYC 4144:

PSYC 3104 - Behavioral Genetics

Summer 2010 Registration **PSY 3104**

Interdisciplinary course on relationships between behavior and heredity, with emphasis on human behavioral genetics. Prereq: General biology or general psychology. Cross-listed with BIOL 3104.

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 3222 - Principles of Learning and Behavior

Summer 2010 Registration **PSY 3222**

Introduces the scientific study of learning and behavior, focusing on "Behaviorism." Principles of operant and classical conditioning are discussed. A particular emphasis is placed on the relevance and application of these principles to understanding human behavior and psychopathology. Prereq: PSYC 1000. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 3254 - Introduction to Animal Behavior

Summer 2010 Registration **PSY 3254**

Surveys the behavior of nonhuman animals, emphasizing the evolution through natural selection. Prereq: One semester of general biology, biological anthropology, or other course emphasizing evolutionary perspective. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 3262 - Health Psychology

Summer 2010 Registration **PSY 3262**

An overview of the scientific study of attitudes, behaviors, and personality variables related to health and illness. Emphasis is on the interaction of biological, psychological, and social factors that cause illness and influence its treatment and prevention. Prereq: PSYC 1000, 2090 and 2220 or permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 3263 - Hormones and Behavior

Summer 2010 Registration **PSY 3263**

The hormonal regulation of behavior will be the primary focus of this course. Topics include: hormonal basis of sexual differentiation and behavioral differences, parental behavior, biological rhythms, aggression, mood and stress. Prereq: PSYC 1000, 2090 and 2220 or permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 3265 - Drugs, Brain and Behavior

Summer 2010 Registration **PSY 3265**

Explores the pharmacological, biological, and behavioral basis of drug effects. Topics include mechanisms of drug action, brain reward pathways, role of environment and history on drug effects, and the impact of science on drug abuse and medication development. Prereq: PSYC 1000, 2090 and 2220 or permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 3724 - Developmental Psychobiology

Summer 2010 Registration **PSY 3724**

Explores the biological influences on the development of brain and behavior. Emphasis is on the evolution and development, the role of experience in prenatal and postnatal development, the ontogeny of sensory systems, learning and memory, and the biological bases of language acquisition. Prereq: PSYC 1000/1005 or BIOL 2051/2061. **Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 3810 - Neuropsychology

Summer 2010 Registration **PSY 3810**

Brain organization and function and its relationship to human memory, language, perception, and other cognitive abilities. Covers the application of clinical neuropsychology to working with individuals that have neurological disorders. Prereq: PSYC 1000 and 2220 or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 3822 - Aging, Brain and Behavior

Summer 2010 Registration **PSY 3822**

Examines the aging process, behavioral changes during senescence and the accompanying changes in the aged brain. Changes that are part of healthy aging are studied, as will age-related brain disorders. Prereq: PSYC 1000, 2090 and 2220 or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 4054 - Behavioral Neuroscience

Summer 2010 Registration **PSY 4054**

The morphological, neurochemical and physiological bases of behavior. Emphasis is on structure and function of the brain. Prereq: PSYC 1000, 2090 and 2220 or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 4144 - Human Cognition

Summer 2010 Registration **PSY 4144**

Studies information processing in humans, with emphasis on memory, thinking and language. Prereq: PSYC 1000. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 4164 - Psychology of Perception

Summer 2010 Registration **PSY 4164**

Studies sensory processes and perceptual variables. Covers processes related to vision, audition, gustation and olfaction. Prereq: PSYC 1000, 2090 and 2220 or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 9 Hours

Choose four, including at least two or all three of PSYC 3205, PSYC 3305, and PSYC 4415:

PSYC 3090 - Research Methods in Experimental Psychology

Summer 2010 Registration **PSY 3090**

Lecture and associated laboratory exercises that consider principles of experimental methodology, data collection and interpretation, presentation of results, evaluation of scientific literature, scientific writing, and advanced statistical concepts. Note: Strongly recommended for students who wish to pursue a career in research or professional psychology. Prereq: PSYC 1000, 1005 and 2090. **Semester Hours:** 4to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 3135 - Organizational Psychology

Summer 2010 Registration **PSY 3135**

Surveys the behavior of individuals in organizations. Topics include leadership and motivation theories; group dynamics; measuring, understanding, and explaining job attitudes; analyzing and designing jobs; training and organizational development. Prereq: PSYC 1000, 1005 and 2090 or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 3205 - Human Development I: Child Psychology

Summer 2010 Registration **PSY 3205**

Studies human development covering birth, infancy, toddler, preschool and school-aged child. Covers biological, cognitive and social processes. Prereq: PSYC 1000 or 1005. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 3215 - Human Development II: Adolescence and Adulthood

Summer 2010 Registration **PSY 3215**

Study of human development from adolescence through adulthood and aging. Covers

biological, cognitive, and social processes. Prereq: PSYC 1000 or 1005.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 3235 - Human Sexuality

Summer 2010 Registration **PSY 3235**

Examines the physiological, psychological, and social psychological bases of human sexuality. Research on the range of sexual behaviors, individual sexual response, sexual development, sexual dysfunction, and variants of sexual orientation. Prereq: PSYC 1000, 1005 and 2090, or permission of instructor.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 3305 - Abnormal Psychology

Summer 2010 Registration **PSY 3305**

Borderline disorders as extreme variations of the normal personality. Major functional and organic disorders. Theories of mental disorders and methods of psychotherapy.

Prereq: PSYC 1000.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 3405 - Family Psychology

Summer 2010 Registration **PSY 3405**

Overview of theory and research pertaining to marital and family structure, functioning and dynamics. Prereq: PSYC 1005.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 3505 - Psychology and the Law

Summer 2010 Registration **PSY 3505**

Examines the legal and extralegal applications of psychology, such as assessment of insanity and competence, psychologists as expert witnesses, accuracy of eyewitness accounts, and issues relating to employment discrimination. Prereq: PSYC 1000, 1005, and 2090 or permission of instructor.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 3610 - Psychological Trauma

Summer 2010 Registration **PSY 3610**

Overview of psychological trauma, including: history, theoretical application, trauma models, diagnosis and treatment implications. Topics include family violence, child abuse, sexual abuse, and the trauma of war. Prereq: PSYC 1000, 1005 and 2090 or

permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 3611 - Psychology of Women

Summer 2010 Registration PSY 3611

Reviews psychological theories and research of women's social, cultural, emotional and behavioral experience. Examines the sociocultural context of women's experience and explores women's socialization, developmental issues, cognitive abilities and achievement motivation, personality variables, stereotypes, psychological disorders, victimization, intimacy and sexuality. Prereq: PSYC 1000, 1005 and 2090 or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 3612 - Domestic Abuse

Summer 2010 Registration PSY 3612

Examines the nature and extent of domestic violence. Personal characteristics and dynamics that contribute to spouse abuse are reviewed. Theories and research in the general field of family violence, victims' and perpetrators' treatment, and child abuse are discussed. Prereq: PSYC 1000, 1005 and 2090 or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 4415 - Experimental Social Psychology

Summer 2010 Registration PSY 4415

Readings and lectures focused on the formulation of researchable problems in social psychology. Prereq: PSYC 1000 and 1005. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 4455 - Theories of Personality

Summer 2010 Registration PSY 4455

An in-depth look at several major theories of personality, including those from psychodynamic, behavioral, and humanistic schools of thought. Students are required to think actively and abstractly, and communicate their ideas in papers and classroom contributions. Prereq: PSYC 1000, 1005 and 2090 or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 4485 - Psychology of Cultural Diversity

Summer 2010 Registration **PSY 4485**

Studies diversity in the development of the individual across Asian, Black, Hispanic, and Native American cultures. The experience of self, role of the family, expression of emotions, and psychology of prejudice are emphasized. Prereq: Six semester hours of psychology, sociology, and/or anthropology in any combination. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 4500 - Psychotherapy

Summer 2010 Registration **PSY 4500**

Overview of the major systems of psychotherapy, including psychoanalysis, person-centered therapy, family therapy, cognitive or behavioral approaches, and relationships among the various approaches. Prereq: 12 hours in psychology, including PSYC 1005 and 2090. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 4645 - Industrial Psychology

Summer 2010 Registration **PSY 4645**

Surveys the field of industrial psychology. Organizational structure, communication networks, personnel selection, training, stress, and human relations are examined. Prereq: PSYC 1000, 1005 and 2090 or permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 4730 - Clinical Psychology: Ethics and Issues

Summer 2010 Registration **PSY 4730**

An in-depth exploration of the values and ideas that guide professional practice in psychology, including professional codes of conduct and philosophical ethical principles. Topics include confidentiality, informed consent, competence, integrity and respect. Prereq: 12 hours in psychology, including PSYC 1005 and 2090. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 12-13 Hours

One integrative course:

PSYC 4511 - History of Psychology

Summer 2010 Registration **PSY 4511**

Development of psychological theories since 500 B.C. Schools of psychology and their adherents. Readings of primary and secondary sources. Prereq: PSYC 1000 and 1005

plus 6 additional credit hours in psychology (12 hours total). **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 3 Hours

BA Major Total: 37-38 Hours

PSYCHOLOGY BS REQUIREMENTS

Psychology BS

Students must declare a major by the time they have completed 60 semester hours of course work. To be admitted to the BS major, students must have sophomore standing and have received grades of *B* or better in General Biology I and II for majors with laboratory, or the equivalent. Students must take at least 48 hours and a maximum of 56 semester hours in psychology, biology and chemistry that will count toward graduation. A minimum of 15 upper-division semester hours must be taken from Downtown Campus faculty. No grade below *C* is acceptable toward the major requirements; i.e., psychology, biology or chemistry courses in which a student earns a *C-* or below will not count toward the major.

Psychology Requirements

Required Psychology Courses

PSYC 1000 - Introduction to Psychology I

Summer 2010 Registration **PSY 1000**

Introduces the scientific study of behavior, including an overview of the biological basis of behavior, sensation or perception, states of consciousness, learning and memory, thinking and language, intelligence, motivation and emotion. **Semester Hours:** 3to 3**GT Pathways Category Key:** GT-SS3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 1005 - Introduction to Psychology II

Summer 2010 Registration **PSY 1005**

Introduces the scientific study of behavior, including an overview of the history of psychology, development, personality, psychological disorders, therapy, health psychology and social behavior. PSYC 1000 is not a prerequisite for this

course. **Semester Hours:** 3to 3 **GT Pathways Category Key:** GT-SS3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 2090 - Statistics and Research Methods

Summer 2010 Registration **PSY 2090**

Introduces statistics and research methods in the field of psychology. Note: Intended for those who plan to major in psychology. Completion of college algebra or equivalent is recommended. Prereq: PSYC 1000. **Semester Hours:** 4to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 2220 - Biological Basis of Behavior

Summer 2010 Registration **PSY 2220**

Introduces the biological basis of behavior. This course will feature concepts like neurons, synaptic and hormonal transmission, and physiological set-points. Behavior of simple (invertebrate) and complex organisms (vertebrates) will be related to the activity of specific brain neural networks. Prereq: PSYC 1000 or BIOL 2051. **Semester Hours:** 3to 3 **GT Pathways Category Key:** GT-SC2

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 4054 - Behavioral Neuroscience

Summer 2010 Registration **PSY 4054**

The morphological, neurochemical and physiological bases of behavior. Emphasis is on structure and function of the brain. Prereq: PSYC 1000, 2090 and 2220 or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 16 Hours

Choose two:

PSYC 3090 - Research Methods in Experimental Psychology

Summer 2010 Registration **PSY 3090**

Lecture and associated laboratory exercises that consider principles of experimental methodology, data collection and interpretation, presentation of results, evaluation of scientific literature, scientific writing, and advanced statistical concepts. Note: Strongly recommended for students who wish to pursue a career in research or professional psychology. Prereq: PSYC 1000, 1005 and 2090. **Semester Hours:** 4to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 3104 - Behavioral Genetics

Summer 2010 Registration **PSY 3104**

Interdisciplinary course on relationships between behavior and heredity, with emphasis on human behavioral genetics. Prereq: General biology or general psychology. Cross-listed with BIOL 3104. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 3222 - Principles of Learning and Behavior

Summer 2010 Registration **PSY 3222**

Introduces the scientific study of learning and behavior, focusing on "Behaviorism." Principles of operant and classical conditioning are discussed. A particular emphasis is placed on the relevance and application of these principles to understanding human behavior and psychopathology. Prereq: PSYC 1000. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 3254 - Introduction to Animal Behavior

Summer 2010 Registration **PSY 3254**

Surveys the behavior of nonhuman animals, emphasizing the evolution through natural selection. Prereq: One semester of general biology, biological anthropology, or other course emphasizing evolutionary perspective. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 3263 - Hormones and Behavior

Summer 2010 Registration **PSY 3263**

The hormonal regulation of behavior will be the primary focus of this course. Topics include: hormonal basis of sexual differentiation and behavioral differences, parental behavior, biological rhythms, aggression, mood and stress. Prereq: PSYC 1000, 2090 and 2220 or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 3265 - Drugs, Brain and Behavior

Summer 2010 Registration **PSY 3265**

Explores the pharmacological, biological, and behavioral basis of drug effects. Topics include mechanisms of drug action, brain reward pathways, role of environment and history on drug effects, and the impact of science on drug abuse and medication development. Prereq: PSYC 1000, 2090 and 2220 or permission of instructor. **Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 3724 - Developmental Psychobiology

Summer 2010 Registration **PSY 3724**

Explores the biological influences on the development of brain and behavior. Emphasis is on the evolution and development, the role of experience in prenatal and postnatal development, the ontogeny of sensory systems, learning and memory, and the biological bases of language acquisition. Prereq: PSYC 1000/1005 or BIOL 2051/2061. **Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 3810 - Neuropsychology

Summer 2010 Registration **PSY 3810**

Brain organization and function and its relationship to human memory, language, perception, and other cognitive abilities. Covers the application of clinical neuropsychology to working with individuals that have neurological disorders. Prereq: PSYC 1000 and 2220 or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 3822 - Aging, Brain and Behavior

Summer 2010 Registration **PSY 3822**

Examines the aging process, behavioral changes during senescence and the accompanying changes in the aged brain. Changes that are part of healthy aging are studied, as will age-related brain disorders. Prereq: PSYC 1000, 2090 and 2220 or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 4164 - Psychology of Perception

Summer 2010 Registration **PSY 4164**

Studies sensory processes and perceptual variables. Covers processes related to vision, audition, gustation and olfaction. Prereq: PSYC 1000, 2090 and 2220 or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 6-7 Hours

Experiential Learning Requirement

Students must complete at least one of the following (all require consultation with BS advisor AND permission of instructor):

PSYC 3939 - Internship/Cooperative Education

Summer 2010 Registration **PSY 3939**

Designed experiences involving application of specific, relevant concepts and skills in supervised employment situations. Prereq: Junior standing, completion of minimum of 12 hours in psychology with minimum grade of 'C'. **Semester Hours: 1 to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 4840 - Independent Study: PSYC

Summer 2010 Registration **PSY 4840**

Prereq: Permission of instructor. **Semester Hours: 1 to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

Honors Project in Psychology (3.5 GPA required): **3 Semester Hours**

Total: 3 Hours

Physical and Biological Science Requirements

Required Courses

BIOL 2051 - General Biology I

Summer 2010 Registration **BIOL 2051**

Introduces four major areas of study: (1) the chemistry of biological systems; (2) the structure and function of the cell; (3) cellular energy transformations (photosynthesis and respiration); and (4) genetics (mitosis, meiosis, patterns of inheritance, molecular genetics). Note: Biology and health science (pre-med, pre-vet, pre-physical therapy, etc.) majors must also take the accompanying laboratory - BIOL 2071. Prereq: CHEM 1000 or high school chemistry required. **Semester Hours: 3 to 3** **GT Pathways Category Key: GT-SC1**

Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 2061 - General Biology II

Summer 2010 Registration **BIOL 2061**

This course is a continuation of BIOL 2051. Introduces four major areas of study: (1) evolution, (2) animal structure and function, (3) plant structure and function and (4) ecology. Note: Biology and health science (pre-med, pre-vet, nursing, etc.) majors must also take the accompanying laboratory - BIOL 2081. Prereq: BIOL 2051 or equivalent with a grade of "C" (2.0) or higher. **Semester Hours: 3 to 3** **GT Pathways Category Key:**

GT-SC1

Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 2071 - General Biology Laboratory I

Summer 2010 Registration **BIOL 2071**

Introduces the basic scientific approach and report preparation through exercises and experiments in cell biology, basic biochemical techniques, genetics, molecular genetics and applications of biotechnology. Note: Exercises corresponding to topics in BIOL

2051. Coreq: BIOL 2051. **Semester Hours:** 1to 1**GT Pathways Category Key:** GT-SC1
Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 2081 - General Biology Laboratory II

Summer 2010 Registration **BIOL 2081**

Study of evolution, plant and animal anatomy, developmental biology; includes two off-campus ecology field trips. Note: Exercises corresponding to topics in BIOL 2061.

Prereq: BIOL 2071 or equivalent with a grade of "C" (2.0) or higher; Coreq: BIOL

2061. **Semester Hours:** 1to 1**GT Pathways Category Key:** GT-SC1

Registration is changing. Visit our website for details ucdenver.edu/registration.

CHEM 2031 - General Chemistry I

Summer 2010 Registration **CHEM 2031**

Topics include chemical structure, atomic and molecular properties, molecular geometry and bonding, and gas laws. Prepares students to take upper division chemistry courses.

Note: a beginning course for science majors, medical technologists, pre-medical and pre-dental students. Prereq: One year of high school chemistry or CHEM 1000 and MATH 1110 (or high school equivalent); Coreq: CHEM 2038. **Semester Hours:** 3to 3**GT**

Pathways Category Key: GT-SC1

Registration is changing. Visit our website for details ucdenver.edu/registration.

CHEM 2038 - General Chemistry Laboratory I

Summer 2010 Registration **CHEM 2038**

Students perform laboratory experiments on topics covered in CHEM 2031 and gain experience in observing, recording, and interpreting physical and chemical phenomena.

Note: Laboratory to accompany CHEM 2031. Coreq: CHEM 2031. **Semester Hours:** 1to 1**GT Pathways Category Key:** GT-SC1

Registration is changing. Visit our website for details ucdenver.edu/registration.

CHEM 2061 - General Chemistry II

Summer 2010 Registration **CHEM 2061**

(Continuation of CHEM 2031.) Topics include kinetics, equilibria and thermodynamics.

Prereq: CHEM 2031; Coreq: CHEM 2068. **Semester Hours:** 3to 3 **GT Pathways**

Category Key: GT-SC1

Registration is changing. Visit our website for details ucdenver.edu/registration.

CHEM 2068 - General Chemistry Laboratory II

Summer 2010 Registration **CHEM 2068**

Students gain experience with laboratory technique and elementary chemical instrumentation. Note: Laboratory to accompany CHEM 2061 and a continuation of CHEM 2038. Prereq: CHEM 2038; Coreq: CHEM 2061. **Semester Hours:** 2to 2 **GT**

Pathways Category Key: GT-SC1

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 17 Hours

Choose two:

BIOL 3225 - Human Physiology

Summer 2010 Registration **BIOL 3225**

The basic orientation of the course is toward understanding the functioning of the body as a set of homeostatic mechanisms. Particular emphasis is placed on membrane potentials, muscle, circulation, respiration, digestion, the kidney, the control of metabolism and acid-based balance. Prereq: One year of general biology, general cell biology and one year of chemistry with grades of 'C' (2.0) or higher. **Semester Hours:**

4to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 3244 - Human Anatomy

Summer 2010 Registration **BIOL 3244**

Introduces the structural aspects of the human body. Anatomical models, microscope slides and dissections, including human cadavers are used in the lab. Prereq: one year of general biology with a grade of "C" (2.0) or higher. **Semester Hours:** 4to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 3611 - General Cell Biology

Summer 2010 Registration **BIOL 3611**

Covers the structure and function of the cell including bioenergetics, membranes, secretion, respiration and the cell cycle. Prereq: One year of general biology with a

grade of "C" (2.0) or higher and one year of general chemistry. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 3654 - General Microbiology

Summer 2010 Registration **BIOL 3654**

Covers all aspects of the biology of microorganisms: their cellular structures and function, growth and metabolism, general and molecular genetics, diversity and interactions with other organisms and the environment (ecology). The objective is to provide students with a thorough introduction to microbiology including basic microbiological laboratory techniques. Note: General cell biology or general genetics is recommended. Prereq: One year of general biology and one year of general chemistry with grades of "C" (2.0) or higher. **Semester Hours:** 4to 4
Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 3832 - General Genetics

Summer 2010 Registration **BIOL 3832**

Introduces molecular, classical, developmental and population genetics. Prereq: One year of general biology with a grade of "C" (2.0) or higher. **Semester Hours:** 4to 4
Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 4134 - Human Genetics

Summer 2010 Registration **BIOL 4134**

Advanced survey of the current status of the field. Emphasis on understanding, diagnosis and treatment of genetic disease and on the impact of molecular biology on human genetics. Prereq: General genetics with a grade of "C" (2.0) or higher. Cross-listed with 5134. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 4165 - Neurobiology

Summer 2010 Registration **BIOL 4165**

Overview of neuroscience, covering the cellular basis of neuronal activity, muscle, sensory structures and the structure and function of the human brain. Prereq: One year of general biology and general cell biology with grades of "C" (2.0) or higher. Cross-listed with BIOL 5165. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 4621 - Immunology

Summer 2010 Registration **BIOL 4621**

Studies antibody-antigen interactions, the immune system, inflammation, hypersensitivity, autoimmunity, and recovery from infection. Prereq: One year of general biology and general cell biology with grades of "C" (2.0) or higher; general genetics strongly recommended. Cross-listed with BIOL 5621. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CHEM 4810 - General Biochemistry I

Summer 2010 Registration **CHEM 4810**

Topics include structure, conformation, and properties of proteins; enzymes, mechanisms and kinetics; carbohydrates, lipids and membranes, and energetics. Prereq: CHEM 3421 or 3491. Cross-listed with CHEM 5810. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 6-8 Hours

BS Major Total: 48-51 Hours

Additional elective courses in psychology, biology and chemistry may be taken up to the maximum of 56 hours.

PSYCHOLOGY BA REQUIREMENTS

Sociology BA

Students must declare a major by the time they have completed 60 semester hours of course work. The major requires a total of 34 hours with an average grade of C (2.0) in all courses. At least 16 of the 34 hours must be upper-division (3000-4000 level) courses. The maximum number of hours allowed in sociology is 48.

Course Requirements

Core Courses

The core consists of the following group of courses, all of which must be completed with a grade of C (2.0) or better:

SOCY 1001 - Introduction to Sociology

Summer 2010 Registration **SOC 1001**

A survey course in which the main concepts that define the sociological perspective are presented, and a picture of society is provided by examining major social institutions and forms of social organization within society. **Semester Hours:** 3to 3 **GT Pathways**

Category Key: GT-SS3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SOCY 3001 - Urban Sociology

Summer 2010 Registration **SOC 3001**

The city and urban society are examined in terms of social structure, residential and institutional patterning, process of interaction, demographic processes, and patterns of growth and change. Cross-listed with ETST 3001. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SOCY 3111 - Research Methods

Summer 2010 Registration **SOC 3111**

Design of social research. Application of statistical techniques and procedures to social phenomena. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SOCY 3121 - Statistics

Summer 2010 Registration **SOC 3121**

Quantitative techniques used in analyzing social phenomena. Prereq: MATH 1070 or equivalent. **Semester Hours:** 4to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

SOCY 4150 - History of Sociological Theory

Summer 2010 Registration **SOC 4150**

An analysis of the major contributions and determinants of earlier social analysts to present-day social thought and analysis of pertinent sociological issues. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SOCY 4160 - Contemporary Sociological Theory

Summer 2010 Registration **SOC 4160**

The explication of various conceptual approaches to the problems of social order, societal functioning and integration, social conflict, and social structural change by the examination of the work of contemporary theorists. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 19 Hours

*Must be taken from Downtown Campus faculty

Electives: 15 Hours

Choose a minimum of 15 hours and a maximum of 29 hours of electives in sociology, with an average grade of C (2.0) in all courses.

Major Total: 34 Hours

All prospective majors should contact the department as early in their academic careers as possible for information and for assignment to a major advisor. Transfer or returning students should consult with the department chairman concerning completion of the core courses.

The department requires that at least 13 hours of sociology be taken from Downtown Campus faculty, including the following courses: SOC 3111, 3121, 4150 and 4160.

Spanish BA

The Spanish program studies the language, linguistics, literature, culture and civilization of Spain, Spanish America and the Spanish-speaking areas of the United States.

Admission and Grade Requirements

To be admitted to major status in Spanish, students must have an overall GPA of C+ (2.3). The minimum grade acceptable in any course applied to a Spanish major or minor is a C (2.0). The GPA in all courses applied to a Spanish major or minor at UC Denver must be 2.5. No courses taken on a pass/fail basis may be credited toward a Spanish major or minor.

Residency Requirement

The BA in Spanish requires 30 semester hours of upper-division course work in Spanish and 6 additional hours in related fields. A minimum of 18 semester hours of Spanish course work for the major, and 9 hours for the minor, must be taken from Spanish faculty at the Downtown Campus. Courses taken at other institutions while a student is enrolled at UC Denver may be applied to the major only with departmental approval before enrollment in those courses.

Proficiency Requirement

Before enrolling in their final semester in the language, Spanish majors must be evaluated by the faculty in oral and written skills. Students must see their Spanish advisor for specific information.

Course Requirements for the Major

Students majoring in Spanish for the BA degree must complete 30 semester hours of upper-division course work, at least 12 of which must be at the 4000 level. All course work applied to the 30-semester hour minimum must be taught in Spanish. In addition, students must complete 6 semester hours in courses in related fields outside the curriculum in Spanish.

Program Requirements

Language, Literature and Culture Track

LITERATURE

SPAN 3252 - Introduction to the Study of Literature

Summer 2010 Registration **SPAN 3252**

The basic terms and skills needed to analyze both the themes and form of literary works, together with an introduction to research skills. All literary examples come from Hispanic literature. Note: SPAN 3252 is a prerequisite (previous or concurrent) to all other literature courses taught in Spanish. Prereq: SPAN 2120 or 2130 (or equivalent). **Semester Hours: 3 to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

At least one course on the literature of Spain: **3 semester hours**

At least one course on the literature of Spanish America: **3 semester hours**

Total: 9 Hours

LANGUAGE SKILLS AND THEORY

SPAN 3060 - Hispanic Phonetics: Theory and Practice

Summer 2010 Registration **SPAN 3060**

Explores the phonetics of spoken Spanish throughout the world. Theoretical content: classification of all Spanish sounds and how they are affected and change according to their phonetic environment and region. Practical features: pronunciation and strategies

teaching English speakers to pronounce Spanish. Prereq: SPAN 3010 or upper division standing in Spanish. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

6 additional hours in language skills and theory

Total: 9 Hours

CULTURE AND CIVILIZATION OF SPAIN OR SPANISH AMERICA

Choose two:

SPAN 3070 - Bilingual Communities: Spanish as a Language of Contact

Summer 2010 Registration **SPAN 3070**

Explores bilingualism by tracing the series of linguistic and ethnic contacts that converted Castilian from a Latin dialect to the language of the Spanish empire, the primary language of Latin America, and a fast-growing language in the United States.

Prereq: SPAN 3010 for majors, or permission of instructor for non-majors. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPAN 3212 - Spanish American Culture and Civilization

Summer 2010 Registration **SPAN 3212**

Surveys the social, political, economic, religious, literary, and artistic life of Spanish America from the conquest to the present. Note: Taught in Spanish for major and minor credit. Prereq: SPAN 2120 or 2130. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPAN 3221 - Culture and Civilization of Spain I

Summer 2010 Registration **SPAN 3221**

From prehistoric times through Phoenician, Greek, Roman, and Visigothic eras to the Moorish invasion in 711; the Arab period; the Reconquest; the Catholic Kings; the Imperial Period; and the Inquisition. Prereq: Upper division standing in Spanish. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPAN 3222 - Culture and Civilization of Spain II

Summer 2010 Registration **SPAN 3222**

(Continuation of 3221.) Studies the social, intellectual, and artistic development of Spain from the time of the Bourbons (18th century) through the civil war of 1936, and the Franco regime to the restoration of democracy under Juan Carlos I and the present day.

Prereq: Upper division standing in Spanish. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

SPAN 4230 - Modern Culture of Spain through Film and Narrative

Summer 2010 Registration **SPAN 4230**

Culture of modern Spain studied through Spanish film. The death of military dictator Francisco Franco opened the process for the recuperation of a usurped democratic, representational system that has become the basis of a cultural and economic resurgence. Taught in Spanish. Prereq: SPAN 3252 and one other Spanish/Spanish American literature course at the 3000-level. Cross-listed with SPAN 5230. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 6 Hours

RELATED FIELDS

Choose 2 courses from the following fields of study (see Modern Languages departmental web site for a list of pre-approved courses):

Latin American studies (from fields such as history, geography, political science, art history)

Hispanic American studies

Linguistics (in the fields of anthropology or English)

Comparative literature

Upper-division courses in another foreign language

Total: 6 Hours

MAJOR TOTAL: 30 Hours

International Language and Culture for the Professions Track

This option in the Spanish major offers career possibilities, both in government and private industry, at home and abroad. Languages are useful in business, industry, commerce, civil service, law, library science, media, science, economics, health and social sciences. Students who follow this course of study could also qualify as teachers of general business subjects in bilingual as well as traditional school systems. (However, students who wish to be certified to teach Spanish in the public schools should consult

the department for information concerning the undergraduate language licensure program.)

International Spanish for the professions is a controlled-enrollment major that takes two years to complete. Interested students should contact the Spanish advisor in the Department of Modern Languages to declare the major. This should be done as early as possible in the student's academic career, but not later than the second semester of the sophomore year.

PREREQUISITES

(These courses do not count toward the major total of 45 semester hours)

ECON 2012 - Principles of Economics: Macroeconomics

Summer 2010 Registration **ECON 2012**

Covers topics of inflation, unemployment, national income, growth and problems of the national economy, stabilization policy, plus others at the discretion of the instructor. Purpose is to teach fundamental principles, to open the field of economics in the way most helpful to further a more detailed study of special problems, and to give those not intending to specialize in the subject an outline of the general principles of economics. **Semester Hours:** 3to 3 **GT Pathways Category Key:** GT-SS1
Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 2022 - Principles of Economics: Microeconomics

Summer 2010 Registration **ECON 2022**

Topics include price determination in a market system composed of households and firms: resource allocation and efficiency of various market structures, plus others at the discretion of the instructor. Note: Complementary to and normally taken following ECON 2012. ECON 2012 is not a prerequisite for ECON 2022. **Semester Hours:** 3to 3 **GT Pathways Category Key:** GT-SS1
Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 1070 - Algebra for Social Sciences and Business

Summer 2010 Registration **MATH 1070**

Topics in algebra designed for students who intend to take business calculus. Functions, graphs, scatter plots, curve-fitting, solving systems of equations, polynomial and rational functions, and selected other topics. Note: Graphics calculator required. No co-credit with MATH 1110 or MATH 1130. Prereq: intermediate algebra and satisfactory score on the placement exam. **Semester Hours:** 3to 3 **GT Pathways Category Key:** GT-MA1
Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

MATH 1110 - College Algebra

Summer 2010 Registration **MATH 1110**

Topics in algebra designed for students who intend to take the calculus sequence. Functions, domains, ranges, graphs, data scatter plots and curve fitting, solving equations and systems of equations, polynomial functions, rational functions, and selected other topics. Graphic calculators and/or computer algebra systems are used extensively. Applications are emphasized. Note: No co-credit with either MATH 1070 or 1130. Prereq: intermediate algebra and satisfactory score on the placement exam. **Semester Hours:** 3 to 3 **GT Pathways Category Key:** GT-MA1
Registration is changing. Visit our website for details ucdenver.edu/registration.
(or higher level math course)

SPAN 2110 - Second Year Spanish I

Summer 2010 Registration **SPAN 2110**

Continues the development of skills acquired in 1010 and 1020. Readings deal with Hispanic culture and current topics from Spain and Latin America. Development of informal oral and written expression. Note: Students may not enroll in any lower division (1000/2000) language skills course in which their level of proficiency exceeds that of the course. Students placing into a course through any means other than following the regular sequence must consult with an appropriate faculty member of the Dept. of Modern Languages prior to enrollment. Prereq: SPAN 1020 with a grade of 'C' (2.0) or higher. **Semester Hours:** 3 to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

SPAN 2120 - Second Year Spanish II

Summer 2010 Registration **SPAN 2120**

Continues the development of skills acquired in SPAN 1010, 1020 and 2110, together with a review of grammar. Readings deal with Hispanic culture and literature. Development of informal oral and written expression. SPAN 2120 satisfies the fourth-semester language requirement at most graduate schools. Note: Students may not enroll in any lower division (1000/2000) language skills course in which their level of proficiency exceeds that of the course. Students placing into a course through any means other than following the regular sequence must consult with an appropriate faculty member of the Dept. of Modern Languages prior to enrollment. Prereq: SPAN 2110 with a grade of 'C' (2.0) or higher. **Semester Hours:** 3 to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

REQUIRED SPANISH COURSES

SPAN 3082 - Introduction to Translation I

Summer 2010 Registration **SPAN 3082**

The first course in a two-semester sequence that introduces the methodology and practice of written translation. Thorough analysis of source texts precedes translation into target language. Students must demonstrate third-year competence in Spanish and advanced writing skills in English. Prereq: Upper division standing in Spanish. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPAN 3252 - Introduction to the Study of Literature

Summer 2010 Registration **SPAN 3252**

The basic terms and skills needed to analyze both the themes and form of literary works, together with an introduction to research skills. All literary examples come from Hispanic literature. Note: SPAN 3252 is a prerequisite (previous or concurrent) to all other literature courses taught in Spanish. Prereq: SPAN 2120 or 2130 (or equivalent). **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPAN 3700 - Spanish for International Business I

Summer 2010 Registration **SPAN 3700**

Development of proficiency in oral and written Spanish as used in business and industry throughout the Hispanic world, together with an increased awareness of social, economic, and political conditions affecting business transactions, particularly in long-term operations. Prereq: Upper division standing in Spanish. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPAN 3710 - Spanish for International Business II

Summer 2010 Registration **SPAN 3710**

(Continuation of SPAN 3700.) Further development of oral and written language proficiency, together with further examination of pertinent social, economic, and political conditions of the Hispanic world. Prereq: Upper division standing in Spanish; SPAN 3700 desirable. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 12 Hours

Two of the following language skills and theory courses:

SPAN 3010 - Advanced Conversation and Composition I

Summer 2010 Registration **SPAN 3010**

Expansion and reinforcement of oral and written skills in Spanish at an advanced level, in a broad cultural context. Oral activities are individual and in groups. Topics are introduced through oral activities, and are then used for written assignments. Prereq: SPAN 2120 or 2130. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPAN 3020 - Advanced Conversation and Composition II

Summer 2010 Registration **SPAN 3020**

(Continuation of SPAN 3010.) Development of oral and written skills in Spanish in preparation for taking other advanced courses. Topics of increasing complexity are selected from current publications in Spanish. Prereq: SPAN 3010. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPAN 3060 - Hispanic Phonetics: Theory and Practice

Summer 2010 Registration **SPAN 3060**

Explores the phonetics of spoken Spanish throughout the world. Theoretical content: classification of all Spanish sounds and how they are affected and change according to their phonetic environment and region. Practical features: pronunciation and strategies teaching English speakers to pronounce Spanish. Prereq: SPAN 3010 or upper division standing in Spanish. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPAN 3310 - Spanish Writing and Grammar I

Summer 2010 Registration **SPAN 3310**

A close study of the structure of the language and practice in its written use. Note: Recommended for those intending to teach Spanish at the secondary level. Prereq: Upper division standing in Spanish. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 6 Hours

Two of the following culture courses:

SPAN 3070 - Bilingual Communities: Spanish as a Language of Contact

Summer 2010 Registration **SPAN 3070**

Explores bilingualism by tracing the series of linguistic and ethnic contacts that

converted Castilian from a Latin dialect to the language of the Spanish empire, the primary language of Latin America, and a fast-growing language in the United States. Prereq: SPAN 3010 for majors, or permission of instructor for non-majors. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPAN 3212 - Spanish American Culture and Civilization

Summer 2010 Registration **SPAN 3212**

Surveys the social, political, economic, religious, literary, and artistic life of Spanish America from the conquest to the present. Note: Taught in Spanish for major and minor credit. Prereq: SPAN 2120 or 2130. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPAN 3222 - Culture and Civilization of Spain II

Summer 2010 Registration **SPAN 3222**

(Continuation of 3221.) Studies the social, intellectual, and artistic development of Spain from the time of the Bourbons (18th century) through the civil war of 1936, and the Franco regime to the restoration of democracy under Juan Carlos I and the present day.

Prereq: Upper division standing in Spanish. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 6 Hours

Electives

Two SPAN electives, to be taken at the 4000 level.

Total: 6 Hours

SPANISH TOTAL: 30 Hours

BUSINESS COURSES

(please be aware of prerequisites in business course descriptions)

ACCT 2200 - Financial Accounting and Financial Statement Analysis

Summer 2010 Registration **ACCT 2200**

The financial accounting process, the role of the profession and the analysis of financial statements. Principal focus on interpretation of financial statements, with emphasis on asset and liability valuation problems and the determination of net income. Prereq: MATH 1070 and sophomore standing. A grade of 'C' or better is required in this course

to proceed to ACCT 2220. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MGMT 1000 - Introduction to Business

Summer 2010 Registration **MGMT 1000**

This course will introduce students to the nature and role of business in our society. Problems confronting business are surveyed from a management, financial, economic and marketing viewpoint. Career opportunities in business are also considered. Students are advised to take this course during their freshman year and may not take it in the junior or senior years. Prereq: Open to freshman and sophomores, non-degree students and music majors at all levels. **Semester Hours:** 3to 3 **When Offered:** FASPRSUM
Registration is changing. Visit our website for details ucdenver.edu/registration.

MGMT 3000 - Managing Individuals and Teams

Summer 2010 Registration **MGMT 3000**

Focuses on helping students understand how to manage individuals and groups effectively. Students are encouraged to know themselves better and how their behavior affects how they deal with organizational situations; they also learn how individuals differ and how to design, manage and work in a team. This is a business core course therefore a grade of a 'c' or better must be earned to satisfy graduation requirements. Prereq: Junior standing. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MGMT 4400 - Environments of International Business

Summer 2010 Registration **MGMT 4400**

An overview of the environmental complexities that arise when business activities and firms cross national borders. Key international business environmental complexities associated with country differences, cross-border trade and investment, and global monetary system are examined. Prereq: MGMT 3000 and junior standing. Cross-listed with INTB 4400. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MKTG 3000 - Principles of Marketing

Summer 2010 Registration **MKTG 3000**

Focuses on the basic marketing concepts of Buyer Behavior, Marketing Research, Marketing Planning and Implementation and the marketing process of product, price,

distribution and promotion. This is a business core course therefore a grade of a 'C' or better must be earned to satisfy graduation requirements. Prereq: Junior standing. **Semester Hours:** 3 to 3 **When Offered:** FASPRSUM
Registration is changing. Visit our website for details ucdenver.edu/registration.

Business Total: 15 Hours

SPANISH BUSINESS OPTION TOTAL: 45 Hours

RECOMMENDED:

- Language study abroad / international travel or field study
- Internship in target language
- Official proficiency exam

Undergraduate Licensure Program in Spanish

With this option, students complete a major in Spanish along with additional course work required for certification to teach Spanish in the public schools. This program should be chosen early in the students' careers. For information, see the Teacher Education Program section of this catalog or contact the CLAS Advising Office (phone 303-556-2555 or visit North Classroom, 4002) and the Spanish advisor.

Honors in Spanish

Students who complete all the requirements for the Spanish major (as outlined above) and meet the following criteria are encouraged to talk with the Spanish faculty about participation in the honors program. Successful completion of this program by students majoring in Spanish leads to graduation with the distinction of *cum laude*, *magna cum laude* or *summa cum laude*.

Cum laude

Overall GPA of 3.5 or better and Spanish GPA of 3.8 or better

Magna cum laude or summa cum laude

1. Overall GPA of 3.5 or better and Spanish GPA of 3.8 or better
—and—
2. 6 semester hours of *Spanish 4840, Independent Study*, spread over two semesters. The candidate must present the independent study topic for approval by the faculty honors committee by the end of the semester preceding the independent study. At the end of the independent study project, and at least one

- month before the end of the second semester, the candidate shall submit a **written thesis** to the faculty honors committee.
3. The designation of *magna* or *summa* will be the decision of the faculty honors committee.

Theatre, Film and Television BA

All students pursuing a bachelor of arts (BA) in theatre, film and television complete a total of at least 53 semester hours for the major: 38 semester hours of foundation courses and 15 semester hours of approved electives. Each course must be completed with a C/2.0 or better. At least 24 of the major semester hours must be earned at UC Denver. **Students must also follow the College of Arts and Media's general degree requirements.**

Students in the theatre, film and video production program are required to know and abide by the policies and procedures outlined in the TFVP Student Handbook, available by contacting CAMadvising@ucdenver.edu.

Required Foundation Courses

TFVP 1050 - Video Production/Post-Production I

Summer 2010 Registration **TFVP 1050**

Students gain a knowledge of single camera video techniques and are introduced to non-linear digital editing. Course work is hands-on and collaborative, with several projects shot and edited. Learning centers on storytelling, including pacing and aesthetics. Prereq: TFVP majors and minors only, or permission of instructor. **Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

TFVP 1100 - Introduction to Theatre, Film, and Television

Summer 2010 Registration **TFVP 1100**

An introduction to dramatic and cinematic texts, styles and productions; students will research and analyze a play and develop it into a film script. They will present their understanding by storyboards and multi-media presentations, exams and written work. Prereq: TFVP majors and minors only, or permission of instructor. **Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

TFVP 1110 - Production Design: Theatre, Film and Video

Summer 2010 Registration **TFVP 1110**

This design/research class explores the creative skills, technical knowledge and scholarly engagement employed by production designers. The students will understand how design elements enhance a production and create a production design for a video, film or play. Prereq: TFVP majors and minors only, or permission of instructor. **Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

TFVP 1550 - Scriptwriting I

Summer 2010 Registration **TFVP 1550**

Each student conceptualizes, designs and creates short scripts for stage and screen. Instruction includes story development through first draft and rewrites, incorporation of critical feedback and the merger of image and idea to convey dramatic concepts. Prereq: TFVP majors and minors only, or permission of instructor. **Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

TFVP 1611 - Acting Lab I

Summer 2010 Registration **TFVP 1611**

Students will perform scenes, have required readings and write research papers introducing them to the basic performance skills required for Stage and Screen Acting. This work will provide a foundation and vocabulary for future projects, where students interact with performers. Prereq: TFVP majors and minors only, or permission of instructor. **Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

TFVP 2090 - Production Management Techniques

Summer 2010 Registration **TFVP 2090**

Demonstrates introductory management principles and aspects of budgeting, scheduling and managing theatre and film productions. Class time includes lectures, planning exercises, demonstrations, critiques, and media presentations along with peer review. Outside of class, students will write and plan a production. Prereq: TFVP majors and minors only, or permission of instructor. **Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

TFVP 2100 - Visual Culture

Summer 2010 Registration **TFVP 2100**

Study academic theories surrounding visual cultures related to Film, Theatre & Video relating to topics such as representation, spectatorship, and mass media by viewing, research, and analyzing. Creative projects, readings, and written responses will increase sensitivity to visuals usage. Note: TFVP majors and minors only, or permission of

instructor. Prereq: TFVP 1100.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

TFVP 2800 - Elements of Directing

Summer 2010 Registration **TFVP 2800**

Uses text analysis and visualization techniques as the foundation of the director's work and investigates its dimensions of practice in theatre and film. Students develop fluency in interpretive analysis and in crating meaning through image and action. Note: TFVP majors and minors only, or permission of instructor. Prereq: TFVP 1100, TFVP 1611.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

TFVP 3810 - Introduction to Production Process

Summer 2010 Registration **TFVP 3810**

Part one of two-course sequence. Students introduced to theoretical and practical applications of production tools, vocabulary, and experiences in a variety of production settings. Students participate as crew members for both theatrical and film events thereby acquiring production skills. Note: Must be taken before TFVP Production Process. TFVP majors and minors only, or permission of instructor.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

TFVP 3820 - Production Process

Summer 2010 Registration **TFVP 3820**

Part two of two-course sequence. Students will increase their experience by applying production skills and theories learned in Intro to Production Process in a practicum setting to support theatre and film activities. Note: TFVP majors and minors only, or permission of instructor. Prereq: TFVP 3810 (Intro to Production Process)**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

TFVP 3910 - BA Junior Project

Summer 2010 Registration **TFVP 3910**

This course consists of structured work and independent work sessions assisting students with portfolio and career path. Students will be required to work on planning an event, either in theatre or film and produce professional portfolio for faculty review. Prereq: TFVP majors and minors only with junior status, or permission of instructor**Semester Hours:** 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

TFVP 4910 - BA Senior Project

Summer 2010 Registration **TFVP 4910**

This course consists of structured work and independent work sessions assisting students with portfolio and career path. Students will be required to work on planning an event, either in theatre or film and produce professional portfolio for faculty review.

Prereq: TFVP majors and minors only with senior status, or permission of instructor. **Semester Hours:** 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

Select two courses from the following:

FILM 3070 - History of Silent Film Production

Summer 2010 Registration **FILM 3070**

Examines history of cinema from its 19th century origins until the introduction of sound. Studies important trends in the silent era, including the beginnings of film comedy, early documentary, origins of Hollywood narrative, avant-garde cinema, German Expressionism and Soviet Cinema. Note: TFVP majors and minors only, or permission of instructor. Prereq: TFVP 1100. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FILM 3080 - History of Sound Film Production

Summer 2010 Registration **FILM 3080**

Students learn various film genres from early sound period, through the present. Traces the development of the various Hollywood genres- and examines representative Hollywood films and major developments of American films from the post-studio period and filmmakers in other cultures. Note: TFVP majors and minors only, or permission of instructor. Prereq: TFVP 1100. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 3610 - Performance: Theory/History/Criticism I

Summer 2010 Registration **THTR 3610**

Part one of two semester course sequence exploring questions of dramatic theory and dramaturgy in context of the development of Western Theater before 1850 and an analysis of historical modes of production, dramatic text and artistic creation in relation to contemporary theatrical practice. Prereq: THTR 1100 or FILM 1100 or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 4610 - Performance: Theory/History/Criticism II

Summer 2010 Registration **THTR 4610**

Part two of course sequence exploring questions of dramatic theory and dramaturgy in context of development of Western Theater after 1850 and an analysis of historical modes of production, dramatic text and artistic creation in relation to contemporary theatrical practice. Note: TFVP majors and minors only, or permission of instructor.

Prereq: TFVP 1100. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Approved Elective Courses

Select 15 semester hours from the following:

FILM 2050 - Film/Video Prod/Post II

Summer 2010 Registration **FILM 2050**

Students create productions using three-chip digital cameras and advanced techniques. Preproduction through post-productivity working with actors, and maximizing production values are stressed. Students employ a range of cinematic techniques to tell stories, convey character state of mind, and communicate information and meaning. Note: TFVP majors and minors only, or permission of instructor. Prereq: TFVP 1050, TFVP 1100. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FILM 2500 - Introduction to Screenwriting for Film and Television

Summer 2010 Registration **FILM 2500**

Students learn the basic elements of the craft of creating a script for film or television through exercises such as idea generation, characters, and scene setting. Genre conventions, three act structure, and other foundation elements are addressed for future work. Note: ENGL 1020, ENGL 2030 or ENGL 2154 are recommended. TFVP majors and minors only, or permission of instructor. Prereq: TFVP 1550. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FILM 3111 - Shooting Action and Physical Effects

Summer 2010 Registration **FILM 3111**

Examines techniques for shooting action based on the needs of the editor. A workshop for production projects. This course analyzes films, storyboard and shoot projects designed for specific outcomes such as: chase, hand combat and car chases. Prereq: Four college-level courses in film/video production and post-production. (For TFVP

majors only)**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FILM 3264 - Advanced Digital Effects

Summer 2010 Registration **FILM 3264**

Cinematography and Post Productions majors study software and create projects with advanced visual effects. With industry standard techniques in animation, applying compositing, image acquisition and motion graphics. Students will create a variety of projects by the end of the semester. Note: Other majors by permission of instructor.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FILM 3270 - Film/Video Production III

Summer 2010 Registration **FILM 3270**

Involves the scripting, planning, casting, storyboarding, and production of individual student projects to be shot on film or digital video. Emphasis is on storytelling and professional techniques. Prereq: Six college-level courses in film/video production, postproduction and scriptwriting. For TFVP majors only.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FILM 3275 - Film and Video Postproduction III

Summer 2010 Registration **FILM 3275**

Students edit the individual projects shot on film or video FILM 3270, using skills from previous classes. Emphasis on outputting a professional quality narrative product with full audio and visual sweetening. Students benefit from longer format and more complex projects. Note: TFVP majors and minors only, or permission of instructor. Prereq: TFVP 1050, TFVP 1100, TFVP 2050, FILM 3270.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FILM 3300 - Advanced Lighting for Film and Video

Summer 2010 Registration **FILM 3300**

Students master film and video set lighting techniques for studio and locations. Focus is on art, technology, methodology, exposure, instruments, rigging and terminology.

Prereq: Six college-level courses in film/video production and postproduction.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FILM 3350 - Editing Aesthetics

Summer 2010 Registration **FILM 3350**

Students study samples of existing films and their own work for artistic and visual merits. Students edit several short films, learn the guidelines for editing and develop the ability to identify the role of rhythm and pacing in films. Note: TFVP majors and minors only, or permission of instructor. Prereq: TFVP 1050, TFVP 1100. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FILM 3400 - Intermediate Screenwriting

Summer 2010 Registration **FILM 3400**

Emphasis is on creating character, conflict and structure through the use of theme, motifs, subplots, and story tone. Students complete the first act and a 25-page feature film treatment or the first draft of a feature-length script. Note: TFVP majors and minors only, or permission of instructor. Prereq: TFVP 1050, FILM 2500. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FILM 4270 - Film and Video Production IV

Summer 2010 Registration **FILM 4270**

Students work on final production project in a major position such as planning, casting, budgeting, and shooting a final professional quality film or video to be edited in FILM 4280 the following semester. Students use skills from previous complex projects. Note: TFVP majors and minors only, or permission of instructor. Prereq: TFVP 1050, TFVP 1100, TFVP 2050, FILM 3270, FILM 3275. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FILM 4280 - Film and Video Postproduction IV

Summer 2010 Registration **FILM 4280**

Students edit longer format and more complex individual project shot on film or video in FILM 4270, using skills from previous classes and outputting a professional quality product with full audio and visual sweetening. Students benefit from more complex projects. Note: TFVP majors and minors only, or permission of instructor. Prereq: TFVP 1050, TFVP 1100, TFVP 2050, FILM 3270, FILM 3275, FILM 4270. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FILM 4350 - Analysis of Contemporary Motion Picture Editing Techniques

Summer 2010 Registration **FILM 4350**

Focuses on analysis of editing techniques, through viewing of contemporary feature films and episodic television exemplars. The techniques of cutting for character, story, action, comedy and genre is covered citing the work of the top editors of our time.

Prereq: Junior standing. Cross-listed with FILM 5350. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FILM 4400 - Advanced Screenwriting

Summer 2010 Registration **FILM 4400**

This course focuses on creating and refining a feature length dramatic script (90-120 pages). Students will view films, read essays and articles, and analyze styles. They will apply these techniques and use this information to improve their own work. Prereq: FILM 3400 or permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FILM 4500 - Writing for Episodic Television

Summer 2010 Registration **FILM 4500**

Explores the constructive and critical process of writing prime-time dramatic television and alternative broadcast platforms. Each student is guided through a series of viewings, readings, and writing exercises culminating with the written completion of television episodes for an original series. Prereq: FILM 2500 or permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FILM 4600 - Topics in Film

Summer 2010 Registration **FILM 4600**

Specialized topics in film and video. Prereq: Permission of instructor. **Semester Hours:** 1to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FILM 4840 - Independent Study: FILM

Summer 2010 Registration **FILM 4840**

Semester Hours: 1to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

TFVP 3840 - Applications Seminar

Summer 2010 Registration **TFVP 3840**

Reflection on the intellectual competencies, artistic capabilities, and skill sets gained throughout student's academic career. Coursework includes investigation and writing on

specified topics of industry opportunities to assist career advancement. Designed to be an alternative if Internship is not appropriate. Note: TFVP majors and minors only, or permission of instructor. Prereq: Senior status **Semester Hours: 1to 3**
Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 2530 - Acting: Character and Staging

Summer 2010 Registration **THTR 2530**

Fully prepared scene studies leading to advance work in characterization and staging. Methods of discovering and utilizing the range of creative potential play scripts from the current production season are emphasized. Prereq: Voice and Movement I (or equivalent), and Performance and Visualization I and II (or equivalent). **Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 2560 - Topics in Theatre

Summer 2010 Registration **THTR 2560**

Semester Hours: 1to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 2700 - Art for the Theatre

Summer 2010 Registration **THTR 2700**

Students will study principles of theatre and screen productions design. They will do exercises in drawing, sketching, drafting, rendering and model building with practical application towards theatre, film, and video design techniques. Upon completion, student will have a basic production design skills. **Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 2840 - Independent Study: THTR

Summer 2010 Registration **THTR 2840**

Prereq: Written permission of the supervising instructor. **Semester Hours: 1to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 3010 - Stage and Production Management

Summer 2010 Registration **THTR 3010**

This is a course that addresses aspects of planning and managing various theatrical

events and live performances. Emphasizes maximum results, given the complexity of live performance and the resource pool. Prereq: THTR/FILM 1600 or THTR/FILM 1610 or instructor permission. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 3530 - Acting: Character and Text

Summer 2010 Registration **THTR 3530**

Fully prepared scene studies leading to advance work in characterization and text. Methods of discovering and utilizing the range of creative potential play scripts from the current production program are emphasized. Prereq: THTR/FILM 1611. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 3560 - Topics in Theatre

Summer 2010 Registration **THTR 3560**

Various topics in the study of the theatre of special interest to majors with an emphasis in theatre. **Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 3720 - Lighting Design

Summer 2010 Registration **THTR 3720**

A practical introduction to the history, theory, practice and equipment for lighting performing arts productions. Course emphasizes textual analysis for lighting design, basic electricity, lighting equipment and control, safety practices and lighting graphics. Requirements include related experiences with departmental productions. Prereq: THTR/FILM 1100 and THTR 2700 or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 3730 - Scene Design

Summer 2010 Registration **THTR 3730**

Introduces the principles and practices of scenic design for the theatre. Emphasizes textual analysis, the aesthetic and practical elements of design, design development and theatrical graphics. Requirements include related experiences working departmental production. Prereq: THTR/FILM 1100 and THTR 2700 or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 3740 - Costume Design

Summer 2010 Registration **THTR 3740**

Introduces the principles and practices of costume and make-up design for the theatre. Costume design focuses on basic figure drawing, practical elements of design, design development and different costume rendering techniques. Make-up design encompasses basic and specialty make-up application along with creating life masks. Prereq: THTR 1100 or FILM 1100 and THTR 2700 or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 3760 - Sound Design for the Theater

Summer 2010 Registration **THTR 3760**

Studies sound design with practical application towards usage in the theatrical discipline. Includes studio techniques, live playback, script analysis, graphic techniques for sound plots and selection and recording techniques to amplify or otherwise manipulate the performer's voice, recreate sounds as they naturally occur and influence the emotional content of the drama. Prereq: THTR/FILM 1100 or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 3840 - Independent Study: THTR

Summer 2010 Registration **THTR 3840**

Prereq: Written permission of supervising instructor. **Semester Hours:** 1to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 4530 - Acting: Character and Media

Summer 2010 Registration **THTR 4530**

Provides the study, skill development and workshop experience for the actor in media work-film, television, video and voice over. Prereq: THTR 1611 or FILM 1611. Cross-listed with THTR 5530. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 4540 - Directing: Staging and Process

Summer 2010 Registration **THTR 4540**

Explores the Director's contemporary staging options, rehearsal processes and production development of text and non-text-based work in the context of traditional as well as experimental approaches to theatricality. Prereq: THTR 1100 or FILM 1100.

Cross-listed with THTR 5540. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 4550 - Playwriting: The Short Form

Summer 2010 Registration **THTR 4550**

Writing workshop in one-act plays, with special emphasis on the demands of production: space, acting, staging conventions and techniques. Prereq: A creative writing course or permission of instructor. Cross-listed with THTR 5550. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 4560 - Topics in Theatre

Summer 2010 Registration **THTR 4560**

Various topics in the study of the theatre of special interest to acting majors, with an emphasis in theatre. **Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 4730 - Advanced Scenic Design

Summer 2010 Registration **THTR 4730**

Students will continue studies in graphic techniques, design styles and the integration of production design areas. Students will complete projects in scenic design for various production forms. Outcomes will include fully realized design projects with renderings, models and drafting. Prereq: THTR 1100 and 1110. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 4760 - Topics in Design

Summer 2010 Registration **THTR 4760**

A special topics investigation of trends in production design and experimental practices in traditional and non-traditional endeavors. Prereq: THTR 3730 and 4730 or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 4840 - Independent Study: THTR

Summer 2010 Registration **THTR 4840**

Prereq: Written permission of supervising instructor. **Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total for Program: 53 Hours

Theatre, Film and Television BFA

The Department of Theatre, Film and Video Production offers a rigorous and structured bachelor of fine arts (BFA) program to a limited number of students with exceptional abilities and qualifications who aspire to work specifically in film/theatre production or writing/directing. The BFA's goal is to provide training at a professional skill level while implementing overall departmental goals, culminating in a comprehensive review that requires successful completion of a portfolio and/or thesis project. The program prepares students to begin their careers with entry-level positions in their areas of study, start their personal creative work or continue their studies in a graduate program.

Emphases and Degree Requirements

All students pursuing a BFA in theatre, film and television complete a total of at least 78 semester hours for the major: 36 semester hours of foundation courses and 42 semester hours in an emphasis area. Students choose between emphases in film/theatre production and writing/directing; see detailed course requirements below. Each course must be completed with a C/2.0 or better. At least 24 of the major semester hours must be earned at UC Denver. **Students must also follow the College of Arts and Media's general degree requirements.**

Admission Procedures and Incoming Assessment Criteria for BFA

The first step for students seeking a BFA is to apply to the university and be accepted under the theatre, film and television bachelor of arts (BA) program. Typically then, after at least three semesters and satisfactory completion of foundation sequence courses in theatre, video/television and film, the qualified student is able to audition/interview during spring semester for admittance into the BFA program the following fall.

Assessment for admission to the BFA program includes the following:

- *Grade Point Average* of 2.75 or better.
- *Department Interview.* Each student is interviewed by members of the Theatre, Film and Video Production faculty to ascertain whether the student's aspirations and expectations are related to those of the BFA program.
- *Diagnostic Exam and Essay.* Students are required to take an objective examination and write an essay on material covered in the foundation sequence courses. This examination is offered during the spring semester.

- *Résumé.* The résumé should include theatre/film/video work experience and education to date.
- *Successful completion of foundation courses* (see below) with a grade of C or better in each course. Students should have at least 24 foundation semester hours completed or in progress at the time of application in spring semester. Note that the BFA foundation courses may also apply toward the Theatre, Film and Television BA degree requirements (for those who end up pursuing the BA instead of the BFA).
- *Development and successful presentation of a portfolio of the student's work to date.* Faculty will review each student's classroom, studio and production work.

For further information, including annual spring semester application deadlines, please contact CAMadvising@ucdenver.edu.

Transfer Students

Transfer students are considered on a case-by-case basis. However, a minimum of at least one semester (12 semester hours) "residency" in the BA program is required before students can participate in a spring audition/interview for possible admittance into the BFA program. Students are only admitted to the BFA for fall semester.

Admission Deferment

Students admitted to the BFA program may defer their admission for one year, to the fall semester of the academic year following their original admission to the program. Students must contact the Theatre, Film and Video Department (303-556-6352) to formally request their deferment. If more than one year elapses after a student's semester of admission and that student has not begun BFA emphasis course requirements, full reapplication is required to attempt to pursue the BFA.

Student Handbook

All students in the theatre, film and video production program are required to know and abide by the policies and procedures outlined in the TFVP Student Handbook, available by contacting CAMadvising@ucdenver.edu.

Required Foundation Courses for Both Film/Theatre Production and Writing/Directing Emphases

TFVP 1050 - Video Production/Post-Production I

Summer 2010 Registration **TFVP 1050**

Students gain a knowledge of single camera video techniques and are introduced to non-linear digital editing. Course work is hands-on and collaborative, with several projects shot and edited. Learning centers on storytelling, including pacing and aesthetics. Prereq: TFVP majors and minors only, or permission of instructor. **Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

TFVP 1100 - Introduction to Theatre, Film, and Television

Summer 2010 Registration **TFVP 1100**

An introduction to dramatic and cinematic texts, styles and productions; students will research and analyze a play and develop it into a film script. They will present their understanding by storyboards and multi-media presentations, exams and written work. Prereq: TFVP majors and minors only, or permission of instructor. **Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

TFVP 1110 - Production Design: Theatre, Film and Video

Summer 2010 Registration **TFVP 1110**

This design/research class explores the creative skills, technical knowledge and scholarly engagement employed by production designers. The students will understand how design elements enhance a production and create a production design for a video, film or play. Prereq: TFVP majors and minors only, or permission of instructor. **Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

TFVP 1550 - Scriptwriting I

Summer 2010 Registration **TFVP 1550**

Each student conceptualizes, designs and creates short scripts for stage and screen. Instruction includes story development through first draft and rewrites, incorporation of critical feedback and the merger of image and idea to convey dramatic concepts. Prereq: TFVP majors and minors only, or permission of instructor. **Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

TFVP 1611 - Acting Lab I

Summer 2010 Registration **TFVP 1611**

Students will perform scenes, have required readings and write research papers introducing them to the basic performance skills required for Stage and Screen Acting. This work will provide a foundation and vocabulary for future projects, where students interact with performers. Prereq: TFVP majors and minors only, or permission of

instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

TFVP 2090 - Production Management Techniques

Summer 2010 Registration **TFVP 2090**

Demonstrates introductory management principles and aspects of budgeting, scheduling and managing theatre and film productions. Class time includes lectures, planning exercises, demonstrations, critiques, and media presentations along with peer review.

Outside of class, students will write and plan a production. Prereq: TFVP majors and minors only, or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

TFVP 2100 - Visual Culture

Summer 2010 Registration **TFVP 2100**

Study academic theories surrounding visual cultures related to Film, Theatre & Video relating to topics such as representation, spectatorship, and mass media by viewing, research, and analyzing. Creative projects, readings, and written responses will increase sensitivity to visuals usage. Note: TFVP majors and minors only, or permission of instructor. Prereq: TFVP 1100. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

TFVP 2800 - Elements of Directing

Summer 2010 Registration **TFVP 2800**

Uses text analysis and visualization techniques as the foundation of the director's work and investigates its dimensions of practice in theatre and film. Students develop fluency in interpretive analysis and in crating meaning through image and action. Note: TFVP majors and minors only, or permission of instructor. Prereq: TFVP 1100, TFVP 1611. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

TFVP 3810 - Introduction to Production Process

Summer 2010 Registration **TFVP 3810**

Part one of two-course sequence. Students introduced to theoretical and practical applications of production tools, vocabulary, and experiences in a variety of production settings. Students participate as crew members for both theatrical and film events thereby acquiring production skills. Note: Must be taken before TFVP Production

Process. TFVP majors and minors only, or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

TFVP 3820 - Production Process

Summer 2010 Registration **TFVP 3820**

Part two of two-course sequence. Students will increase their experience by applying production skills and theories learned in Intro to Production Process in a practicum setting to support theatre and film activities. Note: TFVP majors and minors only, or permission of instructor. Prereq: TFVP 3810 (Intro to Production Process) **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Select two courses from the following:

FILM 3070 - History of Silent Film Production

Summer 2010 Registration **FILM 3070**

Examines history of cinema from its 19th century origins until the introduction of sound. Studies important trends in the silent era, including the beginnings of film comedy, early documentary, origins of Hollywood narrative, avant-garde cinema, German Expressionism and Soviet Cinema. Note: TFVP majors and minors only, or permission of instructor. Prereq: TFVP 1100. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FILM 3080 - History of Sound Film Production

Summer 2010 Registration **FILM 3080**

Students learn various film genres from early sound period, through the present. Traces the development of the various Hollywood genres- and examines representative Hollywood films and major developments of American films from the post-studio period and filmmakers in other cultures. Note: TFVP majors and minors only, or permission instructor. Prereq: TFVP 1100. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 3610 - Performance: Theory/History/Criticism I

Summer 2010 Registration **THTR 3610**

Part one of two semester course sequence exploring questions of dramatic theory and dramaturgy in context of the development of Western Theater before 1850 and an analysis of historical modes of production, dramatic text and artistic creation in relation to contemporary theatrical practice. Prereq: THTR 1100 or FILM 1100 or permission of

instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 4610 - Performance: Theory/History/Criticism II

Summer 2010 Registration **THTR 4610**

Part two of course sequence exploring questions of dramatic theory and dramaturgy in context of development of Western Theater after 1850 and an analysis of historical modes of production, dramatic text and artistic creation in relation to contemporary theatrical practice. Note: TFVP majors and minors only, or permission of instructor.

Prereq: TFVP 1100. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total for Foundation: 36 Hours

Film and Theatre Production Emphasis Courses

Required Courses

FILM 2050 - Film/Video Prod/Post II

Summer 2010 Registration **FILM 2050**

Students create productions using three-chip digital cameras and advanced techniques. Preproduction through post-productivity working with actors, and maximizing production values are stressed. Students employ a range of cinematic techniques to tell stories, convey character state of mind, and communicate information and meaning. Note: TFVP majors and minors only, or permission of instructor. Prereq: TFVP 1050, TFVP 1100. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FILM 2060 - Film and Video Lighting and Grip

Summer 2010 Registration **FILM 2060**

Provides an understanding of lighting theory, tools, and techniques for studio and location production. Students use lighting equipment (lights, stands, nets, flags, grids, diffusion, light meters and waveform). The lighting aesthetics addressed in class will influence future work. Note: TFVP majors and minors only, or permission of instructor. Prereq: TFVP 1050, TFVP 1100. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FILM 2640 - Introduction to Digital Effects

Summer 2010 Registration **FILM 2640**

Gain skills and awareness of motion graphics in film/video. Communicate ideas using graphic elements and learn the fundamentals of digital effects, animation, compression, and color correction. Students will be able to devise visual strategies to augment their films. Prereq: TFVP 1100. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

TFVP 3222 - Theatre, Film & Video Business

Summer 2010 Registration **TFVP 3222**

Students explore and evaluate business issues in film and theatre production such as finance, distribution, organization and legal issues through readings and projects. Students develop a solid business basis for work in these fields. Note: TFVP majors and minors only, or permission of instructor. Prereq: TFVP 1100. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

TFVP 3550 - Directing Process

Summer 2010 Registration **TFVP 3550**

Students learn professional options and opportunities through a sequence of seminars and project-based workshops presented by directors in film and theatre. These interactions with faculty will influence their work in stage productions or documentary, episodic, and narrative film/television. Note: TFVP majors and minors only, or permission of instructor. Prereq: TFVP 1100, TFVP 1611, TFVP 2800. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

TFVP 4090 - Senior Seminar & Project

Summer 2010 Registration **TFVP 4090**

The course integrates the development of four capstone projects (research, creative work, collaborative process and service/outreach) with a continuing forum focused on current issues in professional practice. Note: TFVP majors and minors only, or permission of instructor. Prereq: Senior status in BFA. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

TFVP 4095 - Senior Thesis Project

Summer 2010 Registration **TFVP 4095**

The BFA thesis course involves the preparation, exhibition and critical faculty response to creative work and self-promotional materials as developed by graduating seniors on the BFA degree track. Note: TFVP majors and minors only, or permission of instructor.

Prereq: Senior status in department. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

_____ - Internship (3 semester hours)

Approved Elective Courses

Select 18 semester hours from the following:

FILM 2500 - Introduction to Screenwriting for Film and Television

Summer 2010 Registration **FILM 2500**

Students learn the basic elements of the craft of creating a script for film or television through exercises such as idea generation, characters, and scene setting. Genre conventions, three act structure, and other foundation elements are addressed for future work. Note: ENGL 1020, ENGL 2030 or ENGL 2154 are recommended. TFVP majors and minors only, or permission of instructor. Prereq: TFVP 1550. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FILM 3111 - Shooting Action and Physical Effects

Summer 2010 Registration **FILM 3111**

Examines techniques for shooting action based on the needs of the editor. A workshop for production projects. This course analyzes films, storyboard and shoot projects designed for specific outcomes such as: chase, hand combat and car chases. Prereq: Four college-level courses in film/video production and post-production. (For TFVP majors only) **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FILM 3264 - Advanced Digital Effects

Summer 2010 Registration **FILM 3264**

Cinematography and Post Productions majors study software and create projects with advanced visual effects. With industry standard techniques in animation, applying compositing, image acquisition and motion graphics. Students will create a variety of projects by the end of the semester. Note: Other majors by permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FILM 3270 - Film/Video Production III

Summer 2010 Registration **FILM 3270**

Involves the scripting, planning, casting, storyboarding, and production of individual student projects to be shot on film or digital video. Emphasis is on storytelling and professional techniques. Prereq: Six college-level courses in film/video production,

postproduction and scriptwriting. For TFVP majors only. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FILM 3275 - Film and Video Postproduction III

Summer 2010 Registration **FILM 3275**

Students edit the individual projects shot on film or video FILM 3270, using skills from previous classes. Emphasis on outputting a professional quality narrative product with full audio and visual sweetening. Students benefit from longer format and more complex projects. Note: TFVP majors and minors only, or permission of instructor. Prereq: TFVP 1050, TFVP 1100, TFVP 2050, FILM 3270. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FILM 3300 - Advanced Lighting for Film and Video

Summer 2010 Registration **FILM 3300**

Students master film and video set lighting techniques for studio and locations. Focus is on art, technology, methodology, exposure, instruments, rigging and terminology. Prereq: Six college-level courses in film/video production and postproduction. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FILM 3350 - Editing Aesthetics

Summer 2010 Registration **FILM 3350**

Students study samples of existing films and their own work for artistic and visual merits. Students edit several short films, learn the guidelines for editing and develop the ability to identify the role of rhythm and pacing in films. Note: TFVP majors and minors only, or permission of instructor. Prereq: TFVP 1050, TFVP 1100. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FILM 3400 - Intermediate Screenwriting

Summer 2010 Registration **FILM 3400**

Emphasis is on creating character, conflict and structure through the use of theme, motifs, subplots, and story tone. Students complete the first act and a 25-page feature film treatment or the first draft of a feature-length script. Note: TFVP majors and minors only, or permission of instructor. Prereq: TFVP 1050, FILM 2500. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FILM 4270 - Film and Video Production IV

Summer 2010 Registration **FILM 4270**

Students work on final production project in a major position such as planning, casting,

budgeting, and shooting a final professional quality film or video to be edited in FILM 4280 the following semester. Students use skills from previous complex projects. Note: TFVP majors and minors only, or permission of instructor. Prereq: TFVP 1050, TFVP 1100, TFVP 2050, FILM 3270, FILM 3275. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FILM 4280 - Film and Video Postproduction IV

Summer 2010 Registration **FILM 4280**

Students edit longer format and more complex individual project shot on film or video in FILM 4270, using skills from previous classes and outputting a professional quality product with full audio and visual sweetening. Students benefit from more complex projects. Note: TFVP majors and minors only, or permission of instructor. Prereq: TFVP 1050, TFVP 1100, TFVP 2050, FILM 3270, FILM 3275, FILM 4270. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FILM 4350 - Analysis of Contemporary Motion Picture Editing Techniques

Summer 2010 Registration **FILM 4350**

Focuses on analysis of editing techniques, through viewing of contemporary feature films and episodic television exemplars. The techniques of cutting for character, story, action, comedy and genre is covered citing the work of the top editors of our time. Prereq: Junior standing. Cross-listed with FILM 5350. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FILM 4400 - Advanced Screenwriting

Summer 2010 Registration **FILM 4400**

This course focuses on creating and refining a feature length dramatic script (90-120 pages). Students will view films, read essays and articles, and analyze styles. They will apply these techniques and use this information to improve their own work. Prereq: FILM 3400 or permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FILM 4500 - Writing for Episodic Television

Summer 2010 Registration **FILM 4500**

Explores the constructive and critical process of writing prime-time dramatic television and alternative broadcast platforms. Each student is guided through a series of viewings,

readings, and writing exercises culminating with the written completion of television episodes for an original series. Prereq: FILM 2500 or permission of instructor.**Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

FILM 4600 - Topics in Film

Summer 2010 Registration **FILM 4600**

Specialized topics in film and video. Prereq: Permission of instructor.**Semester Hours: 1to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

FILM 4840 - Independent Study: FILM

Summer 2010 Registration **FILM 4840**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

TFVP 3840 - Applications Seminar

Summer 2010 Registration **TFVP 3840**

Reflection on the intellectual competencies, artistic capabilities, and skill sets gained throughout student's academic career. Coursework includes investigation and writing on specified topics of industry opportunities to assist career advancement. Designed to be an alternative if Internship is not appropriate. Note: TFVP majors and minors only, or permission of instructor. Prereq: Senior status**Semester Hours: 1to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 2530 - Acting: Character and Staging

Summer 2010 Registration **THTR 2530**

Fully prepared scene studies leading to advance work in characterization and staging. Methods of discovering and utilizing the range of creative potential play scripts from the current production season are emphasized. Prereq: Voice and Movement I (or equivalent), and Performance and Visualization I and II (or equivalent).**Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 2560 - Topics in Theatre

Summer 2010 Registration **THTR 2560**

Semester Hours: 1to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 2700 - Art for the Theatre

Summer 2010 Registration **THTR 2700**

Students will study principles of theatre and screen productions design. They will do exercises in drawing, sketching, drafting, rendering and model building with practical application towards theatre, film, and video design techniques. Upon completion, student will have a basic production design skills. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 2840 - Independent Study: THTR

Summer 2010 Registration **THTR 2840**

Prereq: Written permission of the supervising instructor. **Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 3010 - Stage and Production Management

Summer 2010 Registration **THTR 3010**

This is a course that addresses aspects of planning and managing various theatrical events and live performances. Emphasizes maximum results, given the complexity of live performance and the resource pool. Prereq: THTR/FILM 1600 or THTR/FILM 1610 or instructor permission. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 3530 - Acting: Character and Text

Summer 2010 Registration **THTR 3530**

Fully prepared scene studies leading to advance work in characterization and text. Methods of discovering and utilizing the range of creative potential play scripts from the current production program are emphasized. Prereq: THTR/FILM 1611. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 3560 - Topics in Theatre

Summer 2010 Registration **THTR 3560**

Various topics in the study of the theatre of special interest to majors with an emphasis in theatre. **Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 3720 - Lighting Design

Summer 2010 Registration **THTR 3720**

A practical introduction to the history, theory, practice and equipment for lighting

performing arts productions. Course emphasizes textual analysis for lighting design, basic electricity, lighting equipment and control, safety practices and lighting graphics. Requirements include related experiences with departmental productions. Prereq: THTR/FILM 1100 and THTR 2700 or permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 3730 - Scene Design

Summer 2010 Registration **THTR 3730**

Introduces the principles and practices of scenic design for the theatre. Emphasizes textual analysis, the aesthetic and practical elements of design, design development and theatrical graphics. Requirements include related experiences working departmental production. Prereq: THTR/FILM 1100 and THTR 2700 or permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 3740 - Costume Design

Summer 2010 Registration **THTR 3740**

Introduces the principles and practices of costume and make-up design for the theatre. Costume design focuses on basic figure drawing, practical elements of design, design development and different costume rendering techniques. Make-up design encompasses basic and specialty make-up application along with creating life masks. Prereq: THTR 1100 or FILM 1100 and THTR 2700 or permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 3760 - Sound Design for the Theater

Summer 2010 Registration **THTR 3760**

Studies sound design with practical application towards usage in the theatrical discipline. Includes studio techniques, live playback, script analysis, graphic techniques for sound plots and selection and recording techniques to amplify or otherwise manipulate the performer's voice, recreate sounds as they naturally occur and influence the emotional content of the drama. Prereq: THTR/FILM 1100 or permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 3840 - Independent Study: THTR

Summer 2010 Registration **THTR 3840**

Prereq: Written permission of supervising instructor. **Semester Hours:** 1to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 4530 - Acting: Character and Media

Summer 2010 Registration **THTR 4530**

Provides the study, skill development and workshop experience for the actor in media work-film, television, video and voice over. Prereq: THTR 1611 or FILM 1611. Cross-listed with THTR 5530. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 4540 - Directing: Staging and Process

Summer 2010 Registration **THTR 4540**

Explores the Director's contemporary staging options, rehearsal processes and production development of text and non-text-based work in the context of traditional as well as experimental approaches to theatricality. Prereq: THTR 1100 or FILM 1100.

Cross-listed with THTR 5540. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 4550 - Playwriting: The Short Form

Summer 2010 Registration **THTR 4550**

Writing workshop in one-act plays, with special emphasis on the demands of production: space, acting, staging conventions and techniques. Prereq: A creative writing course or permission of instructor. Cross-listed with THTR 5550. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 4560 - Topics in Theatre

Summer 2010 Registration **THTR 4560**

Various topics in the study of the theatre of special interest to acting majors, with an emphasis in theatre. **Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 4730 - Advanced Scenic Design

Summer 2010 Registration **THTR 4730**

Students will continue studies in graphic techniques, design styles and the integration of production design areas. Students will complete projects in scenic design for various production forms. Outcomes will include fully realized design projects with renderings, models and drafting. Prereq: THTR 1100 and 1110. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 4760 - Topics in Design

Summer 2010 Registration **THTR 4760**

A special topics investigation of trends in production design and experimental practices in traditional and non-traditional endeavors. Prereq: THTR 3730 and 4730 or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 4840 - Independent Study: THTR

Summer 2010 Registration **THTR 4840**

Prereq: Written permission of supervising instructor. **Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

_____ - Upper-division Film Studies Courses from the English Department
(maximum of 6 semester hours)

_____ - Audio Production and Postproduction Music Courses Related to Theatre,
Film or Video (maximum of 6 semester hours)

**Total for Film and Theatre Production Emphasis: 42
hours**

Writing/Directing Emphasis Courses

Required Courses

FILM 2500 - Introduction to Screenwriting for Film and Television

Summer 2010 Registration **FILM 2500**

Students learn the basic elements of the craft of creating a script for film or television through exercises such as idea generation, characters, and scene setting. Genre conventions, three act structure, and other foundation elements are addressed for future work. Note: ENGL 1020, ENGL 2030 or ENGL 2154 are recommended. TFVP majors and minors only, or permission of instructor. Prereq: TFVP 1550. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

TFVP 3550 - Directing Process

Summer 2010 Registration **TFVP 3550**

Students learn professional options and opportunities through a sequence of seminars and project-based workshops presented by directors in film and theatre. These interactions with faculty will influence their work in stage productions or documentary, episodic, and narrative film/television. Note: TFVP majors and minors only, or permission of instructor. Prereq: TFVP 1100, TFVP 1611, TFVP 2800. **Semester Hours:**

3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

TFVP 4090 - Senior Seminar & Project

Summer 2010 Registration **TFVP 4090**

The course integrates the development of four capstone projects (research, creative work, collaborative process and service/outreach) with a continuing forum focused on current issues in professional practice. Note: TFVP majors and minors only, or permission of instructor. Prereq: Senior status in BFA. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

TFVP 4095 - Senior Thesis Project

Summer 2010 Registration **TFVP 4095**

The BFA thesis course involves the preparation, exhibition and critical faculty response to creative work and self-promotional materials as developed by graduating seniors on the BFA degree track. Note: TFVP majors and minors only, or permission of instructor. Prereq: Senior status in department. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

TFVP 4560 - Directors at Work

Summer 2010 Registration **TFVP 4560**

Through creation and participation on a premiere production of a devised and/or mixed media, performance work in collaboration with faculty and guest professional artists, directing students will sharpen the application of skills and learn aesthetics and structure. Note: TFVP majors and minors only, or permission of instructor. Prereq: TFVP 1100, TFVP 1611, TFVP 2800, TFVP 3550. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

or

TFVP 4570 - Directing Practicum

Summer 2010 Registration **TFVP 4570**

Directing Practicum is professional practice training through a mentored project-based assistantship with a director. During class students will be connected to and assist directors on film and theatre projects, working one on one, to develop their skills. By application only. Note: TFVP majors and minors only, or permission of instructor. Prereq: TFVP 1100, TFVP 1611. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 3530 - Acting: Character and Text

Summer 2010 Registration **THTR 3530**

Fully prepared scene studies leading to advance work in characterization and text. Methods of discovering and utilizing the range of creative potential play scripts from the current production program are emphasized. Prereq: THTR/FILM 1611. **Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

- _____ - Internship (3 semester hours)
- _____ - Two Upper-division Screenwriting Courses (6 semester hours)

Approved Elective Courses

Select 15 semester hours from the following:

FILM 2050 - Film/Video Prod/Post II

Summer 2010 Registration **FILM 2050**

Students create productions using three-chip digital cameras and advanced techniques. Preproduction through post-productivity working with actors, and maximizing production values are stressed. Students employ a range of cinematic techniques to tell stories, convey character state of mind, and communicate information and meaning. Note: TFVP majors and minors only, or permission of instructor. Prereq: TFVP 1050, TFVP 1100. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FILM 2060 - Film and Video Lighting and Grip

Summer 2010 Registration **FILM 2060**

Provides an understanding of lighting theory, tools, and techniques for studio and location production. Students use lighting equipment (lights, stands, nets, flags, grids, diffusion, light meters and waveform). The lighting aesthetics addressed in class will influence future work. Note: TFVP majors and minors only, or permission of instructor. Prereq: TFVP 1050, TFVP 1100. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FILM 2640 - Introduction to Digital Effects

Summer 2010 Registration **FILM 2640**

Gain skills and awareness of motion graphics in film/video. Communicate ideas using graphic elements and learn the fundamentals of digital effects, animation, compression, and color correction. Students will be able to devise visual strategies to augment their

films. Prereq: TFVP 1100. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FILM 3111 - Shooting Action and Physical Effects

Summer 2010 Registration **FILM 3111**

Examines techniques for shooting action based on the needs of the editor. A workshop for production projects. This course analyzes films, storyboard and shoot projects designed for specific outcomes such as: chase, hand combat and car chases. Prereq: Four college-level courses in film/video production and post-production. (For TFVP majors only) **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FILM 3264 - Advanced Digital Effects

Summer 2010 Registration **FILM 3264**

Cinematography and Post Productions majors study software and create projects with advanced visual effects. With industry standard techniques in animation, applying compositing, image acquisition and motion graphics. Students will create a variety of projects by the end of the semester. Note: Other majors by permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FILM 3270 - Film/Video Production III

Summer 2010 Registration **FILM 3270**

Involves the scripting, planning, casting, storyboarding, and production of individual student projects to be shot on film or digital video. Emphasis is on storytelling and professional techniques. Prereq: Six college-level courses in film/video production, postproduction and scriptwriting. For TFVP majors only. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FILM 3275 - Film and Video Postproduction III

Summer 2010 Registration **FILM 3275**

Students edit the individual projects shot on film or video FILM 3270, using skills from previous classes. Emphasis on outputting a professional quality narrative product with full audio and visual sweetening. Students benefit from longer format and more complex projects. Note: TFVP majors and minors only, or permission of instructor. Prereq: TFVP 1050, TFVP 1100, TFVP 2050, FILM 3270. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FILM 3300 - Advanced Lighting for Film and Video

Summer 2010 Registration **FILM 3300**

Students master film and video set lighting techniques for studio and locations. Focus is on art, technology, methodology, exposure, instruments, rigging and terminology.

Prereq: Six college-level courses in film/video production and postproduction.

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FILM 3350 - Editing Aesthetics

Summer 2010 Registration **FILM 3350**

Students study samples of existing films and their own work for artistic and visual merits.

Students edit several short films, learn the guidelines for editing and develop the ability to identify the role of rhythm and pacing in films. Note: TFVP majors and minors only, or permission of instructor. Prereq: TFVP 1050, TFVP 1100.

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FILM 3400 - Intermediate Screenwriting

Summer 2010 Registration **FILM 3400**

Emphasis is on creating character, conflict and structure through the use of theme, motifs, subplots, and story tone. Students complete the first act and a 25-page feature film treatment or the first draft of a feature-length script. Note: TFVP majors and minors only, or permission of instructor. Prereq: TFVP 1050, FILM 2500.

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FILM 4270 - Film and Video Production IV

Summer 2010 Registration **FILM 4270**

Students work on final production project in a major position such as planning, casting, budgeting, and shooting a final professional quality film or video to be edited in FILM 4280 the following semester. Students use skills from previous complex projects. Note:

TFVP majors and minors only, or permission of instructor. Prereq: TFVP 1050, TFVP 1100, TFVP 2050, FILM 3270, FILM 3275.

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FILM 4280 - Film and Video Postproduction IV

Summer 2010 Registration **FILM 4280**

Students edit longer format and more complex individual project shot on film or video in FILM 4270, using skills from previous classes and outputting a professional quality product with full audio and visual sweetening. Students benefit from more complex projects. Note: TFVP majors and minors only, or permission of instructor. Prereq: TFVP

1050, TFVP 1100, TFVP 2050, FILM 3270, FILM 3275, FILM 4270.

Semester Hours:

3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FILM 4350 - Analysis of Contemporary Motion Picture Editing Techniques

Summer 2010 Registration **FILM 4350**

Focuses on analysis of editing techniques, through viewing of contemporary feature films and episodic television exemplars. The techniques of cutting for character, story, action, comedy and genre is covered citing the work of the top editors of our time.

Prereq: Junior standing. Cross-listed with FILM 5350. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FILM 4400 - Advanced Screenwriting

Summer 2010 Registration **FILM 4400**

This course focuses on creating and refining a feature length dramatic script (90-120 pages). Students will view films, read essays and articles, and analyze styles. They will apply these techniques and use this information to improve their own work. Prereq: FILM 3400 or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FILM 4500 - Writing for Episodic Television

Summer 2010 Registration **FILM 4500**

Explores the constructive and critical process of writing prime-time dramatic television and alternative broadcast platforms. Each student is guided through a series of viewings, readings, and writing exercises culminating with the written completion of television episodes for an original series. Prereq: FILM 2500 or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FILM 4600 - Topics in Film

Summer 2010 Registration **FILM 4600**

Specialized topics in film and video. Prereq: Permission of instructor. **Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FILM 4840 - Independent Study: FILM

Summer 2010 Registration **FILM 4840**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

TFVP 3222 - Theatre, Film & Video Business

Summer 2010 Registration **TFVP 3222**

Students explore and evaluate business issues in film and theatre production such as finance, distribution, organization and legal issues through readings and projects.

Students develop a solid business basis for work in these fields. Note: TFVP majors and minors only, or permission of instructor. Prereq: TFVP 1100.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

TFVP 3840 - Applications Seminar

Summer 2010 Registration **TFVP 3840**

Reflection on the intellectual competencies, artistic capabilities, and skill sets gained throughout student's academic career. Coursework includes investigation and writing on specified topics of industry opportunities to assist career advancement. Designed to be an alternative if Internship is not appropriate. Note: TFVP majors and minors only, or permission of instructor. Prereq: Senior status**Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 2530 - Acting: Character and Staging

Summer 2010 Registration **THTR 2530**

Fully prepared scene studies leading to advance work in characterization and staging.

Methods of discovering and utilizing the range of creative potential play scripts from the current production season are emphasized. Prereq: Voice and Movement I (or equivalent), and Performance and Visualization I and II (or equivalent).

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 2560 - Topics in Theatre

Summer 2010 Registration **THTR 2560**

Semester Hours: 1to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 2700 - Art for the Theatre

Summer 2010 Registration **THTR 2700**

Students will study principles of theatre and screen productions design. They will do exercises in drawing, sketching, drafting, rendering and model building with practical application towards theatre, film, and video design techniques. Upon completion, student will have a basic production design skills. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 2840 - Independent Study: THTR

Summer 2010 Registration **THTR 2840**

Prereq: Written permission of the supervising instructor. **Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 3010 - Stage and Production Management

Summer 2010 Registration **THTR 3010**

This is a course that addresses aspects of planning and managing various theatrical events and live performances. Emphasizes maximum results, given the complexity of live performance and the resource pool. Prereq: THTR/FILM 1600 or THTR/FILM 1610 or instructor permission. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 3560 - Topics in Theatre

Summer 2010 Registration **THTR 3560**

Various topics in the study of the theatre of special interest to majors with an emphasis in theatre. **Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 3720 - Lighting Design

Summer 2010 Registration **THTR 3720**

A practical introduction to the history, theory, practice and equipment for lighting performing arts productions. Course emphasizes textual analysis for lighting design, basic electricity, lighting equipment and control, safety practices and lighting graphics. Requirements include related experiences with departmental productions. Prereq:

THTR/FILM 1100 and THTR 2700 or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 3730 - Scene Design

Summer 2010 Registration **THTR 3730**

Introduces the principles and practices of scenic design for the theatre. Emphasizes textual analysis, the aesthetic and practical elements of design, design development and theatrical graphics. Requirements include related experiences working departmental production. Prereq: THTR/FILM 1100 and THTR 2700 or permission of instructor.

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 3740 - Costume Design

Summer 2010 Registration **THTR 3740**

Introduces the principles and practices of costume and make-up design for the theatre. Costume design focuses on basic figure drawing, practical elements of design, design development and different costume rendering techniques. Make-up design encompasses basic and specialty make-up application along with creating life masks.

Prereq: THTR 1100 or FILM 1100 and THTR 2700 or permission of instructor.

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 3760 - Sound Design for the Theater

Summer 2010 Registration **THTR 3760**

Studies sound design with practical application towards usage in the theatrical discipline. Includes studio techniques, live playback, script analysis, graphic techniques for sound plots and selection and recording techniques to amplify or otherwise manipulate the performer's voice, recreate sounds as they naturally occur and influence the emotional content of the drama.

Prereq: THTR/FILM 1100 or permission of instructor.

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 3840 - Independent Study: THTR

Summer 2010 Registration **THTR 3840**

Prereq: Written permission of supervising instructor.

Semester Hours: 1to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 4530 - Acting: Character and Media

Summer 2010 Registration **THTR 4530**

Provides the study, skill development and workshop experience for the actor in media work-film, television, video and voice over. Prereq: THTR 1611 or FILM 1611. Cross-listed with THTR 5530.

Semester Hours: 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 4540 - Directing: Staging and Process

Summer 2010 Registration **THTR 4540**

Explores the Director's contemporary staging options, rehearsal processes and production development of text and non-text-based work in the context of traditional as well as experimental approaches to theatricality. Prereq: THTR 1100 or FILM 1100.

Cross-listed with THTR 5540. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 4550 - Playwriting: The Short Form

Summer 2010 Registration **THTR 4550**

Writing workshop in one-act plays, with special emphasis on the demands of production: space, acting, staging conventions and techniques. Prereq: A creative writing course or permission of instructor. Cross-listed with THTR 5550. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 4560 - Topics in Theatre

Summer 2010 Registration **THTR 4560**

Various topics in the study of the theatre of special interest to acting majors, with an emphasis in theatre. **Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 4730 - Advanced Scenic Design

Summer 2010 Registration **THTR 4730**

Students will continue studies in graphic techniques, design styles and the integration of production design areas. Students will complete projects in scenic design for various production forms. Outcomes will include fully realized design projects with renderings, models and drafting. Prereq: THTR 1100 and 1110. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 4760 - Topics in Design

Summer 2010 Registration **THTR 4760**

A special topics investigation of trends in production design and experimental practices in traditional and non-traditional endeavors. Prereq: THTR 3730 and 4730 or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 4840 - Independent Study: THTR

Summer 2010 Registration **THTR 4840**

Prereq: Written permission of supervising instructor. **Semester Hours:** 1 to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

_____ - Upper-division Film Studies Courses from the English Department
(maximum of 6 semester hours)

_____ - Audio Production and Postproduction Music Courses Related to Theatre,
Film or Video (maximum of 6 semester hours)

Total for Writing/Directing Emphasis: 42 Hours

Undergraduate Minors

Anthropology Minor

A minimum of 18 semester hours in anthropology must be completed with an average of C (2.0) or better. Nine of the 18 hours must be upper division and 9 hours must be taken from Downtown Campus faculty.

Program Requirements

Required Courses

Choose a minimum of three courses from the following:

ANTH 1302 - Introduction to Archaeology

Summer 2010 Registration **ANTH 1302**

Introduces the study of past cultures and their environments. Emphasis is on the scientific method, aspects of research design and analytical techniques used by archaeologists to determine chronology, taphonomy, source production areas, exchange networks, and human-environment interactions. Note: Three hours of lecture and a two-hour lab each week. **Semester Hours:** 4 to 4 **GT Pathways Category Key:** GT-SS3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 1303 - Introduction to Biological Anthropology

Summer 2010 Registration **ANTH 1303**

Introduces the study of human biological evolution, both processes and outcomes, from primate ancestors to fossil hominids to contemporary human populations. Methods of obtaining and interpreting data concerning the genetic, biological and evolutionary basis of physical variation in living and skeletal populations. Note: 3 hours of lecture and a 2

hour lab each week.**Semester Hours:** 4to 4**GT Pathways Category Key:** GT-SC1
Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 2102 - Culture and the Human Experience

Summer 2010 Registration **ANTH 2102**

An application of the concept of culture to several aspects of the human experience, including gender relations, emotion and personality, cognition, language, health and healing and economic behavior. In exploring these dimensions of the human experience, the course focuses on selected cultures from each of the world's major geographic areas.

Semester Hours: 3to 3**GT Pathways Category Key:** GT-SS3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 3101 - Foundations of Cultural Anthropology

Summer 2010 Registration **ANTH 3101**

Covers current theories in cultural anthropology and discusses the nature of field work. Major schools of thought and actual field studies are explored with an emphasis on anthropological data gathering, analysis and writing. Prereq: Introductory course in cultural anthropology.

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 3121 - Language and Communication

Summer 2010 Registration **ANTH 3121**

Definitions of language and communication and their relationship to human behavior, thought and culture. The classification of languages, linguistic universals, language acquisition, multilingualism, and nonhuman communication, with consideration of the evolutionary implications of such studies. Prereq: Introductory course in cultural anthropology.

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 3301 - World Prehistory

Summer 2010 Registration **ANTH 3301**

Explores of 3.5 million years of human cultural development that examines the prehistory of Africa, Asia, Europe and the Americas. Patterns and processes that underlie the earliest hominid expansion out of Africa, tool use, origins of fire, the peopling of the Americas, the development of metallurgy, the domestication of plants and animals and the rise of cities and the state are examined. Emphasis is on both regional developments and landmark projects that have helped clarify prehistory. Prereq: Introductory course in archaeology.

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 3512 - Human Evolution

Summer 2010 Registration **ANTH 3512**

Provides an overview of the fossil and archaeological evidence for human origins. Theory and method in paleoanthropology is emphasized. The goal is to outline current knowledge of human biological evolution and the lifeways of our evolutionary relatives. Prereq: ANTH 1303. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 9-11 Hours

Elective Courses

Total: 7-9 Hours

Minor total: 18 Hours

Art History Minor

To declare a CAM minor, please see the College of Arts & Media's Office of Advising and Student Services in Arts Building, 177.

Students may transfer up to 6 semester hours of non-UC Denver courses toward a minor. All other courses must be taken at UC Denver. Each course must be completed with a C/2.0 or better. Students pursuing a BA or BFA in fine arts may use up to 6 semester hours to fulfill major and minor requirements; the remaining semester hours must be taken in addition to the major requirements. Students pursuing a major in art history may not pursue a minor in art history. Consult a CAM advisor for further details.

Program Requirements

FINE 2600 - History of Art I (Survey)

Summer 2010 Registration **F A 2600**

(This course is an approved Colorado Statewide Guaranteed Transfer Course).
Overview of various cultures of humankind from cave painting to the Renaissance. **Semester Hours:** 3to 3 **GT Pathways Category Key:** GT-AH1
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 2610 - History of Art II (Survey)

Summer 2010 Registration **F A 2610**

Survey of various cultures of humankind from the Renaissance to the present. **Semester Hours: 3 to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

_____ - Upper-division Art History Electives (9 semester hours)

_____ - Studio Arts Elective (3 semester hours)

Total: 18 Hours

Astrophysics Minor

Astrophysics is an important and well-represented subdiscipline of physics. It includes the study of the solar system, galactic and extra-galactic astrophysics, as well as cosmology. A minor in this field combines a theoretical approach with observational analysis. There is also opportunity to do research in this field.

While the Department of Physics offers minors in both physics and astrophysics, it is not possible to receive minors in both fields. Physics majors may elect to receive only the astrophysics minor from the department.

The astrophysics minor requires a total of 17 semester hours, in which no grade below a C (2.0) may be used to meet the requirements for the minor. At least 6 semester hours taken for the minor must be completed at the Downtown Campus. Requirements for the minor in astrophysics may be used to fulfill the requirements of the major in physics. However, a student majoring in physics who wants to minor in astrophysics needs to take 15 semester hours in astrophysics that do not overlap with the major.

Program Requirements

Required Physics Courses:

PHYS 1052 - General Astronomy I

Summer 2010 Registration **PHYS 1052**

The history of astronomy is studied from early civilizations to the present. The basic motions of the earth, moon, sun, and planets are discussed both qualitatively and quantitatively, using elementary principles of physics. Properties of our solar system are discussed in detail, including results from unmanned space probes. Note: An additional

30 hours of laboratory work (at times to be arranged), plus appropriate report preparation time, are required to complete laboratory component of the course. Prereq: High school algebra or equivalent. **Semester Hours:** 4to 4**GT Pathways Category Key:** GT-SC1

Registration is changing. Visit our website for details ucdenver.edu/registration.

Either of the following two sequences:

PHYS 2010 - College Physics I

Summer 2010 Registration **PHYS 2010**

(This course is an approved Colorado Statewide Guaranteed Transfer Course). Mechanics, heat and sound. Prereq: College algebra and trigonometry. **Semester Hours:** 4to 4**GT Pathways Category Key:** GT-SC1

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 2020 - College Physics II

Summer 2010 Registration **PHYS 2020**

Electricity, magnetism, light and modern physics. Prereq: PHYS 2010. **Semester Hours:** 4to 4**GT Pathways Category Key:** GT-SC1

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 2030 - College Physics Lab I

Summer 2010 Registration **PHYS 2030**

Semester Hours: 1to 1**GT Pathways Category Key:** GT-SC1

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 2040 - College Physics Lab II

Summer 2010 Registration **PHYS 2040**

Prereq: PHYS 2030. **Semester Hours:** 1to 1**GT Pathways Category Key:** GT-SC1

Registration is changing. Visit our website for details ucdenver.edu/registration.

Sequence Total: 10 Hours

-OR-

PHYS 2311 - General Physics I: Calculus-Based

Summer 2010 Registration **PHYS 2311**

Covers vector displacement, uniform and accelerated motion, force, momentum, energy, rotating systems, oscillations, and an introduction to thermodynamics. Emphasis is on

basic principles. Coreq: MATH 1401. **Semester Hours:** 4to 4
Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 2321 - General Physics Lab I

Summer 2010 Registration **PHYS 2321**

Semester Hours: 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 2331 - General Physics II: Calculus-Based

Summer 2010 Registration **PHYS 2331**

Covers electrostatics, magnetic fields, electromagnetic waves (including light), and optics. Prereq: PHYS 2311. Coreq: MATH 2411. **Semester Hours:** 4to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 2341 - General Physics Lab II

Summer 2010 Registration **PHYS 2341**

Prereq: PHYS 2321. **Semester Hours:** 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

Sequence Total: 10 Hours

Elective Physics Courses

Choose one:

GEOL 1302 - Introduction to Astrogeology

Summer 2010 Registration **GEOL 1302**

Surveys the geology of the planets and their environments in space, including the origin and destiny of the universe. Intended for non-majors, the course provides an introduction to the geological origin, evolution, structure, and geomorphology of the planets. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 3040 - Modern Cosmology

Summer 2010 Registration **PHYS 3040**

Designed for non-majors, covering the large-scale structure of the universe. Topics covered are gravitational concepts, neutron stars, pulsars, black holes, big bang universe and cosmological tests. Prereq: PHYS 2010 or equivalent. **Semester Hours:**

3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 3050 - General Astronomy II

Summer 2010 Registration **PHYS 3050**

Evolution of our sun and other stars is studied, as well as the methods used to gain the information. Discussion includes objects such as neutron stars, novae and supernovae, and black holes. Large-scale structures, including clusters and galaxies, are studied.

Prereq: PHYS 1052, 2010 or 2311. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 3060 - Astronomical Image Processing Lab

Summer 2010 Registration **PHYS 3060**

Techniques in digital image processing. Emphasis on data reduction of astronomical images, processed and reduced on the department's own computer and software platform. Exercise and project oriented. Prereq: MATH 2411 or PHYS 2811 or 1052 and PHYS 2020. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 3840 - Independent Study: PHYS

Summer 2010 Registration **PHYS 3840**

Note: Students must check with a faculty member before taking this course. **Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 3939 - Internship/Cooperative Education

Summer 2010 Registration **PHYS 3939**

Designed experiences involving application of specific, relevant concepts and skills in supervised employment situations. Prereq: Junior standing and 2.75 GPA. **Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 4840 - Independent Study: PHYS

Summer 2010 Registration **PHYS 4840**

Note: Students must check with a faculty member before taking this course. **Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 4920 - Advanced Undergraduate Seminar

Summer 2010 Registration **PHYS 4920**

Studies a focused topic such as: size and age of the universe, critical phenomena, non-linear optics, energy, fiber-optic communications, among others. Students research these topics and give a seminar outlining their findings. Prereq: PHYS 2811 or permission of instructor. **Semester Hours:** 1 to 1
Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 4931 - Internship in Applied Physics

Summer 2010 Registration **PHYS 4931**

Lab experience at major federal and industrial laboratories; an alternative means by which senior physics students complete their senior lab requirement. Note: To be taken in lieu of PHYS 4711 and/or 4721. Prereq: PHYS 3721. **Semester Hours:** 2 to 4
Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 4980 - Advanced Physics Topics

Summer 2010 Registration **PHYS 4980**

Covers a particular topic, as announced in the 'Schedule Planner.' Note: May be taken more than once for credit in different topics. Prereq: PHYS 2811. **Semester Hours:** 1 to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 3 Hours

Minor Total: 17 Hours

*Topics in these classes vary. See departmental advisor for approval.

Biology Minor

For a biology minor, students must complete all biology core requirements (22 hours), of which a minimum of 9 hours must be completed in residence on the UC Denver Downtown Campus. The minimum grade in each UC Denver course is C- (1.7); however, a GPA of 2.5 is required in biology courses taken at UC Denver to complete the minor. In addition, students must complete one year of general chemistry including laboratory with a grade of C- (1.7) or higher.

Course Requirements

BIOL 2051 - General Biology I

Summer 2010 Registration **BIOL 2051**

Introduces four major areas of study: (1) the chemistry of biological systems; (2) the structure and function of the cell; (3) cellular energy transformations (photosynthesis and respiration); and (4) genetics (mitosis, meiosis, patterns of inheritance, molecular genetics). Note: Biology and health science (pre-med, pre-vet, pre-physical therapy, etc.) majors must also take the accompanying laboratory - BIOL 2071. Prereq: CHEM 1000 or high school chemistry required. **Semester Hours:** 3to 3**GT Pathways Category Key:** GT-SC1

Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 2071 - General Biology Laboratory I

Summer 2010 Registration **BIOL 2071**

Introduces the basic scientific approach and report preparation through exercises and experiments in cell biology, basic biochemical techniques, genetics, molecular genetics and applications of biotechnology. Note: Exercises corresponding to topics in BIOL 2051. Coreq: BIOL 2051. **Semester Hours:** 1to 1**GT Pathways Category Key:** GT-SC1
Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 2061 - General Biology II

Summer 2010 Registration **BIOL 2061**

This course is a continuation of BIOL 2051. Introduces four major areas of study: (1) evolution, (2) animal structure and function, (3) plant structure and function and (4) ecology. Note: Biology and health science (pre-med, pre-vet, nursing, etc.) majors must also take the accompanying laboratory - BIOL 2081. Prereq: BIOL 2051 or equivalent with a grade of "C" (2.0) or higher. **Semester Hours:** 3to 3**GT Pathways Category Key:** GT-SC1

Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 2081 - General Biology Laboratory II

Summer 2010 Registration **BIOL 2081**

Study of evolution, plant and animal anatomy, developmental biology; includes two off-campus ecology field trips. Note: Exercises corresponding to topics in BIOL 2061. Prereq: BIOL 2071 or equivalent with a grade of "C" (2.0) or higher; Coreq: BIOL 2061. **Semester Hours:** 1to 1**GT Pathways Category Key:** GT-SC1
Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 3411 - Principles of Ecology

Summer 2010 Registration **BIOL 3411**

A lecture course that examines the interrelationships between organisms and their environments. Subject matter includes organism, population and ecosystem levels of study and application to current environmental issues. The emphasis is on the underlying principles of ecology that involve all types of organisms. Note: Satisfies core ecology requirement for biology major. May not be used as upper division biology elective. No co-credit with BIOL 3412. Prereq: One year of general biology with a grade of "C" (2.0) or higher. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

BIOL 3412 - Fundamentals of Applied Ecology

Summer 2010 Registration **BIOL 3412**

Ecology is the science of interrelationships between organisms, including humans and their environment. This lecture course examines applications of ecological principles to human needs and environmental protection. Covers the ecology of humans and managed systems. Note: Satisfies core ecology requirement for biology major. May not be used as upper division biology elective. No co-credit with BIOL 3411. Prereq: One year of general biology with a grade of "C" (2.0) or higher. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 3611 - General Cell Biology

Summer 2010 Registration **BIOL 3611**

Covers the structure and function of the cell including bioenergetics, membranes, secretion, respiration and the cell cycle. Prereq: One year of general biology with a grade of "C" (2.0) or higher and one year of general chemistry. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 3832 - General Genetics

Summer 2010 Registration **BIOL 3832**

Introduces molecular, classical, developmental and population genetics. Prereq: One year of general biology with a grade of "C" (2.0) or higher. **Semester Hours:** 4to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

One of the following structure/function courses:

BIOL 3225 - Human Physiology

Summer 2010 Registration **BIOL 3225**

The basic orientation of the course is toward understanding the functioning of the body as a set of homeostatic mechanisms. Particular emphasis is placed on membrane

potentials, muscle, circulation, respiration, digestion, the kidney, the control of metabolism and acid-based balance. Prereq: One year of general biology, general cell biology and one year of chemistry with grades of 'C' (2.0) or higher. **Semester Hours:** 4to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 3244 - Human Anatomy

Summer 2010 Registration **BIOL 3244**

Introduces the structural aspects of the human body. Anatomical models, microscope slides and dissections, including human cadavers are used in the lab. Prereq: one year of general biology with a grade of "C" (2.0) or higher. **Semester Hours:** 4to 4
Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 3654 - General Microbiology

Summer 2010 Registration **BIOL 3654**

Covers all aspects of the biology of microorganisms: their cellular structures and function, growth and metabolism, general and molecular genetics, diversity and interactions with other organisms and the environment (ecology). The objective is to provide students with a thorough introduction to microbiology including basic microbiological laboratory techniques. Note: General cell biology or general genetics is recommended. Prereq: One year of general biology and one year of general chemistry with grades of "C" (2.0) or higher. **Semester Hours:** 4to 4
Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 4335 - Plant Science

Summer 2010 Registration **BIOL 4335**

Lecture, lab and field trips. An in-depth study of flowering plants, including embryology, structure, function, reproduction, ecology and evolution of the group. Emphasis is placed upon morphology and anatomy at all stages of plant development. Prereq: One year of general biology with a grade of "C" (2.0) or higher. Cross-listed with BIOL 5335. **Semester Hours:** 4to 4
Registration is changing. Visit our website for details ucdenver.edu/registration.

Ancillary chemistry courses:

CHEM 2031 - General Chemistry I

Summer 2010 Registration **CHEM 2031**

Topics include chemical structure, atomic and molecular properties, molecular geometry

and bonding, and gas laws. Prepares students to take upper division chemistry courses. Note: a beginning course for science majors, medical technologists, pre-medical and pre-dental students. Prereq: One year of high school chemistry or CHEM 1000 and MATH 1110 (or high school equivalent); Coreq: CHEM 2038. **Semester Hours:** 3to 3**GT Pathways Category Key:** GT-SC1
Registration is changing. Visit our website for details ucdenver.edu/registration.

CHEM 2038 - General Chemistry Laboratory I

Summer 2010 Registration **CHEM 2038**

Students perform laboratory experiments on topics covered in CHEM 2031 and gain experience in observing, recording, and interpreting physical and chemical phenomena. Note: Laboratory to accompany CHEM 2031. Coreq: CHEM 2031. **Semester Hours:** 1to 1**GT Pathways Category Key:** GT-SC1
Registration is changing. Visit our website for details ucdenver.edu/registration.

CHEM 2061 - General Chemistry II

Summer 2010 Registration **CHEM 2061**

(Continuation of CHEM 2031.) Topics include kinetics, equilibria and thermodynamics. Prereq: CHEM 2031; Coreq: CHEM 2068. **Semester Hours:** 3to 3**GT Pathways Category Key:** GT-SC1
Registration is changing. Visit our website for details ucdenver.edu/registration.

CHEM 2068 - General Chemistry Laboratory II

Summer 2010 Registration **CHEM 2068**

Students gain experience with laboratory technique and elementary chemical instrumentation. Note: Laboratory to accompany CHEM 2061 and a continuation of CHEM 2038. Prereq: CHEM 2038; Coreq: CHEM 2061. **Semester Hours:** 2to 2**GT Pathways Category Key:** GT-SC1
Registration is changing. Visit our website for details ucdenver.edu/registration.

Minor Total: 31 Hours

Business Administration Minor

Students in other undergraduate schools and colleges at the Downtown Campus wishing to take a minor in business administration must have a 2.0 GPA to enter as a business minor plus a 2.0 GPA in business courses.

Prerequisites

ISMG 2050 - Introduction to Business Problem Solving

Summer 2010 Registration **ISMG 2050**

Focuses on the technology and problem solving skills necessary for students to succeed both at school and in the business world. Focuses on business decision making using spreadsheets, database and web tools. Students solve problems in statistics, accounting, finance, marketing, management and information systems. The objective is to provide problem solving methods necessary for students to succeed in the business community. This is a business core course therefore a grade of a 'C' or better must be earned to satisfy Business graduation and prerequisites for other business courses. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 1070 - Algebra for Social Sciences and Business

Summer 2010 Registration **MATH 1070**

Topics in algebra designed for students who intend to take business calculus. Functions, graphs, scatter plots, curve-fitting, solving systems of equations, polynomial and rational functions, and selected other topics. Note: Graphics calculator required. No co-credit with MATH 1110 or MATH 1130. Prereq: intermediate algebra and satisfactory score on the placement exam. **Semester Hours:** 3to 3 **GT Pathways Category Key:** GT-MA1
Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 1110 - College Algebra

Summer 2010 Registration **MATH 1110**

Topics in algebra designed for students who intend to take the calculus sequence. Functions, domains, ranges, graphs, data scatter plots and curve fitting, solving equations and systems of equations, polynomial functions, rational functions, and selected other topics. Graphic calculators and/or computer algebra systems are used extensively. Applications are emphasized. Note: No co-credit with either MATH 1070 or 1130. Prereq: intermediate algebra and satisfactory score on the placement exam. **Semester Hours:** 3to 3 **GT Pathways Category Key:** GT-MA1
Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 1080 - Polynomial Calculus

Summer 2010 Registration **MATH 1080**

A one-semester course in single-variable calculus. Topics include limits, derivatives, differentiation rules, integration and integration rules. Emphasis is on applications to business and social sciences. Note: No knowledge of trigonometry is required. Those planning to take more than one semester of calculus should take MATH 1401 instead of

MATH 1080. Prereq: MATH 1070 or 1110. No co-credit with MATH 1401. **Semester Hours: 3to 3GT Pathways Category Key: GT-MA1**
Registration is changing. Visit our website for details ucdenver.edu/registration.

DSCI 2010 - Business Statistics

Summer 2010 Registration **DSCI 2010**

Basic principles of probability and statistics with applications in business. Includes descriptive statistics, probability and probability distributions, data collection, sampling distributions, statistical inference, simple regression and the use of a computer to perform statistical analysis. Students are required to present their analyses in written and/or oral form and defend their conclusions. This is a business core course. Therefore a grade of a 'C' or better must be earned to satisfy Business graduation requirements and prerequisites for other business courses. Prereq: MATH 1070, MATH 1080, and computer literacy (working knowledge of basic operating system and file manipulation commands, email, the world-wide web, a word processing package and spreadsheets). **Semester Hours: 3to 3**
Registration is changing. Visit our website for details ucdenver.edu/registration.
a statistics class approved by the Business School and

ECON 2022 - Principles of Economics: Microeconomics

Summer 2010 Registration **ECON 2022**

Topics include price determination in a market system composed of households and firms: resource allocation and efficiency of various market structures, plus others at the discretion of the instructor. Note: Complementary to and normally taken following ECON 2012. ECON 2012 is not a prerequisite for ECON 2022. **Semester Hours: 3to 3GT Pathways Category Key: GT-SS1**
Registration is changing. Visit our website for details ucdenver.edu/registration.

Required Courses

MGMT 1000 - Introduction to Business

Summer 2010 Registration **MGMT 1000**

This course will introduce students to the nature and role of business in our society. Problems confronting business are surveyed from a management, financial, economic and marketing viewpoint. Career opportunities in business are also considered. Students are advised to take this course during their freshman year and may not take it in the junior or senior years. Prereq: Open to freshman and sophomores, non-degree students and music majors at all levels. **Semester Hours: 3to 3When Offered: FASPRSUM**
Registration is changing. Visit our website for details ucdenver.edu/registration.

ACCT 2200 - Financial Accounting and Financial Statement Analysis

Summer 2010 Registration **ACCT 2200**

The financial accounting process, the role of the profession and the analysis of financial statements. Principal focus on interpretation of financial statements, with emphasis on asset and liability valuation problems and the determination of net income. Prereq: MATH 1070 and sophomore standing. A grade of 'C' or better is required in this course to proceed to ACCT 2220. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

BLAW 3000 - Legal and Ethical Environments of Business I

Summer 2010 Registration **BLAW 3000**

Addresses the most fundamental ways the legal and ethical environments of business affect managers. Students are taught to identify legal issues, make ethical judgments about business conduct, and understand the ways ethical and social issues are developed. Topics include actual analysis of legal and ethical issues, ethical theory and its application, law-making processes, contracts, torts, product liability, criminal law, constitutional law and real property. This is a business core course therefore a grade of "C" or better must be earned to satisfy Business graduation requirements and prerequisites for other business courses. Prereq: Junior Standing. **Semester Hours:** 3to 3**When Offered:** FASPRSUM
Registration is changing. Visit our website for details ucdenver.edu/registration.

MKTG 3000 - Principles of Marketing

Summer 2010 Registration **MKTG 3000**

Focuses on the basic marketing concepts of Buyer Behavior, Marketing Research, Marketing Planning and Implementation and the marketing process of product, price, distribution and promotion. This is a business core course therefore a grade of a 'C' or better must be earned to satisfy graduation requirements. Prereq: Junior standing. **Semester Hours:** 3to 3**When Offered:** FASPRSUM
Registration is changing. Visit our website for details ucdenver.edu/registration.

FNCE 3000 - Principles of Finance

Summer 2010 Registration **FNCE 3000**

This course provides an introduction to financial markets and institutions, interest rates and the time value of money, principles of security valuation, concepts of risk and return, costs of capital and capital budgeting. Note: This course is required in the Business Core. A grade of 'C' or better must be earned to receive credit as a core course and to take subsequent courses for which it is a prerequisite. Prereq: MATH 1070 or MATH 1080 and MATH 1110 and DSCI 2010, ACCT 2200, ECON 2012, ECON 2022 and junior

standing. **Semester Hours:** 3 to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MGMT 3000 - Managing Individuals and Teams

Summer 2010 Registration **MGMT 3000**

Focuses on helping students understand how to manage individuals and groups effectively. Students are encouraged to know themselves better and how their behavior affects how they deal with organizational situations; they also learn how individuals differ and how to design, manage and work in a team. This is a business core course therefore a grade of a 'C' or better must be earned to satisfy graduation requirements.

Prereq: Junior standing. **Semester Hours:** 3 to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Twelve of these 18 hours must be taken while in residence at the Downtown Campus. If the student has already taken the equivalent of one or more of these courses, other higher-level business courses may be substituted with Business School approval. Up to 6 hours of the 18 required business courses may be taken at another institution. Transfer credit will be granted on the same basis that transfer credit is granted for courses taken by business majors.

Chemistry Minor

The objective of the chemistry minor is to provide broad introductory course work and laboratory experience to science majors without the more technical mathematical and chemical prerequisites required of the chemistry major. The chemistry minor is open to all CLAS students and should prove beneficial for science majors, pre-professional health science majors and students seeking science education certification.

Course work and grade requirements that must be satisfied to obtain a chemistry minor include:

- a minimum of 20 semester hours of chemistry courses
- a minimum of 10 upper-division chemistry hours
- upper-division course work must include three of the six subdisciplines that comprise chemistry: analytical, biochemistry, inorganic, organic, physical and environmental chemistry
- a minimum 2.0 GPA for chemistry courses taken at UC Denver
- all chemistry minor courses must be taken for a letter grade rather than with the pass/fail grading option
- to satisfy the department residency requirement, a minimum of 7 upper-division hours of chemistry must be taken at the Downtown Campus

Course Requirements

All upper division chemistry courses at UC Denver will satisfy course work requirements for the minor. Furthermore, the Department of Chemistry offers courses that have minimum chemistry and mathematics prerequisites and should be considered for the chemistry minor degree.

Analytical

CHEM 3111 - Analytical Chemistry

Summer 2010 Registration **CHEM 3111**

Topics include sampling, volumetric analyses, instrumental analyses and statistical treatment of data. Note: Lecture course for chemistry, biology, medical technology and environmental students. Prereq: CHEM 2061. **Semester Hours:** 3to 3**When Offered:** FALL

Registration is changing. Visit our website for details ucdenver.edu/registration.

CHEM 3118 - Analytical Chemistry Laboratory

Summer 2010 Registration **CHEM 3118**

Students gain experience with technique of sampling and analysis, including an introduction to instrumental methods. Note: Laboratory course to be taken concurrently with CHEM 3111. Prereq: CHEM 2068; Coreq: CHEM 3111. **Semester Hours:** 2to 2**When Offered:** FALL

Registration is changing. Visit our website for details ucdenver.edu/registration.

Biochemistry

CHEM 3810 - Biochemistry

Summer 2010 Registration **CHEM 3810**

Introduces the principles of biochemistry for science and health science-oriented majors. Designed to cover the important aspects of modern biochemistry. Prereq: BIOL 2061 and CHEM 3411. **Semester Hours:** 4to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

Organic

CHEM 3411 - Organic Chemistry I

Summer 2010 Registration **CHEM 3411**

Lecture course designed to introduce the study of structure, reactions, properties, and mechanisms of organic molecules. Prereq: CHEM 2061. **Semester Hours:** 4to 4
Registration is changing. Visit our website for details ucdenver.edu/registration.

CHEM 3418 - Organic Chemistry Laboratory I

Summer 2010 Registration **CHEM 3418**

Laboratory course to augment concepts of CHEM 3411, illustrating the practical aspects of organic chemistry. Prereq: CHEM 2068; Prereq or Coreq: CHEM 3411. **Semester Hours:** 1to 1
Registration is changing. Visit our website for details ucdenver.edu/registration.

CHEM 3421 - Organic Chemistry II

Summer 2010 Registration **CHEM 3421**

Lecture course designed to introduce the study of structure, reaction, properties and mechanisms of organic molecules. Note: Continuation of CHEM 3411. Prereq: CHEM 3411. **Semester Hours:** 4to 4
Registration is changing. Visit our website for details ucdenver.edu/registration.

CHEM 3428 - Organic Chemistry Laboratory II

Summer 2010 Registration **CHEM 3428**

Laboratory course to augment concepts of CHEM 3421, illustrating the practical aspects of organic chemistry. Prereq: CHEM 3418; Prereq or Coreq: CHEM 3421. **Semester Hours:** 1to 1
Registration is changing. Visit our website for details ucdenver.edu/registration.

CHEM 3498 - Honors Organic Chemistry Laboratory II

Summer 2010 Registration **CHEM 3498**

In small groups, students use the chemical literature to devise multi-step syntheses and determine reaction mechanisms for organic compounds. Note: Laboratory course required for chemistry majors. Open to non-majors on approval of the instructor. Prereq or Coreq: CHEM 3491. **Semester Hours:** 2to 2
Registration is changing. Visit our website for details ucdenver.edu/registration.

Inorganic

CHEM 3011 - Inorganic Chemistry

Summer 2010 Registration **CHEM 3011**

The fundamentals of inorganic chemistry, including: atomic, molecular and crystal structures; the energetics of reactions, acid-base interactions; and the chemistry of main group and transition metal elements, including coordination and organometallic chemistry. Prereq or Coreq: CHEM 3421 or 3491. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

Physical

Course selections to be announced.

Environmental

CHEM 4700 - Environmental Chemistry

Summer 2010 Registration **CHEM 4700**

A discussion of the sources, reactions, transport, effects, and fates of chemical species in the water, soil, and air environments. Prereq: CHEM 3111 or 3411. Cross-listed with CHEM 5700. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

To register your minor in chemistry, please visit the CLAS advising office in NC 4002. After establishing your minor status, you are encouraged to meet with the chemistry minor advisor, Professor Mark Anderson in NC 3002C.

Chinese Studies Minor

The minor requires a total of 21 semester hours. A minimum of 15 semester hours must be taken from Downtown Campus faculty. All courses must be completed with a grade of C (2.0) or better.

Requirements for the Minor

Required Courses

CHIN 1010 - Beginning Chinese I

Summer 2010 Registration **CHIN 1010**

A basic introduction to Chinese language and culture. Students study pronunciation, vocabulary, grammar and simple writing techniques. Note: Students may not enroll in any lower division (1000/2000) language skills course in which their level of proficiency exceeds that of the course. Students placing into a course through any means other than following the regular sequence must consult with an appropriate faculty member of the Dept. of Modern Languages prior to enrollment. No previous study of Chinese is required. **Semester Hours:** 5to 5

Registration is changing. Visit our website for details ucdenver.edu/registration.

CHIN 1020 - Beginning Chinese II

Summer 2010 Registration **CHIN 1020**

(Continuation of CHIN 1010.) Further practice of pronunciation, study of vocabulary, grammar, and simple writing techniques. Note: Students may not enroll in any lower division (1000/2000) language skills course in which their level of proficiency exceeds that of the course. Students placing into a course through any means other than following the regular sequence must consult with an appropriate faculty member of the Dept. of Modern Languages prior to enrollment. Prereq: CHIN 1010. **Semester Hours:** 5to 5

Registration is changing. Visit our website for details ucdenver.edu/registration.

CNST 1000 - China and the Chinese

Summer 2010 Registration **CNST 1000**

A multidisciplinary introduction to Chinese society both past and present. Prehistory, birth of imperial China, literature, philosophy, religion, nationalism, revolution, modernization, contemporary life, social structure, gender, food, family life, population policy, ethnicity, popular culture, economics and politics. Note: This course is taught in English. **Semester Hours:** 3to 3 **GT Pathways Category Key:** GT-AH1

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 13 Hours

**Note:* CNST 1000 should be taken toward the beginning of the minor.

Additional Courses

An additional 8 hours of course work should be selected from the following list of courses:

ANTH 4000 - Special Topics in Anthropology

Summer 2010 Registration **ANTH 4000**

Designed to give students a chance to evaluate critically some practical or theoretical problem under faculty supervision and to present results of their thinking to fellow students and instructors for critical evaluation. Prereq: Permission of instructor. Cross-listed with ANTH 5000. **Semester Hours:** 1to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 4995 - Travel Study

Summer 2010 Registration **ANTH 4995**

A flexible format that permits courses to be taught in various areas of the world. Cultures of the Himalayas. Concerned broadly with contemporary Himalayan culture. Focuses on Tibetan cultures and the Tibetan diaspora, and the Nepalese (Newari) culture of the Katmandu Valley. The goals for this course are: to acquaint the student with social, political and cultural features of this part of the world; to teach, through directed field experiences, how cultural anthropology is practiced; to understand how the process of tourism differs from the study of anthropology; how tourism, however it is practiced, changes in fundamental ways those subject to it. The Arts of Self and Society in Contemporary China. An intensive introduction to contemporary conditions and issues in the People's Republic of China, including social relations, popular culture, eating practices, religious practices and everyday life. Uses a combination of readings, lectures, field trips to local sites and ethnographic field projects. Usually situated in Kunming, Yunnan province, in southwest China, but the location may vary. Note: Students enroll additionally in Chinese language classes at levels from beginning to advanced. Prereq: Permission of instructor. Cross-listed with ANTH 5995. **Semester Hours:** 3to 9

Registration is changing. Visit our website for details ucdenver.edu/registration.

CHIN 2110 - Second Year Chinese I

Summer 2010 Registration **CHIN 2110**

Continuing development of listening, speaking, reading, and writing skills in practical Chinese, with grammar review and introduction of the Chinese dictionary. In addition to contemporary Chinese, there is some emphasis on Chinese classical materials, such as proverbs. Note: Students may not enroll in any lower division (1000/2000) language skills course in which their level of proficiency exceeds that of the course. Students placing into a course through any means other than following the regular sequence must consult with an appropriate faculty member of the Dept. of Modern Languages prior to enrollment. Prereq: CHIN 1020. **Semester Hours:** 5to 5

Registration is changing. Visit our website for details ucdenver.edu/registration.

CHIN 2120 - Second Year Chinese II

Summer 2010 Registration **CHIN 2120**

(Continuation of CHIN 2110.) Satisfies the fourth semester language requirement at most graduate schools. Note: Students may not enroll in any lower division (1000/2000) language skills course in which their level of proficiency exceeds that of the course. Students placing into a course through any means other than following the regular sequence must consult with an appropriate faculty member of the Dept. of Modern Languages prior to enrollment. Prereq: CHIN 2110. **Semester Hours:** 5 to 5
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 4750 - Arts of China

Summer 2010 Registration **F A 4750**

Surveys Chinese painting, sculpture, and architecture from the Neolithic period through the present era, including the art of Tibet. Prereq: FINE 2600 or 2610. Cross-listed with FINE 5750. **Semester Hours:** 3 to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 3160 - Geography of China

Summer 2010 Registration **GEOG 3160**

Geographic survey of the physical, cultural, and economic features characterizing the geography of China. **Semester Hours:** 3 to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4420 - Traditional China: China to 1600

Summer 2010 Registration **HIST 4420**

A general introduction to the history of China from the advent of historic civilization to the point of the great encounter with the West. Cross-listed with HIST 5420. **Semester Hours:** 3 to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4421 - Modern China

Summer 2010 Registration **HIST 4421**

Surveys Chinese history in the modern era. Includes examination of Western domination of China; revolution and internal fragmentation of China; Japanese attacks and World War II; and civil war and the communist revolution. Cross-listed with HIST

5421.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4186 - East Asia in World Affairs

Summer 2010 Registration P SC 4186

Political and economic systems and foreign policies of East Asian powers, such as China, Japan, Taiwan, South Korea and Hong Kong; interactions of these powers and their collective economic and political roles in world affairs; major theoretical approaches to the study of East Asian powers.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4615 - Politics and Government of China

Summer 2010 Registration P SC 4615

Political and governmental changes within China, from the 19th century to the present. Primary emphasis on contemporary political systems and sociopolitical problems. China's struggle for independence and economic development. The Chinese revolutions, Maoist communism, and the post-Maoist period.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4726 - Russian and Chinese Foreign Policy

Summer 2010 Registration P SC 4726

Foreign policies of Russia and China; relations with Western powers and the Third World; interaction of domestic developments and foreign policy; role of national interest, ideology, and elite personalities.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4995 - Travel Study Topics

Summer 2010 Registration P SC 4995

Students study various topics at an off-campus location, either a foreign country or another city or region in the United States, led by a Downtown Denver Campus instructor. Prereq: PSCI 1001 or 3022 or permission of instructor. Cross-listed with PSCI 5995.**Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Take under the topic title, "Window on China," for 3 semester hours.

PHIL 3666 - Asian Philosophies and Religions

Summer 2010 Registration **PHIL 3666**

We in the Western world encounter a vastly different world, a radically different "universe of meaning," when we examine the traditions of the East. Even what we tacitly assume to be "real" is claimed by the Hindus and Buddhists of India to be a grand illusion. The world of China is, again, very different from India. An examination of Tibetan and Japanese religious forms will conclude our study of Asian thought. Cross-listed with RLST 3400. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 3981 - Chinese Philosophy and Culture

Summer 2010 Registration **PHIL 3981**

China is a fascinating world with its own characteristic orientation to philosophical questions. Chinese thinkers produced the "Flowering of a Hundred Schools of Thought" in the Axial Age, the same period of time in which philosophy was coming to birth in ancient Greece. Covers some of the Chinese schools, including Confucianism, Taoism, Mohism, Legalis, Chinese "logic," and the later schools of Neo-Confucianism, Neo-Taoism and Chinese Buddhism. Cross-listed with RLST 3660. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 8 Hours

Minor Total: 21 Hours

* New courses may not appear in the course description section of this catalog. Contact the department for further information.

Communication Minor

Knowledge in an area of study, such as business, politics, biology or sociology, means little unless it can be communicated effectively. The minor in communication is designed to provide students who are not communication majors with knowledge and skills in communication that are useful in any discipline or profession.

The minor in communication requires 18 semester hours, with 12 hours of required courses and 6 hours of electives.

Requirements

Core Courses

COMM 1011 - Fundamentals of Communication

Summer 2010 Registration **CMMU 1011**

Studies communication theory and application. Topics include communication models, interpersonal communication and the concept of self, nonverbal communication, message preparation and analysis, and decision making. **Semester Hours:** 3to 3**GT**

Pathways Category Key: GT-SS3

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 2020 - Communication and Citizenship

Summer 2010 Registration **CMMU 2020**

Offers an introduction to debates about, and the different means of practicing, citizenship in America. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 2101 - Presentational Speaking

Summer 2010 Registration **CMMU 2101**

Theory and practice of presentational speaking in a variety of contexts to accomplish goals of asserting individuality, building community, securing adherence, discovering knowledge and belief, and offering perspectives. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 4200 - Persuasion

Summer 2010 Registration **CMMU 4200**

Examines influence and communication at individual, group, organizational and societal levels. a theoretical and applied analysis of persuasion, including examination of public opinion, individual attitudes, beliefs, values, sources, credibility, ethics, and certain message and audience variables. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 12 Hours

Elective Courses

In addition to the four courses specified above, students must take two upper-division courses (3000 level or above) to be selected with the aid of the undergraduate advisor in communication.

Total: 6 Hours

Minor Total: 18 Hours

Grade and Residency Requirements for Minors

A grade of C (2.0) or better must be earned in each course completed as part of the minor. No more than 6 of the semester hours for the minor may be transferred from another university.

Community Health Science Minor

To earn a minor in community health science, a minimum of 18 semester hours are required, of which 12 must be upper-division. Students must achieve no less than a C (2.0) in each course applied toward minor requirements. At least 12 semester hours must be taken from the Downtown Campus faculty. Note that additional HBSC courses are currently being developed to provide additional choices. As they are approved, these courses will appear on the HBS Web site, the online course descriptions and term schedule planner. (Note: HBS courses, in general, are 3 semester hours under the prefix HBSC.)

Program Requirements

Community Health Science Courses

Choose two:

HBSC 2001 - Introduction to Community and Population Health Science

Summer 2010 Registration **HBSC 2001**

Introduces undergraduate students to the mission, history, knowledge-base, values, concepts, and tools of community and population health science, a field that broadly encompasses health and the socio-behavioral sciences, and forms the core of public health. Provides an overview of the principal strategies and methods of public health. **Semester Hours:** 3to 3**GT Pathways Category Key:** GT-SS3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HBSC 3021 - Fundamentals of Health Promotion

Summer 2010 Registration **HBSC 3021**

Provides an overview of the field of health promotion, including an introduction to key

theories and methods, as well as exposure to the breadth of programs and diversity of settings through several case studies. Includes attention to health behaviors as contributors to current public health problems and community-based approaches to health promotion in addressing them. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HBSC 3031 - Health, Human Biology and Behavior

Summer 2010 Registration **HBSC 3031**

Introduces the study of human health and well-being, and the allied disciplines of epidemiology and demography. The course considers the nature of disease, health problems related to nutrition and the physical environment, and morbidity and mortality from an integrated "biobehavioral" perspective. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HBSC 3041 - Health, Culture and Society

Summer 2010 Registration **HBSC 3041**

A critical, holistic interpretation of health, illness, and human bodies that emphasizes power as a key social-structural factor in health and societal responses to illness. Explores those areas of social and cultural life where power differences are most evident in their impact on health. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 6 Hours

Methods Courses

Choose at least two:

GEOG 4235 - GIS Applications in the Health Sciences

Summer 2010 Registration **GEOG 4235**

Examines how GIS is used throughout the health care industry and public health. Covers environmental health, disease surveillance, and health services research. Students critically review current literature and gain hands-on experience with GIS software.

Prereq: GEOG 4080 or GEOG 5080, public health background, or consent of instructor.

Cross-listed with GEOG 5235, HBSC 7235. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HBSC 4021 - Community Health Assessment

Summer 2010 Registration **HBSC 4021**

Introduces applied methods of public health, including: analyzing community-level

assessment data, developing a casual model for selected health outcomes, maximizing community participation in the assessment process, developing assessments as a team, and setting the stage for effective intervention and evaluation. Prereq: Upper division standing, a course in statistics, and an introductory course in epidemiology (HBSC 4001, 5001). Cross-listed with HBSC 5021. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 6 Hours

Community Health Emphasis Courses

Choose at least two:

ANTH 4040 - Anthropology of Food and Nutrition

Summer 2010 Registration **ANTH 4040**

Examines the myriad relationships between food as a biological necessity and eating as a socially and culturally conditioned activity. Takes a biocultural perspective that considers not only the tremendous variety of foods we eat, but also the complex meanings and importance attached to food and eating. Prereq: Introductory course in anthropology. Cross-listed with ANTH 5040. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 4060 - Evolutionary Medicine

Summer 2010 Registration **ANTH 4060**

Applies evolutionary principles to an understanding of human health and illness. The view complements perspectives on health and disease emanating from biological and social sciences, but considers the health or disease process from the perspective of pathogen and host, current and previous environments, and various phases of the life cycle. Prereq: ANTH 1303. Cross-listed with ANTH 5060, HBSC 4060 and 5060. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 4090 - Political Economy of Drugs

Summer 2010 Registration **ANTH 4090**

Psychotropic drugs, both legal and illicit, are a predominant part of our everyday lives. This course examines their use and meaning within cultures, and the social, political and economic issues that surround their production, use and misuse. Prereq: introductory course in cultural anthropology. Cross-listed with ANTH 5090. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 4260 - Human Reproductive Ecology

Summer 2010 Registration **ANTH 4260**

Considers the determinants of fertility variation within and among traditional human societies. Biocultural and ecological perspectives on pubertal timing, marriage patterns, birth seasonality, duration of birth intervals and reproductive senescence. Prereq: ANTH 1303 or equivalent. Cross-listed with ANTH 5260. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 4560 - Human Ecology

Summer 2010 Registration **ANTH 4560**

Studies demographic and ecological variables as they relate to human populations. Aspects of natural selection, overpopulation and environmental deterioration are considered. Prereq: Introductory course in biological or physical anthropology. Cross-listed with ANTH 5560. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 4500 - Health Communication

Summer 2010 Registration **CMMU 4500**

Examines the role of communication in a wide range of health contexts. Topics include cultural constructions of health and illness, public health communication campaigns, client-provider interactions, telemedicine, community-based health programs and medical journalism. Cross-listed with COMM 5500. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 4620 - Health Risk Communication

Summer 2010 Registration **CMMU 4620**

Acquaints students with contemporary theory, research, and practice in health risk communication. Prereq: COMM 3120, COMM 4011, COMM 4200, COMM 4500, or permission of instructor. Cross-listed with COMM 5620, HBSC 4620, HBSC 5620, and ENVS 5620. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4020 - Earth Environments and Human Impacts

Summer 2010 Registration **GEOG 4020**

Basic concepts describing earth's biomes and physical environment are presented in a

systems context. Global warming assessment, from both political and scientific perspectives, is then presented. Model visualization of these concepts to consider human impacts on Earth's biomes is discussed. Earth system viewpoint, having links of Earth's biomes to oceans and atmosphere, completes the course discussion. Prereq: GEOG 1202 and 3232 or permission of instructor. Cross-listed with ENVS 5020, GEOL 4020.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4230 - Hazard Mitigation and Vulnerability Assessment

Summer 2010 Registration **GEOG 4230**

Examines hazard mitigation and its planning and policy implications, emphasizing how vulnerability assessments play an integral role. Students explore how mitigation minimizes the impacts from hazards and use GIS to conduct a local study. Prereq: GEOG 2202 or permission of instructor. Cross-listed with GEOG 5230.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HBSC 3010 - Evolution of Human Sexuality

Summer 2010 Registration **HBSC 3010**

Surveys the biological and social evolution of human sexuality from an interdisciplinary perspective. Encourages critical thinking about human sexual behavior and challenges assumptions about sexuality. Students explore what happens when sexual behaviors that have evolved over the millennia mix with the cultural, political, and economic influences imposed by contemporary civilization. Prereq: Introductory courses in anthropology, biology, psychology, sociology or political science.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HBSC 4010 - Global Health Studies I: The Biocultural Basis of Health

Summer 2010 Registration **HBSC 4010**

This course is concerned with the underlying biological and cultural determinants of health throughout the human life cycle in global and cross-cultural perspective. Note: The first of a two-course sequence in medical anthropology and global health studies; the second is HBSC 4020. Prereq: Upper division and/or graduate standing. Cross-listed with HBSC 5010, ANTH 4010 and 5014.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HBSC 4020 - Global Health Studies II: Comparative Health Systems

Summer 2010 Registration **HBSC 4020**

The course has three parts: (1) examines the social and cultural construction of sickness, systems of etiology cross culturally, the therapeutic encounter, varying roles of healer and patient, and the cultural basis of all healing systems; (2) considers health systems in the context of global health reform, and the history, organization, and roles of institutions of global health governance; and (3) considers the inter-relationship of health, foreign policy and global security. Prereq: Upper division and/or graduate standing. Cross-listed with HBSC 5020, ANTH 4020 and 5024. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HBSC 4080 - Global Health Practice

Summer 2010 Registration **HBSC 4080**

A travel-study course that provides students the opportunity to work on global health issues in the context of a supervised internship experience. In addition to a formal internship placement or directed research opportunity, students attend formal lectures and participate in seminars devoted to addressing those health issues most relevant to the country in which the course is being taught. Prereq: HBSC/ANTH 4010/5014, HBSC/ANTH 4020/5024, HLTH 6070 or equivalent. Cross-listed with HBSC 5080, ANTH 4080 and 5080. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HBSC 4200 - The Global HIV/AIDS Epidemic

Summer 2010 Registration **HBSC 4200**

Provides a foundation for a critical analysis of HIV/AIDS in global context, concerning topics such as disease, the body, ethnicity/race, gender, sexuality, risk, addiction, power, and culture together with a set of ethnographic texts that explore the epidemic's impact. Cross-listed with HBSC 5200. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4345 - Gender, Science, and Medicine: 1600 to the Present

Summer 2010 Registration **HIST 4345**

Examines the ways science and medicine have both shaped and been shaped by ideas about gender. Pays particular attention to the relationship between scientific/medical ideas about the sexes and the social organization of gender. Cross-listed with HIST 5345. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4346 - Medicine and Society: the Ancients to the Present

Summer 2010 Registration **HIST 4346**

Surveys change and continuity in definitions of health and illness, interactions between patients and practitioners, the practice of medical authority, and the relationships between science, clinical medicine, and the provision of health care. Cross-listed with HIST 5346. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4503 - Topics in History of Science

Summer 2010 Registration **HIST 4503**

Themes vary from year to year. Possible topics: Darwinism, Nature of Memory, Time and Space, Origins. Cross-listed with HIST 5503. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 3235 - Human Sexuality

Summer 2010 Registration **PSY 3235**

Examines the physiological, psychological, and social psychological bases of human sexuality. Research on the range of sexual behaviors, individual sexual response, sexual development, sexual dysfunction, and variants of sexual orientation. Prereq: PSYC 1000, 1005 and 2090, or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 3262 - Health Psychology

Summer 2010 Registration **PSY 3262**

An overview of the scientific study of attitudes, behaviors, and personality variables related to health and illness. Emphasis is on the interaction of biological, psychological, and social factors that cause illness and influence its treatment and prevention. Prereq: PSYC 1000, 2090 and 2220 or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 6 Hours

Total: 18 Hours

Computer Science Minor

The Department of Computer Science and Engineering offers a minor in computer science. The requirements for the minor are listed below.

Program Requirements

1. Any undergraduate student currently enrolled in a UC Denver degree program with a major other than computer science and engineering may earn a minor in computer science. This includes students from the College of Engineering and Applied Science, the College of Liberal Arts and Sciences, the Business School, the College of Arts & Media and the School of Public Affairs.
2. The student must complete the following classes with a grade of C- or better:

CSCI 1410 - Fundamentals of Computing

Summer 2010 Registration **C SC 1410**

First course in computing for those who will take additional computer science courses. Covers the capabilities of a computer, the elements of the computer language C++, and basic techniques for solving problems using a computer. Coreq: CSCI 1411. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 2421 - Data Structures and Program Design

Summer 2010 Registration **C SC 2421**

Topics include a first look at an algorithm, data structures, abstract data types, and basic techniques such as sorting, searching, and recursion. Programming exercises are assigned through the semester. Prereq: ENGL 1020, CSCI 2312. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 2511 - Discrete Structures

Summer 2010 Registration **C SC 2511**

Covers the fundamentals of discrete mathematics, including: logic, sets, functions, asymptotics, mathematical reasoning, induction, combinatorics, discrete probability, relations and graphs. Emphasis on how discrete mathematics applies to computer science in general and algorithm analysis in particular. Prereq: MATH 1401. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 1401 - Calculus I

Summer 2010 Registration **MATH 1401**

First course of a three-semester sequence (MATH 1401, 2411, 2421) in calculus. Topics covered include limits, derivatives, applications of derivatives, and the definite integral.

Note: Students cannot receive credit for both MATH 1080 and 1401. Prereq: MATH 1120 or 1130 and satisfactory score on the placement exam. **Semester Hours:** 4to 4GT

Pathways Category Key: GT-MA1

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 2411 - Calculus II*Summer 2010 Registration* **MATH 2411**

The second of a three-semester sequence (MATH 1401, 2411, 2421) in calculus. Topics covered include exponential, logarithmic, and trigonometric functions, techniques of integration, indeterminate forms, improper integrals and infinite series. Prereq: MATH 1401.

Semester Hours: 4to 4**GT Pathways Category Key:** GT-MA1

Registration is changing. Visit our website for details ucdenver.edu/registration.

3. The student must complete (with a C- or better) three additional computer science courses at the 3000 level or higher with the approval of an undergraduate advisor.

Note: Some courses at the 3000 level and above require additional prerequisites. A student must fulfill all prerequisites for the courses he/she selects. See the catalog course descriptions for prerequisite information for each course.

4. All computer science courses 3000 level and above must be taken at the Downtown Campus of UC Denver.

5. At the time of graduation, the student must have a UC Denver cumulative GPA of 2.0 and must have a 2.0 GPA for the eight classes taken for the minor.

6. The student must file a minor declaration form with an undergraduate advisor or with the Engineering Student Services office in North Classroom, 3024. For more information or an advising appointment, contact the Department of Computer Science and Engineering in North Classroom, 2605, or by phone at 303-556-4314.

Creative Writing Minor

The creative writing minor gives students the opportunity to complement their area of major study with experience writing and reading poetry or fiction.

Students minoring in creative writing must complete a total of 15 hours. None of the required courses may be taken pass/fail. Only courses completed with a grade of C (2.0) or better may be counted toward the minor. All upper-division courses must be taken with Downtown Campus English faculty. Students should take ENGL 1020 before beginning the minor.

Courses

Required Courses

ENGL 1400 - Introduction to Literary Studies

Summer 2010 Registration **ENGL 1400**

Helps students develop a sense of literary techniques and issues so they can bring an improved critical sensibility to their reading and writing. Note: Designed for students who plan to major in English or who are seriously interested in literature. Prereq or Coreq: ENGL 1020. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 1400 will be replaced during 2010-11 by ENGL 2450 when it becomes available

ENGL 2154 - Introduction to Creative Writing

Summer 2010 Registration **ENGL 2154**

Reading, discussing, writing short fiction and poetry in a workshop setting. Prereq: ENGL 1020. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 6 Hours

Requirements for poetry

ENGL 3020 - Poetry Workshop

Summer 2010 Registration **ENGL 3020**

Practical workshop for developing poetic craft, focusing on writing process and specialized topics. Prereq: ENGL 2154 for English majors and minors only; all others must obtain permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 4025 - Advanced Poetry Workshop

Summer 2010 Registration **ENGL 4025**

Focuses on the development of poetic craft. Prereq: ENGL 2154 and 3020 for English majors and minors only; all others must obtain permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 4160 - Poetics

Summer 2010 Registration **ENGL 4160**

"Mechanics" of poetry in English, including meter, rhythm, rhyme, line, and other systems of measurement and logic. Emphasis is on historical development of poetic art in English. Prereq: ENGL 1400 or permission of instructor. Cross-listed with ENGL

5160. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

ENGL 4166 - History of American Poetry

Summer 2010 Registration **ENGL 4166**

Examines major American poets and poetic trends from the colonial period to the present, with attention to cultural contexts and to development of distinctively American practices. Prereq: Must have 30 semester hours or permission of the instructor. Cross-listed with ENGL 5166. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

ENGL 4320 - History of Poetry in English

Summer 2010 Registration **ENGL 4320**

Studies the major schools and eras of English prosody, including the poetry of Great Britain and the United States, from the medieval period to the present. Prereq: Must have 30 semester hours or permission of the instructor. Cross-listed with ENGL

5320. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 9 Hours

Requirements for fiction

ENGL 3050 - Fiction Workshop

Summer 2010 Registration **ENGL 3050**

Practical workshop for developing narrative craft, focusing on writing process and specialized topics. Prereq: ENGL 2154 for English majors and minors only; all others must obtain permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 4055 - Advanced Fiction Workshop

Summer 2010 Registration **ENGL 4055**

Focuses on the development of narrative craft. Prereq: ENGL 2154 and 3050 for English majors and minors only; all others must obtain permission of instructor. **Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 4200 - History of the English Novel I

Summer 2010 Registration **ENGL 4200**

Rise and development of the English novel from its beginnings in the 18th century through the mid-19th century, including such writers as Defoe, Fielding, Austen and Shelley. Prereq: Must have 30 semester hours or permission of the instructor. Cross-listed with ENGL 5200. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

ENGL 4210 - History of the English Novel II

Summer 2010 Registration **ENGL 4210**

Overview of the English novel from mid-19th century to World War II, emphasizing the important developments which the form underwent in the hands of notable novelists, including Charles Dickens, the Brontes, George Eliot, Henry James, Joseph Conrad, D.H. Lawrence and Virginia Woolf. Prereq: Must have 30 semester hours or permission of the instructor. Cross-listed with ENGL 5210. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

ENGL 4230 - The American Novel

Summer 2010 Registration **ENGL 4230**

Surveys major developments in the American novel from the 18th century to the 21st century. Prereq: Must have 30 semester hours or permission of the instructor. Cross-listed with ENGL 5230. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

ENGL 4236 - The American Short Story

Summer 2010 Registration **ENGL 4236**

Traces the development of the short story in the United States, from its beginnings in colonial tales to its contemporary renaissance as a dominant literary form. Prereq: Must have 30 semester hours or permission of the instructor. Cross-listed with ENGL

5236. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 9 Hours

Minor Total: 15 Hours

Criminal Justice Minor

Program Requirements

A minor in criminal justice requires 18 semester hours of course work including the following:

CRJU 1001 - Introduction to Criminal Justice

Summer 2010 Registration **C J 1001**

This course is designed to provide an overview of the criminal justice process and the criminal justice system in general. Concepts of crime, deviance and justice are discussed and general theories of crime causality are examined. Special emphasis is placed on the components of the criminal justice system: the police, the prosecutorial and defense functions, the judiciary and the field of corrections. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 2041 - Crime Theory and Causes

Summer 2010 Registration **C J 2041**

This course provides a general survey of the nature and causes of crime and efforts of the criminal justice system to predict, prevent, modify and correct this behavior. This course involves a critical appraisal of various theories of crime causation, including an examination of biological, psychological, economic and sociological perspectives that explain crime and deviance. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 6 Hours

At least one of the following

CRJU 4042 - Corrections

Summer 2010 Registration **C J 4042**

This course consists of an overview of the field of penology and corrections. Attention is paid to conflicting philosophies of punishment, criminological theory as it applies to the field of corrections, the selectivity of the process through which offenders move prior to their involvement in correctional programs, alternative correctional placements and empirical assessments of the short and long-term consequences of one's involvement in correctional programs. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 4043 - Law Enforcement

Summer 2010 Registration **C J 4043**

This course presents an overview of the role of police in the United States. Attention is placed on the origins of policing, the nature of police organizations and police work, patterns of relations between the police and the public, discretion and police role in a sociolegal context. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 4044 - Courts and Judicial Process

Summer 2010 Registration **C J 4044**

This course examines the basic functions, structure and organization of the federal and state court system, with special attention on the criminal court system. This course also focuses on the influence of judicial behavior on the court process by examining judges' policy preferences, legal considerations, group processes within courts and courts' political and social environments. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 3-9 Hours

One to three additional elective courses in criminal justice or ancillary fields.

Digital Design Minor

Admission into the BFA digital design program or the digital design minor is by portfolio review. This review process occurs April 1 or November 1 (or on the following business day if the deadline falls on a weekend or holiday) during a student's sophomore year after a student has met the following eligibility criteria:

University of Colorado Denver Students

- You have completed, or are in the process of completing, the following Foundation Studio classes: FINE 1100, FINE 1400, FINE 2015, FINE

2405 and FINE 2415. (FINE 2405 and FINE 2415 should be taken after a student's freshman year and are offered only in fall.)

- A cumulative fine arts GPA of 2.75.

Transfer Students

- You have completed, and are transferring, a minimum of 24 credit hours from a previous institution.
- You have completed, or are in the process of completing, the equivalents of the following Foundation Studio classes: FINE 1100, FINE 1400, FINE 2405 and FINE 2415.
- A cumulative fine arts GPA of 2.75.

Students who are applying for entrance into the digital design program or minor are required to submit a portfolio that consists of (1) a written statement, (2) a designed portfolio on CD-ROM or DVD and (3) official or unofficial transcript(s) from all previous post-secondary education institutions with the understanding that digital design is a fall start program. Upon acceptance into the digital design program, students may register for upper-division digital design classes.

Those applying to the minor (and not the major) are not required to complete FINE 1100, FINE 1400 or FINE 2015 (or their college-level equivalents), but they must show equivalent studio work in their application portfolios.

Contact CAMadvising@ucdenver.edu for program and portfolio information, or contact the Digital Design Area Head Brian DeLevie at brian.delevie@ucdenver.edu.

Additional Information about the Minor

All courses for the minor must be taken at UC Denver unless approved otherwise by the digital design faculty advisor. Each course must be completed with a C/2.0 or better. Students pursuing a BA in fine arts (art history emphasis) may use up to 9 semester hours to fulfill major and minor requirements; the remaining semester hours must be taken in addition to the major requirements. Students pursuing a major in any of the studio arts may not pursue this minor. Consult a CAM advisor for further details.

Minor Course Requirements

FINE 2405 - Introduction to Digital Design

Summer 2010 Registration F A 2405

A project-based exploration of the design potentials of vector, raster and motion based digital media. Through project critiques, discussion and demonstration students will create projects that examine technology as an art medium and a design strategy. Note: Priority seating given to Digital Design and Transmedia majors. **Semester Hours:** 3 to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 2415 - Typography Studio

Summer 2010 Registration F A 2415

A studio course that teaches principles of typography and organization that is the foundation of design and artistic practice. Through drawing, editing, arranging and moving typographic forms, students will create projects that examine how typography is used to create meaning. Note: Priority seating given to Digital Design majors. Prereq: FINE 1400 or permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3414 - Motion Design I

Summer 2010 Registration F A 3414

A workshop devoted to understanding time based imagery that focuses on utilizing video and motion graphics as a creative communication tool. Students will create projects that explore topics using video, animation, time and motion using a non-linear digital editing software. Note: Priority seating given to Digital Design and Transmedia majors. Prereq: Digital Design majors: passed portfolio review, FINE 2405 and 2415. Digital Design minors: FINE 2405 and 2415. Transmedia: FINE 2405, 2510, 3505 - can be taken concurrently with 3424 and 3438, or permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3415 - Design Studio I

Summer 2010 Registration F A 3415

In a design laboratory students learn to turn ideas into visual solutions through the application of design principles. Through lectures, writings, readings, discussion and critiques of projects assigned students will build visual literacy in relation to digital design. Note: Priority seating given to digital design majors. Prereq: Digital Design majors: passed portfolio review, FINE 2405, 2415 can be taken concurrently with 3414 and 3424. Digital Design minors: FINE 2405 and 2415 or permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3424 - Interactive Media

Summer 2010 Registration F A 3424

A workshop exploring how interactive media can be used to convey a message and deliver information. Through critiques of projects, discussion and research, students will learn principles of user interface design, aesthetics and structure including their potential cultural impact. Note: priority seating given to Digital Design and Transmedia majors. Prereq: Digital Design majors: passed portfolio review, FINE 2405 and 2415. Digital Design minors: FINE 2405 and 2415. Transmedia: FINE 2405, 2510, 3505 - can be taken concurrently with 3414 and 3438 or permission of instructor. **Semester Hours:** 3to

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3434 - 3D Motion Design

Summer 2010 Registration F A 3434

A workshop devoted to 3D as a medium for creating works of art. Through demonstration, discussion, readings and project based explorations, students will learn to navigate and create in the 3D digital environment. Note: Priority seating given to Digital Design and Transmedia majors. Prereq: Digital Design majors: FINE 3410, FINE 3414 and FINE 3424; Digital Design minors and Transmedia majors: FINE 2405, FINE 3414 or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 4632 - Media History and Aesthetics

Summer 2010 Registration F A 4632

This survey class will present the current and historic impact of media technology on the arts and professional design practice. Through lectures, research and discussion students will become familiar with issues specific to digital media and design. Prereq: Digital Design majors: FINE 3410, portfolio review or permission of instructor. Cross-listed with FINE 5632. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 21 Hours

Economics Minor

Students minoring in economics must complete a minimum of 15 semester hours in economics. All course work must be completed at the Downtown Campus, or the Department of Economics reserves the right to test the student's competence in the material covered. No grade below C- will be counted toward the minor requirements.

Courses

ECON 2012 - Principles of Economics: Macroeconomics

Summer 2010 Registration **ECON 2012**

Covers topics of inflation, unemployment, national income, growth and problems of the national economy, stabilization policy, plus others at the discretion of the instructor.

Purpose is to teach fundamental principles, to open the field of economics in the way most helpful to further a more detailed study of special problems, and to give those not intending to specialize in the subject an outline of the general principles of economics. **Semester Hours:** 3to 3**GT Pathways Category Key:** GT-SS1

Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 2022 - Principles of Economics: Microeconomics

Summer 2010 Registration **ECON 2022**

Topics include price determination in a market system composed of households and firms: resource allocation and efficiency of various market structures, plus others at the discretion of the instructor. Note: Complementary to and normally taken following ECON 2012. ECON 2012 is not a prerequisite for ECON 2022. **Semester Hours:** 3to 3**GT**

Pathways Category Key: GT-SS1

Registration is changing. Visit our website for details ucdenver.edu/registration.

—plus—

Three upper-division electives in economics: **9 semester hours**

(ECON 3100 - Economics of Race and Gender is acceptable)

Total: 15 Hours

At least two upper-division courses must not overlap with courses required in the student's major program.

Educational Studies Minor

The preparation of high-quality K–12 teachers is dependent on both content knowledge and teaching methodologies. The College of Liberal Arts and Sciences, in cooperation with the School of Education & Human Development, offers an educational studies minor to assist undergraduate students unable to fit licensure course work into their bachelor's degree and to prepare them for the graduate-level licensure programs.

The CLAS educational studies minor is flexible in design and individually tailored for each student to complete some content requirements required for admission into the graduate-level teacher licensure programs at UC Denver. The educational studies minor requires course work in psychology and human development, democratic schooling principles, a K–12 internship and undergraduate course work required for licensure outside college and major requirements.

The educational studies minor is open to all Downtown Campus undergraduate students. For more information, students should contact the CLAS Advising Office, North Classroom, 4002, 303-556-2555.

Environmental Sciences Minor

The environmental sciences minor offers students exposure to the breadth of environmental issues. Students may emphasize the natural/physical sciences, the social sciences and humanities or structure their own mixed emphasis.

Program Requirements

Lecture/Laboratory Courses

Choose two lecture/laboratory courses (see Note 2):

BIOL 2051 - General Biology I

Summer 2010 Registration **BIOL 2051**

Introduces four major areas of study: (1) the chemistry of biological systems; (2) the structure and function of the cell; (3) cellular energy transformations (photosynthesis and respiration); and (4) genetics (mitosis, meiosis, patterns of inheritance, molecular genetics). Note: Biology and health science (pre-med, pre-vet, pre-physical therapy, etc.) majors must also take the accompanying laboratory - BIOL 2071. Prereq: CHEM 1000 or high school chemistry required. **Semester Hours:** 3to 3**GT Pathways Category Key:** GT-SC1

Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 2071 - General Biology Laboratory I

Summer 2010 Registration **BIOL 2071**

Introduces the basic scientific approach and report preparation through exercises and experiments in cell biology, basic biochemical techniques, genetics, molecular genetics and applications of biotechnology. Note: Exercises corresponding to topics in BIOL 2051. Coreq: BIOL 2051. **Semester Hours:** 1to 1**GT Pathways Category Key:** GT-SC1

Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 2061 - General Biology II

Summer 2010 Registration **BIOL 2061**

This course is a continuation of BIOL 2051. Introduces four major areas of study: (1) evolution,(2) animal structure and function, (3) plant structure and function and (4)

ecology. Note: Biology and health science (pre-med, pre-vet, nursing, etc.) majors must also take the accompanying laboratory - BIOL 2081. Prereq: BIOL 2051 or equivalent with a grade of "C" (2.0) or higher. **Semester Hours:** 3to 3 **GT Pathways Category Key:** GT-SC1

Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 2081 - General Biology Laboratory II

Summer 2010 Registration **BIOL 2081**

Study of evolution, plant and animal anatomy, developmental biology; includes two off-campus ecology field trips. Note: Exercises corresponding to topics in BIOL 2061.

Prereq: BIOL 2071 or equivalent with a grade of "C" (2.0) or higher; Coreq: BIOL 2061. **Semester Hours:** 1to 1 **GT Pathways Category Key:** GT-SC1

Registration is changing. Visit our website for details ucdenver.edu/registration.

CHEM 2031 - General Chemistry I

Summer 2010 Registration **CHEM 2031**

Topics include chemical structure, atomic and molecular properties, molecular geometry and bonding, and gas laws. Prepares students to take upper division chemistry courses.

Note: a beginning course for science majors, medical technologists, pre-medical and pre-dental students. Prereq: One year of high school chemistry or CHEM 1000 and MATH 1110 (or high school equivalent); Coreq: CHEM 2038. **Semester Hours:** 3to 3 **GT Pathways Category Key:** GT-SC1

Registration is changing. Visit our website for details ucdenver.edu/registration.

CHEM 2038 - General Chemistry Laboratory I

Summer 2010 Registration **CHEM 2038**

Students perform laboratory experiments on topics covered in CHEM 2031 and gain experience in observing, recording, and interpreting physical and chemical phenomena.

Note: Laboratory to accompany CHEM 2031. Coreq: CHEM 2031. **Semester Hours:** 1to 1 **GT Pathways Category Key:** GT-SC1

Registration is changing. Visit our website for details ucdenver.edu/registration.

CHEM 2061 - General Chemistry II

Summer 2010 Registration **CHEM 2061**

(Continuation of CHEM 2031.) Topics include kinetics, equilibria and thermodynamics.

Prereq: CHEM 2031; Coreq: CHEM 2068. **Semester Hours:** 3to 3 **GT Pathways Category Key:** GT-SC1

Registration is changing. Visit our website for details ucdenver.edu/registration.

CHEM 2068 - General Chemistry Laboratory II

Summer 2010 Registration **CHEM 2068**

Students gain experience with laboratory technique and elementary chemical instrumentation. Note: Laboratory to accompany CHEM 2061 and a continuation of CHEM 2038. Prereq: CHEM 2038; Coreq: CHEM 2061. **Semester Hours:** 2to 2**GT**

Pathways Category Key: GT-SC1

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENVS 1042 - Introduction to Environmental Sciences

Summer 2010 Registration **ENVS 1042**

This laboratory or survey course develops a basic understanding of ecological relationships and environmental systems. Issues such as the effects of human activities on earth's environment, extinction or diversity, greenhouse effect, hazardous or toxic wastes and human population growth are discussed. **Semester Hours:** 4to 4**GT**

Pathways Category Key: GT-SC1

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOL 1072 - Physical Geology: Surface Processes

Summer 2010 Registration **GEOL 1072**

Introductory course in physical geology that covers surface processes and landforms, and includes one all-day field trip. Note: Required for geology majors. **Semester Hours:** 4to 4**GT Pathways Category Key:** GT-SC1

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOL 1082 - Physical Geology: Internal Processes

Summer 2010 Registration **GEOL 1082**

Introductory course in physical geology that covers internal processes and properties of the earth's interior, with plate tectonics as the underlying theme. Includes one all-day field trip. Note: Required for geology majors. **Semester Hours:** 4to 4**GT Pathways**

Category Key: GT-SC1

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 2010 - College Physics I

Summer 2010 Registration **PHYS 2010**

(This course is an approved Colorado Statewide Guaranteed Transfer Course). Mechanics, heat and sound. Prereq: College algebra and trigonometry. **Semester Hours:** 4to 4**GT Pathways Category Key:** GT-SC1

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 2030 - College Physics Lab I

Summer 2010 Registration **PHYS 2030**

Semester Hours: 1to 1**GT Pathways Category Key:** GT-SC1

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 2020 - College Physics II

Summer 2010 Registration **PHYS 2020**

Electricity, magnetism, light and modern physics. Prereq: PHYS 2010.**Semester Hours:**

4to 4**GT Pathways Category Key:** GT-SC1

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 2040 - College Physics Lab II

Summer 2010 Registration **PHYS 2040**

Prereq: PHYS 2030.**Semester Hours:** 1to 1**GT Pathways Category Key:** GT-SC1

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 8-10 Hours

Upper-division Courses

Choose three upper-division courses outside of the student's major discipline from the following list (see Notes 5 and 6):

ANTH 4010 - Global Health Studies I: The Biocultural Basis of Health

Summer 2010 Registration **ANTH 4010**

This course is concerned with the underlying biological and cultural determinants of health throughout the human life cycle in global and cross-cultural perspective. Note: The first of a two-course sequence in medical anthropology and global health studies; the second is ANTH 4020. Prereq: Upper division and/or graduate standing. Cross-listed with ANTH 5014, HBSC 4010 and 5010.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 3411 - Principles of Ecology

Summer 2010 Registration **BIOL 3411**

A lecture course that examines the interrelationships between organisms and their

environments. Subject matter includes organism, population and ecosystem levels of study and application to current environmental issues. The emphasis is on the underlying principles of ecology that involve all types of organisms. Note: Satisfies core ecology requirement for biology major. May not be used as upper division biology elective. No co-credit with BIOL 3412. Prereq: One year of general biology with a grade of "C" (2.0) or higher. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CHEM 4700 - Environmental Chemistry

Summer 2010 Registration **CHEM 4700**

A discussion of the sources, reactions, transport, effects, and fates of chemical species in the water, soil, and air environments. Prereq: CHEM 3111 or 3411. Cross-listed with CHEM 5700. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

(see note 4)

ECON 4540 - Environmental Economics

Summer 2010 Registration **ECON 4540**

Economic approach to environmental problems: relationship between ownership structures, externalities and environmental damage; poverty, population pressure, and environmental degradation; valuation of environmental amenities; sustainability of economic activity; cost-benefit analysis applied to the environment; evaluation of alternative instruments for environmental control. Prereq: ECON 2022. Cross-listed with ECON 5540. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENVS 3082 - Energy and the Environment

Summer 2010 Registration **ENVS 3082**

For students of various backgrounds who wish to increase their understanding of the environmental and technical issues of supplying the energy demands of our society. Alternative energy sources and conservation are explored as solutions to promote a sustainable society. Prereq: One course in college science or mathematics. Cross-listed with PHYS 3082. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

PHYS 3082 - Energy and the Environment

Summer 2010 Registration **PHYS 3082**

For students of various backgrounds who wish to increase their understanding of the environmental and technical issues of supplying the energy demands of our society.

Alternative energy sources and conservation are explored as solutions to promote sustainable society. Prereq: One college-level science course and MATH 1110 or equivalent. Cross-listed with ENVS 3082. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 3232 - Weather and Climate

Summer 2010 Registration **GEOG 3232**

Introduces the processes and systems that govern both day-to-day weather and longer-term climate variations. Covers instrumentation and weather forecasting techniques.

Prereq: GEOG 1202 or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 3240 - Colorado Climates

Summer 2010 Registration **GEOG 3240**

Provides a broad overview of the various weather and climate patterns that are found within the state of Colorado. To accomplish this, the state of Colorado will be divided into regions which (hopefully) have a large degree of homogeneity in terms of weather and climate controls. Note: Taught in a seminar style with students giving presentations and reports on their findings about a given region. Prereq: GEOG 1202 and/or GEOG 3232 or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4020 - Earth Environments and Human Impacts

Summer 2010 Registration **GEOG 4020**

Basic concepts describing earth's biomes and physical environment are presented in a systems context. Global warming assessment, from both political and scientific perspectives, is then presented. Model visualization of these concepts to consider human impacts on Earth's biomes is discussed. Earth system viewpoint, having links of Earth's biomes to oceans and atmosphere, completes the course discussion. Prereq: GEOG 1202 and 3232 or permission of instructor. Cross-listed with ENVS 5020, GEOL 4020. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

ENVS 5020 - Earth Environments and Human Impacts

Summer 2010 Registration **ENVS 5020**

Basic concepts describing earth's biomes and physical environment are presented in a systems context. Global warming assessment, from both political and scientific perspectives, is then presented. Model visualization of these concepts to consider human impacts on Earth's biomes is discussed. Earth system viewpoint, having links of

Earth's biomes to oceans and atmosphere, completes the course discussion. Cross-listed with GEOG 4020, GEOL 4020. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4060 - Remote Sensing I: Introduction to Environmental Remote Sensing

Summer 2010 Registration **GEOG 4060**

An in-depth treatment of the use of aerial photographs and other forms of imagery for the analysis of urban-industrial patterns, vegetation, agriculture, landforms, and geologic structure. Prereq: GEOG 3080 or permission of instructor. Cross-listed with GEOG 5060, GEOL 4060, GEOL 5060. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

GEOG 5060 - Remote Sensing I: Introduction to Environmental Remote Sensing

Summer 2010 Registration **GEOG 5060**

An in-depth treatment of the use of aerial photographs and other forms of imagery for the analysis of urban-industrial patterns, vegetation, agriculture, landforms, and geologic structure. Prereq: GEOG 3080 or permission of instructor. Cross-listed with GEOG 4060, GEOL 4060, 5060. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4080 - Introduction to GIS

Summer 2010 Registration **GEOG 4080**

Introduces various aspects of geographic information systems (GIS), including justification, definition of hardware/software, database design, and data conversion. GIS is a computer-based mapping system providing a graphical interface to locational and relational attribute data on facilities and land. Includes hands-on use of a geographic information system workstation. Prereq: GEOG 3080 or permission of instructor. Cross-listed with GEOG 5080. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

GEOG 5080 - Introduction to GIS

Summer 2010 Registration **GEOG 5080**

Introduces various aspects of geographic information systems (GIS), including justification, definition of hardware/software, database design, and data conversion. GIS is a computer-based mapping system providing a graphical interface to locational and relational attribute data on facilities and land. Includes hands-on use of a geographic

information system workstation. Cross-listed with GEOG 4080.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4090 - Environmental Modeling with Geographic Information Systems

Summer 2010 Registration **GEOG 4090**

Expands the basic knowledge of GIS to spatial models. Establishes a comprehensive framework that can be used to address a wide range of applications in natural and built environments. Prereq: GEOG 4080 or GEOG 5080 or permission of instructor. Cross-listed with GEOG 5090.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

GEOG 5090 - Environmental Modeling with Geographic Information Systems

Summer 2010 Registration **GEOG 5090**

Expands the basic knowledge of GIS to spatial models. Establishes a comprehensive framework that can be used to address a wide range of applications in natural and built environments. Prereq: GEOG 4080 or GEOG 5080 or permission of instructor. Cross-listed with GEOG 4090.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4220 - Environmental Impact Assessment

Summer 2010 Registration **GEOG 4220**

The objective of this course is to provide the foundation for understanding the environmental impact assessment process, its legal context, and the criteria and methods for procedural and substantive compliance. Prereq: URPL 5530 or permission of instructor. Cross-listed with GEOG 5220, URPL 6651.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

GEOG 5220 - Environmental Impact Assessment

Summer 2010 Registration **GEOG 5220**

The objective of this course is to provide the foundation for understanding the environmental impact assessment process, its legal context, and the criteria and methods for procedural and substantive compliance. Prereq: URPL 5530 or permission of instructor. Cross-listed with GEOG 4220, URPL 6651.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4230 - Hazard Mitigation and Vulnerability Assessment

Summer 2010 Registration **GEOG 4230**

Examines hazard mitigation and its planning and policy implications, emphasizing how vulnerability assessments play an integral role. Students explore how mitigation minimizes the impacts from hazards and use GIS to conduct a local study. Prereq: GEOG 2202 or permission of instructor. Cross-listed with GEOG 5230. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

GEOG 5230 - Hazard Mitigation and Vulnerability Assessment

Summer 2010 Registration **GEOG 5230**

Examines hazard mitigation and its planning and policy implications, emphasizing how vulnerability assessments play an integral role. Students explore how mitigation minimizes the impacts from hazards and use GIS to conduct a local study. Prereq: GEOG 2202 or permission of instructor. Cross-listed with GEOG 4230. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4240 - Principles of Geomorphology

Summer 2010 Registration **GEOG 4240**

Systematic study of processes associated with rock structures, weathering, mass wasting, fluvial, wind, glacial, and shorelines, and the resultant landforms they can produce, influence, and change over time. Course includes field trips and in-class exercises to help solidify concepts. Cross-listed with GEOL 4630 and GEOG 5240. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4265 - Sustainability in Resources Management

Summer 2010 Registration **GEOG 4265**

Sustainability and sustainable development are the dominant economic, environmental and social issues of the 21st century. Follows a multi-disciplinary approach to these concepts. Case studies demonstrate their implementation in different geographical, ecological and socio-economic conditions worldwide. Prereq: ENVS 1042 or permission of instructor. Cross-listed with GEOG 5265. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

GEOG 5265 - Sustainability in Resources Management

Summer 2010 Registration **GEOG 5265**

Sustainability and sustainable development are the dominant economic, environmental

and social issues of the 21st century. Follows a multi-disciplinary approach to these concepts. Case studies demonstrate their implementation in different geographical, ecological and socio-economic conditions worldwide. Prereq: ENVS 1042 or permission of instructor. Cross-listed with GEOG 4265. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4270 - Glacial Geomorphology

Summer 2010 Registration **GEOG 4270**

Provides an in-depth view of the processes and systems found in glacial environments. Topics include: evidence of past glaciation; present-day glacial extent; glacier dynamics; glacial erosional processes and landforms; glacial depositional processes and landforms. Prereq: GEOG 1202 or GEOL 1072. Cross-listed with GEOG/GEOL 4270/5270. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4335 - Contemporary Environmental Issues

Summer 2010 Registration **GEOG 4335**

Provides an overview of environmental challenges facing society today, focusing on how humans impact and change the environment. Opposing views and environmental policy at the local, state, national, and international levels are explored. Cross-listed with GEOG 5335. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

GEOG 5335 - Contemporary Environmental Issues

Summer 2010 Registration **GEOG 5335**

Provides an overview of environmental challenges facing society today, focusing on how humans impact and change the environment. Opposing views and environmental policy at the local, state, national, and international levels are explored. Cross-listed with GEOG 4335. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4350 - Environment and Society in the American Past

Summer 2010 Registration **GEOG 4350**

Overview of the geographical development of North American society from the late 15th century to the mid-20th century. A comparative regional approach emphasizing relationships between natural resource exploitation, cultural landscape formation and environmental change. Cross-listed with GEOG 5350. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

GEOG 5350 - Environment and Society in the American Past

Summer 2010 Registration **GEOG 5350**

Overview of the geographical development of North American society from the late 15th century to the mid-20th century. A comparative regional approach emphasizing relationships between natural resource exploitation, cultural landscape formation and environmental change. Cross-listed with GEOG 4350. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOL 4030 - Environmental Geology

Summer 2010 Registration **GEOL 4030**

Applies geological information to interactions between people and the physical environment. Increasing awareness of its importance in our society means that this is an expanding field as companies are required to address the environmental consequences of their actions. Prereq: Entry into MSES program, senior standing in sciences or geography, or permission of instructor. Cross-listed with ENVS 5030 and GEOL 5030. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4232 - Historic Preservation

Summer 2010 Registration **HIST 4232**

Introduces the history, methodology, and goals of historic preservation. Guest speakers, field trips, research projects, and book reports. Cross-listed with HIST 5232. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4810 - Special Topics

Summer 2010 Registration **HIST 4810**

Cross-listed with HIST 5810. **Semester Hours:** 1to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4354 - Environmental Politics

Summer 2010 Registration **P SC 4354**

Political, legal, and economic forces in environmental law and policy. Special emphasis on air and water pollution and on threats to public and agricultural land. Environmental groups and their opponents. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 9 Hours

Minor Total: 17-19 Hours

Notes:

1. All work submitted for an environmental sciences minor must have a grade of C (2.0) or above.
2. The lecture/laboratory sequence can be part of the requirements for the major, but not in the student's major department (i.e., a biology major cannot use the general biology sequence, but could use the general chemistry sequence, which is also required for the biology major).
3. Students must take a minimum of 9 hours of the upper-division courses at the Downtown Campus.
4. If the student plans to go on to the MS in environmental sciences program, he/she should choose courses other than CHEM 4700. This is a core course in the MS in environmental sciences program.
5. Many of the upper-division courses have prerequisites; the student must check the catalog for prerequisite requirements for these courses.
6. The four upper-division elective courses for the environmental sciences minor cannot be from the student's major discipline, even if the particular course is not counted toward the major.

Ethics Minor

A total of 15 semester hours is required for an ethics minor, with a minimum grade of C (2.0) in each course.

Required Courses

PHIL 1020 - Introduction to Ethics and Society: The Person and the Community

Summer 2010 Registration **PHIL 1020**

Studies some of the traditional problems in ethics that tend to be focused on individual morality within the larger context of social and political philosophy. Some specific contemporary moral and social problems may be addressed, such as AIDS, abortion, famine, and individual rights versus the collective rights of society. **Semester Hours: 3 to 3**

GT Pathways Category Key: GT-AH3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Choose four:

PHIL 3150 - History of Ethics

Summer 2010 Registration **PHIL 3150**

Surveys the ethical thought of major figures in the history of philosophy, beginning with Plato and ending with the 19th century. Examples: Aristotle, Hume, Kant and Mill. (Class readings of primary philosophical texts.) **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 3200 - Social and Political Philosophy

Summer 2010 Registration **PHIL 3200**

Examines basic issues in social and political philosophy, including justice, freedom, individuality, power and community. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 3250 - Business Ethics

Summer 2010 Registration **PHIL 3250**

Surveys some of the major moral problems which arise in business, such as the nature and scope of the moral responsibilities of corporations, affirmative action, and truth in advertising. Begins with a study of moral reasoning, ethical theory, and the challenges of applying ethical theory. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 3500 - Ideology and Culture: Racism and Sexism

Summer 2010 Registration **PHIL 3500**

Surveys the nature and role of racism and sexism. Topics may include ideology theory, naturalism, the equal protection clause, recent scientific discussion, sociolegal history, and social constructionism. Cross-listed with WGST 3500. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 3939 - Internship/Cooperative Education

Summer 2010 Registration **PHIL 3939**

Designed experiences involving application of specific, relevant concepts and skills in supervised employment situations. Prereq: Junior standing and 2.75 GPA. **Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 4150 - Twentieth Century Ethics

Summer 2010 Registration **PHIL 4150**

Surveys representative philosophers, methods, and/or problems in 20th century ethics. Prereq: PHIL 3002 or 3022, a minimum grade of "C" in each previous philosophy course, or permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 4242 - Bioethics

Summer 2010 Registration **PHIL 4242**

Examines some of the major moral issues confronting the nation's health care system. The class will search for solutions to such problems as financing health care for those unable to do so on their own, determining the extent of a patient's right to both refuse and demand certain types of medical treatment, and allocating scarce medical resources such as lifesaving vital organs. The springboard for examining these issues will be the doctor or patient relationship framed by the moral principles of respect for persons and beneficence. Prereq: PHIL 3002 or 3022, a minimum grade of "C" in each previous philosophy course, or permission of instructor. Cross-listed with PHIL 5242, SSCI 5242, HUMN 5242. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

Minor Total: 15 Hours

For those students who major in philosophy and minor in ethics, no course can satisfy the requirements for both. For example, if a student takes PHIL 4150, Twentieth Century Ethics, it cannot satisfy the requirement in the major for a course in 19th or 20th century philosophy.

Ethnic Studies Minor

Requirements for the Minor

The minor in ethnic studies offers students the opportunity to enhance and broaden the body of knowledge acquired in their chosen majors and to apply it in a variety of careers involving intercultural relations. Students are required to complete 18 semester hours (6 courses) in ethnic studies with a grade of C or better. These hours are to be taken with UC Denver faculty (any exception needs to be approved by the ethnic studies advisor). At least 9 of the required 18 hours must be in courses numbered 3000 or above.

The 18 hours required for the minor must be distributed as follows:

Core Courses

ETST 2000 - Introduction to Ethnic Studies

Summer 2010 Registration **ETST 2000**

Multi-disciplinary survey of contemporary and historical research analyses of the diverse social, economic, political, and cultural facets of African American, American Indian, Asian American, and Latino communities and cultures. **Semester Hours:** 3to 3**GT**

Pathways Category Key: GT-SS3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 3 Hours

Additional Courses

Select four upper- or lower-division ETST courses from the following four focal U.S. racial/ethnic groups

- Asian-Americans
- African-Americans
- American Indians
- Chicanos/as and Latinos/as

Total: 12 Hours

Elective

ETST elective course of your choice.

Total: 3 Hours

Total: 18 Hours

Film Studies Minor

The film studies minor offers students the opportunity to gain an informed understanding of the sophisticated medium of film, its language and history. Courses cover critical writing about cinema, creative screenwriting, the evolution of Hollywood movies, international cinema and film in its cultural context. The film studies minor makes a valuable complement to a range of undergraduate majors.

Students must complete a total of 15 hours for the film studies minor. None of the required 15 hours may be taken pass/fail. Only courses completed with a grade of C (2.0) or better may be counted toward the minor. A minimum of 9 hours must be taken with Downtown Campus faculty. Students are strongly advised to take ENGL 2250, Introduction to Film, before taking other film courses. Students are also advised to fulfill the liberal arts and sciences core curriculum writing requirements before enrolling in upper-division topics in film courses. No more than two online film studies courses can be counted toward the minor.

Courses

Required Courses

ENGL 2250 - Introduction to Film

Summer 2010 Registration **ENGL 2250**

Introduces students to the critical study of cinema as an art form and a cultural phenomenon. Topics include cinematography, editing, mise-en-scene and sound; the connections between cinema and related art forms; film genres; the social dimensions of film production and reception; and films by such key filmmakers as Alfred Hitchcock, Maya Deren and Spike Lee. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 3070 - Film History I

Summer 2010 Registration **ENGL 3070**

Examines the history of cinema from its 19th-century origins until the early sound era. Explores important developments and influences in American and international cinema, including the origins of Hollywood narrative, avant-garde cinema, German Expressionism, and Soviet Cinema. Prereq: Must have 30 semester hours or permission of the instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

ENGL 3080 - Film History II

Summer 2010 Registration **ENGL 3080**

Examines world cinema from 1938 to the present, with examples from major movements and directors--such as Film Noir, Italian Neo-Realism, the French New Wave, Jean Renoir, Agnes Varda, John Ford, Alfred Hitchcock and Werner Herzog. Prereq: Must

have 30 semester hours or permission of the instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 6 Hours

Electives

Choose three:

ENGL 2415 - Introduction to Movie Writing

Summer 2010 Registration **ENGL 2415**

Examines structural and dramatic elements required to write a feature-length screenplay. Students conceptualize, plan, write and then re-write to complete the first ten pages of their own feature-length screenplay. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 3070 - Film History I

Summer 2010 Registration **ENGL 3070**

Examines the history of cinema from its 19th-century origins until the early sound era. Explores important developments and influences in American and international cinema, including the origins of Hollywood narrative, avant-garde cinema, German Expressionism, and Soviet Cinema. Prereq: Must have 30 semester hours or permission of the instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

ENGL 3080 - Film History II

Summer 2010 Registration **ENGL 3080**

Examines world cinema from 1938 to the present, with examples from major movements and directors--such as Film Noir, Italian Neo-Realism, the French New Wave, Jean Renoir, Agnes Varda, John Ford, Alfred Hitchcock and Werner Herzog. Prereq: Must have 30 semester hours or permission of the instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 3075 - Film Genres

Summer 2010 Registration **ENGL 3075**

An intensive study of films of one or more significant genres, such as comedy, film noir, science fiction. Prereq: Must have 30 semester hours or permission of the instructor.

Note: May be taken more than once when genres vary. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 3085 - Film Directors

Summer 2010 Registration **ENGL 3085**

An intensive study of the films of one or more major directors, such as Chaplin, Keaton, Hitchcock, Welles, Coen Brothers. Prereq: Must have 30 semester hours or permission of the instructor. Note: May be taken more than once when directors vary. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 3200 - From Literature to Film

Summer 2010 Registration **ENGL 3200**

Explores the relationship between literature and cinema; the process of adapting and transforming a novel into a feature-length film; and the historical, cultural, and commercial influences that shaped the creation of each novel and film studied. Prereq: Must have 30 semester hours or permission of the instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 4420 - Film Theory and Criticism

Summer 2010 Registration **ENGL 4420**

(1) Familiarizes students with some of the central concepts and debates in film theory and criticism, both classic and contemporary, (2) enables students to develop advanced analytic and interpretive skills, and (3) guides students toward discovering and articulating original critical and theoretical perspectives. Prereq: ENGL 2250 and 3070, 3080 or permission of instructor. Cross-listed with ENGL 5420. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 4770 - Topics in English: Film and Literature

Summer 2010 Registration **ENGL 4770**

May look at specific genres, aesthetic approaches to literature, ideological or socio-political agendas, or other special topics in literature and/or film. Prereq: Must have 30 semester hours or permission of the instructor. Cross-listed with ENGL 5770. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Approved film courses from another department (3 semester hours)

Total: 9 Hours

Total: 15 Hours

* Repeatable with different topic or title.

French Minor

Students minoring in French must complete 15 semester hours of upper-division French courses (courses numbered 3000 and above). The minor in French must include at least one language skills class, chosen from the following:

Required Courses

Choose one:

FREN 3010 - French Phonetics and Pronunciation

Summer 2010 Registration **FR 3010**

Helps students acquire speech habits through knowledge of phonetics. Topics include the function of the speech organs, accurate production and recognition of sound, and the use of phonetic symbols. Note: Students with native or near-native level proficiency in French must consult with the French advisor before enrolling in this course. These students may, in some cases, take this course. The instructor of the course and/or the French advisor reserve the right to determine the level of linguistic proficiency of the student and his or her admission to the class by means of an oral interview and/or placement exam scores. Prereq: FREN 2120 or equivalent. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FREN 3020 - Oral Practice

Summer 2010 Registration **FR 3020**

Conversation course, using dialogues, debates, small-group discussion, and short oral presentations to improve fluency in spoken French and to build vocabulary. Discussions center around current issues. Note: Students with native or near-native-level proficiency will not be allowed to take FREN 3020. The instructor of the course and/or the French advisor reserve the right to determine the level of linguistic proficiency of the student and his or her admission to the class by means of an oral interview and/or placement exam scores. Prereq: FREN 2120 or equivalent. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FREN 3050 - Advanced Grammar and Composition

Summer 2010 Registration **FR 3050**

Rigorous review of grammar (including past and future tenses, conditional mood and nominal phrase), along with development of writing skills through analysis and discussion of selections from French writers. Through questions and written exercises, students familiarize themselves with vocabulary, spelling, syntax and grammar. Note: May be taken before or after FREN 3060. Students with native or near-native level proficiency in French must consult with the French advisor before enrolling in this course. These students may, in some cases, take this course. The instructor of the course and/or the French advisor reserve the right to determine the level of linguistic proficiency of the student and his or her admission to the class by means of an oral interview and/or placement exam scores. Prereq: FREN 2120 or equivalent. **Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

FREN 3060 - Advanced French Language Skills

Summer 2010 Registration **FR 3060**

Rigorous review of grammar (including subjunctive, interrogative, verbal phrase and passive voice), along with development of writing skills through analysis and discussion of selections from French writers. Through questions and written exercises, students familiarize themselves with vocabulary, spelling, and grammar. Note: May be taken before or after FREN 3050. Students with native or near-native level proficiency in French must consult with the French advisor before enrolling in this course. These students may, in some cases, take this course. The instructor of the course and/or the French advisor reserve the right to determine the level of linguistic proficiency of the student and his or her admission to the class by means of an oral interview and/or placement exam scores. Prereq: FREN 2120 or equivalent. **Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 3 Hours

Electives

In addition, students minoring in French must complete four additional upper-division French courses

Total: 12 Hours

Minor Total: 15 Hours

General Musicianship Minor

See the beginning of the Music and Entertainment Industry Studies section in this catalog for specific admission information to the UC Denver Department of Music and Entertainment Industry (MEIS). This competitive process is also for students interested in either music minor.

To declare a CAM minor, please see the College of Arts & Media's Office of Advising and Student Services in Arts Building, 177. All courses must be taken at UC Denver unless approved by an MEIS faculty member. All other courses must be taken at UC Denver. Students pursuing a BS in music may not declare a minor in music. Consult a CAM advisor for details. All minor courses must be passed with a C (2.0) or better.

Students must successfully audition before declaring a general musicianship minor.

Program Requirements

PMUS 1100 - Music Theory I

Summer 2010 Registration **PMUS 1100**

Study of harmonic procedures as derived from the common practice period, and their relationship to contemporary concepts. Coreq: PMUS 1110 and PMUS 1023. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1110 - Ear Training and Sight Singing I

Summer 2010 Registration **PMUS 1110**

Laboratory course designed to help students listen to music analytically and to apply the harmonic principles learned in PMUS 1100 to the performance of music. Coreq: PMUS 1100 and PMUS 1023. **Semester Hours:** 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1200 - Music Theory II

Summer 2010 Registration **PMUS 1200**

Continuation of PMUS 1100. Prereq: PMUS 1110 and PMUS 1100. Coreq: PMUS 1210 and PMUS 1023. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1210 - Ear Training and Sight Singing II

Summer 2010 Registration **PMUS 1210**

Laboratory course designed to help students listen to music analytically and to apply the harmonic principles learned in PMUS 1200 to the performance of music. Prereq: PMUS 1100 and PMUS 1110. Coreq: PMUS 1200 and PMUS 1023. **Semester Hours:** 1to 1
Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 3830 - History and Literature of Music I

Summer 2010 Registration **PMUS 3830**

This course provides a historical perspective of Western music literature from the medieval through the classical era. Prereq: Any semester of music theory. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 3831 - History and Literature of Music II

Summer 2010 Registration **PMUS 3831**

This course provides a historical perspective of Western music literature from the Romantic era through the present day. Prereq: Any semester of music theory. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1502 through PMUS 1762 Applied Music (2 semester hours) (24 instruments)

PMUS 1500 - General Recital

Summer 2010 Registration **PMUS 1500**

May be taken on a pass/fail basis only. Co-requisite for all applied music courses for music majors and minors. Attendance at musical performances is required. **Semester Hours:** 0to 0

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1500 - General Recital

PMUS 1410 through PMUS 4430 Ensembles. Students must take a minimum of 2 ensembles.

PMUS 1023 - Piano Class I

Summer 2010 Registration **PMUS 1023**

This course focuses on beginning note reading in both treble and bass clefs, learning one octave major key scales, basic harmonization, and beginning improvisation. Students perform in both individual and group settings. Note: This course is restricted to Music-Majors only. Prereq: Acceptance to the MEIS program **Semester Hours:** 1to 1
Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1023 Piano Class I, PMUS 1024 Piano Class II, PMUS 1025 Piano Class III and/or PMUS 1026 Piano Class IV. Students must complete 2 semesters of Piano. Piano placement is available - consult a CAM advisor.
P/MUS ____ - Music Elective (1 semester hour)

Total: 23 Hours

Geography Minor

Students must complete 15 semester hours in geography, including at least 6 semester hours of upper-division courses. Students must achieve a grade of C (2.0) or above on required courses. At least 9 semester hours of upper-division geography courses must be completed at the Downtown Campus.

Geology Minor

At least two of the upper-division requirements must be completed at UC Denver. Transfer students who have earned the equivalent of all these courses elsewhere must complete a minimum of two of the required upper-division courses at UC Denver. No grade below a C (2.0) will be counted toward the minor requirements.

Required Courses

GEOL 1072 - Physical Geology: Surface Processes

Summer 2010 Registration **GEOL 1072**

Introductory course in physical geology that covers surface processes and landforms, and includes one all-day field trip. Note: Required for geology majors. **Semester Hours:** 4to 4**GT Pathways Category Key:** GT-SC1
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOL 1082 - Physical Geology: Internal Processes

Summer 2010 Registration **GEOL 1082**

Introductory course in physical geology that covers internal processes and properties of the earth's interior, with plate tectonics as the underlying theme. Includes one all-day field trip. Note: Required for geology majors. **Semester Hours:** 4to 4**GT Pathways**

Category Key: GT-SC1

Registration is changing. Visit our website for details ucdenver.edu/registration.

Choose at least two of the following courses:

GEOL 3011 - Mineralogy

Summer 2010 Registration **GEOL 3011**

Principles of mineralogy, including crystallography, crystal chemistry, and a systematic study of the more important nonsilicate and silicate minerals. Origins and occurrences of minerals. Prereq: Physical geology and college-level chemistry. **Semester Hours:** 4to 4
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOL 3421 - Sedimentation and Stratigraphy

Summer 2010 Registration **GEOL 3421**

Introduces the principles of sedimentology and stratigraphy. Emphasis is on dynamic processes within sedimentary environments and the resulting stratigraphic record. Prereq: GEOL 1082 or equivalent. **Semester Hours:** 4to 4
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOL 4030 - Environmental Geology

Summer 2010 Registration **GEOL 4030**

Applies geological information to interactions between people and the physical environment. Increasing awareness of its importance in our society means that this is an expanding field as companies are required to address the environmental consequences of their actions. Prereq: Entry into MSES program, senior standing in sciences or geography, or permission of instructor. Cross-listed with ENVS 5030 and GEOL 5030. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

Minor Total: 15-16 Hours

German Minor

The German program provides a variety of courses for students interested in German language, linguistics, literature, history, philosophy, music and art.

Admission and Grade Requirements

To be admitted to minor status in German, students must have an overall GPA of C+ (2.3). The minimum grade acceptable in any course applied to a German minor is a C (2.0). The GPA in all courses applied to a German minor at UC Denver must be 2.5. No courses taken on a pass/fail basis may be credited toward a German minor.

Residency Requirement

The German minor requires 15 semester hours of upper-division course work. A minimum of 6 semester hours must be taken from German faculty at the Downtown Campus. Courses taken at other institutions while a student is enrolled at UC Denver may be applied to the minor only with departmental approval before enrollment in those courses.

Students who have completed course work through an approved exchange program must also complete a residency requirement of a minimum of 6 credits of upper-division German courses. This residency requirement must include at least 3 semester hours of language skills courses at the Downtown Campus.

Course Requirements for the Minor

Students minoring in German must complete 15 hours of upper division German courses (courses numbered 3000 and above). The minor in German must include at least one language skills course:

Required Courses

Choose one:

GRMN 3050 - Phonetics and Pronunciation of German

Summer 2010 Registration **GER 3050**

Students acquire skills for articulating German with a high degree of accuracy, and systematically develop a more native-like pronunciation of German. Students learn basic linguistic principles for the purpose of gaining insight into the mechanics of spoken German. Note: Taught in German. Prereq: GRMN 2130. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GRMN 3060 - Advanced German Language Skills I

Summer 2010 Registration **GER 3060**

An advanced course in German language skills with equal emphasis devoted to

speaking, listening, reading and writing. Students improve their cultural awareness, pronunciation, and vocabulary as well. Specific grammar topics include: subjunctive I and II, participles I and II, extended adjectives, verb tenses, gender of nouns, and reflexive. Note: Primary language of instruction for this course is German. Prereq: GRMN 2130 or permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GRMN 3070 - Advanced German Language Skills II

Summer 2010 Registration **GER 3070**

An advanced course in German language skills with equal emphasis devoted to speaking, listening, reading and writing. Students improve their cultural awareness, pronunciation and vocabulary. Specific grammar topics include: semantic categories, functions of nouns, determiners, adjectives, relative clauses, pronouns. Note: Primary language of instruction for this course is German. Prereq: GRMN 2130 or permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GRMN 3080 - Advanced German Language Skills III

Summer 2010 Registration **GER 3080**

An advanced course in German language skills with equal emphasis devoted to speaking, listening, reading and writing. Students improve their cultural awareness, pronunciation, and vocabulary as well. Specific grammar topics include: prepositions and idioms, "da" compounds, German syntax, clause typology numerals, and time expressions. Note: Primary language of instruction for this course is German. Prereq: GRMN 2130 or permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GRMN 3090 - Advanced German Language Skills IV

Summer 2010 Registration **GER 3090**

An advanced course in German language skills with equal emphasis devoted to speaking, listening, reading, and writing. Students improve their cultural awareness, pronunciation and vocabulary. Specific grammar topics include: modal verbs, complex clause and sentence structure, "werden," passive voice, double infinitives, perfect infinitives, and dependent infinitives. Note: Primary language of instruction for this course is German. Prereq: GRMN 2130 or permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 3 Hours

Electives

In addition, students minoring in German must complete four additional German courses.

Total: 12 Hours

Minor Total: 15 Hours

Students taking a German course taught in English must complete a portion of the course work (e.g., papers and exams) in German for the course to count toward the minor.

History Minor

Students interested in a minor in history are required to complete 18 hours of course work. At least 12 semester hours must be completed at UCD. No grade below a C (2.0) will count toward the minor.

Students minoring in history must take at least 9 credit hours of upper division (3000- and 4000-level) courses.

Course Requirements

Required Course

HIST 3031 - Theory and Practice of History: An Introduction to the Major

Summer 2010 Registration **HIST 3031**

Introduces history majors to the discipline at the outset of their course work. Covers historiographical trends and methodologies, and familiarizes students with the various types of research and writing they are likely to encounter in their classes. Note: This course should be taken as early as possible, and must be taken before HIST 4839. **Semester Hours:** 3 to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 3 Hours

Distribution Requirement

A minimum of 3 semester hours must be taken in each of the following areas: United States, Europe and World.

Total: 9 Hours

Electives

Choose at least 6 hours of elective upper-division history credit.

Total: 6 Hours

Minor Total: 18 Hours

Law Studies Minor

Program Requirements

A total of 18 semester hours must be completed for the law studies minor. The five required courses (15 semester hours) must be taken in residence at UC Denver. A minimum grade of C is required in each course and students must maintain a GPA of 3.0 in courses taken toward the minor. Every course taken for the minor must be upper division, and cannot serve to fulfill requirements of the undergraduate core. Students should check with their major department to determine whether courses counted toward the law studies minor can fulfill major requirements. To apply for this minor, students must complete and submit a major/minor change declaration form to the CLAS Advising Office in North Classroom, 4002.

Required Courses

COMM 4680 - Mass Communication Law and Policy

Summer 2010 Registration **CMMU 4680**

Covers issues of mass communication and the law and ethics, including issues of the First and Fourth Amendments, communication regulations, intellectual property, public access and obscenity. Cross-listed with COMM 5680. **Semester Hours: 3 to 3**
Registration is changing. Visit our website for details ucdenver.edu/registration.

(offered at least once a year)

HUMN 3250 - Introduction to Law Studies

Summer 2010 Registration **HUM 3250**

Introduces students to the materials and methods of law studies. Students learn how to read case law, brief a case, make a course outline, analyze fact patterns, and perform legal research and writing projects. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

(offered every fall)

PHIL 4260 - Philosophy of Law

Summer 2010 Registration **PHIL 4260**

Surveys theoretical positions on the nature of law, with particular emphasis on American law. Prereq: PHIL 3002 or 3022, a minimum grade of "C" in each previous philosophy course, or permission of instructor. Cross-listed with PHIL 5260. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

(offered every spring)

Choose two:

COMM 4681 - Communication Issues in Trial Court Practices and Processes

Summer 2010 Registration **CMMU 4681**

Introduces students to communication and language research aimed at improving the fairness, reliability, and validity of court and judicial processes, including lawyer-client interviews, interrogatories, jury selection, jury instructions, witness examination, and the use of language evidence in court. Prereq: ENGL 2030 or equivalent. Cross-listed with COMM 5681. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

(offered every other year)

COMM 4750 - Legal Reasoning and Writing

Summer 2010 Registration **CMMU 4750**

Introduces the fundamentals of legal reasoning and legal argumentation through intensive class discussion, formal debate and writing. Attention is given to the relationship between case and statutory law and their application in trial and appeals courts in the United States. Prereq: ENGL 1020, 2030, and any one 3000-level English/writing course or COMM 3120. Cross-listed with COMM 5750, PSCI 4757,

5747.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.
(offered every other year)

PSCI 3034 - Race, Gender, Law and Public Policy

Summer 2010 Registration P SC 3034

Historical overview of race and gender relations in the U.S. and an examination of the treatment of issues of race and gender in the judicial system and public policy. Cross-listed with WGST 3034.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4427 - Law, Politics and Justice

Summer 2010 Registration P SC 4427

Analysis of the relationship of politics, law, and justice, particularly the degree to which moral norms and political concerns should and do influence legal standards and their perceived legitimacy.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4494 - Judicial Politics

Summer 2010 Registration P SC 4494

Examines principal actors in the legal system: police, lawyers, judges, citizens. About half of this course is devoted to the study of judicial behavior, especially at the Supreme Court level. Political and personal influences on judicial behavior.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 15 Hours

Electives

Choose one:

BLAW 3000 - Legal and Ethical Environments of Business I

Summer 2010 Registration BLAW 3000

Addresses the most fundamental ways the legal and ethical environments of business affect managers. Students are taught to identify legal issues, make ethical judgments about business conduct, and understand the ways ethical and social issues are developed. Topics include actual analysis of legal and ethical issues, ethical theory and its application, law-making processes, contracts, torts, product liability, criminal law,

constitutional law and real property. This is a business core course therefore a grade of "C" or better must be earned to satisfy Business graduation requirements and prerequisites for other business courses. Prereq: Junior Standing. **Semester Hours:** 3to 3**When Offered:** FASPRSUM

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 4140 - Argumentation

Summer 2010 Registration **CMMU 4140**

Examines classical through contemporary theories, with special attention to types of propositions, burden of proof, analysis of issues, evidence, reasoning, fallacies, case construction, refutation and ethics. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.
(taught each summer)

COMM 4255 - Negotiations and Bargaining

Summer 2010 Registration **CMMU 4255**

Designed to allow students to study theories and apply concepts that explain the influences of various forms of mediating, reducing, and/or resolving conflict among individuals, groups, organizations, nations and cultures. Cross-listed with COMM 5255. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MUSC 3720 - Law and the Music Industry

Summer 2010 Registration **MUS 3720**

Students will learn how to use and analyze music law principles through a review of essential court case studies. Students will be tested on lecture material and provided with an opportunity to complete research papers for a more in-depth examination.

Prereq: MUSC 2700 (Intro to Music Business), MUSC 3220 (Artist Management), Jr. standing. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 4812 - Special Topics in Philosophy

Summer 2010 Registration **PHIL 4812**

Prereq: PHIL 3002 or 3022, a minimum grade of "C" in each previous philosophy course, or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 3214 - Federal Law and American Indians

Summer 2010 Registration **P SC 3214**

Examines the legal and political history of the U.S. in relation to American Indian Nations. Focuses on specific laws and Supreme Court cases in federal Indian law, with analysis of U.S. policy. There will be some comparison with Indian policies of other countries. Cross-listed with ETST 3216. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4024 - Legislatures and Legislation

Summer 2010 Registration **P SC 4024**

Structure and organization of legislatures, informal influences, and the process of statute law making. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4477 - Constitutional Law I

Summer 2010 Registration **P SC 4477**

Nature and scope of the following American constitutional principles as developed by the U.S. Supreme Court: federalism, jurisdiction of the federal courts, separation of powers, the taxing power, and the commerce power. Case method. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 3 Hours

Minor Total: 18 Hours

The law studies program also recommends a course in informal logic to aid in preparation for the LSAT (e.g., PHIL 2441).

Literature Minor

This program is designed for students who are interested in the study of English literature but who have elected to major in another area. The recommended series of courses allows students to become acquainted with some of the methods of literary study and with a number of the most important literary works.

The literature minor allows students to complement their area of major study with systematic experience in literature.

Students minoring in literature must complete a total of 15 hours (excluding ENGL 1010, 1020, 2030). None of the required 15 hours may be taken pass/fail. Only courses completed with a grade of C (2.0) or better may be counted toward the minor. A minimum of 9 upper-division hours of work in the minor must be taken with Downtown Campus English faculty.

Courses

Required Courses

ENGL 1400 - Introduction to Literary Studies

Summer 2010 Registration **ENGL 1400**

Helps students develop a sense of literary techniques and issues so they can bring an improved critical sensibility to their reading and writing. Note: Designed for students who plan to major in English or who are seriously interested in literature. Prereq or Coreq:

ENGL 1020. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 1400 will be replaced during 2010-11 by ENGL 2450 when it becomes available

ENGL 3001 - Critical Writing

Summer 2010 Registration **ENGL 3001**

Introduces literary theory, which provides extensive practice in writing about literature.

Note: Required for literature majors, and should be taken in the sophomore or junior year. Prereq: ENGL 1400 and two literature courses. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 6 Hours

Electives; distribution requirements

Any three upper division courses, at least two of which must be from those listed as distribution requirements for the major.

Total: 9 Hours

Minor Total: 15 Hours

Restrictions: These requirements may not be met by independent study. All upper-division courses must be taken from a member of the Downtown Campus faculty.

Mathematics Minor

Program Requirements

MATH 1401 - Calculus I

Summer 2010 Registration **MATH 1401**

First course of a three-semester sequence (MATH 1401, 2411, 2421) in calculus. Topics covered include limits, derivatives, applications of derivatives, and the definite integral.

Note: Students cannot receive credit for both MATH 1080 and 1401. Prereq: MATH 1120 or 1130 and satisfactory score on the placement exam. **Semester Hours:** 4to 4**GT**

Pathways Category Key: GT-MA1

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 2411 - Calculus II

Summer 2010 Registration **MATH 2411**

The second of a three-semester sequence (MATH 1401, 2411, 2421) in calculus. Topics covered include exponential, logarithmic, and trigonometric functions, techniques of integration, indeterminate forms, improper integrals and infinite series. Prereq: MATH 1401. **Semester Hours:** 4to 4**GT**

Pathways Category Key: GT-MA1

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 2421 - Calculus III

Summer 2010 Registration **MATH 2421**

The third of a three-semester sequence in calculus (MATH 1401, 2411 and 2421).

Topics include vectors, vector-valued functions, partial differentiation, differentiation, multiple integration, and vector calculus. Prereq: MATH 2411. **Semester Hours:** 4to 4**GT**

Pathways Category Key: GT-MA1

Registration is changing. Visit our website for details ucdenver.edu/registration.

Three additional upper-division math courses (3 or more semester hours each, excluding MATH 3040): **9 semester hours**

Minor Total: 21 Hours

Minimum of 21 semester hours with a C average.

Note: At least 6 of the upper-division semester hours must be taken at the Downtown Campus. No grade below a C- will be counted toward the minor requirements.

Music Industry Studies Minor

See the beginning of the Music and Entertainment Industry Studies section in this catalog for specific admission information to the UC Denver Department of Music and Entertainment Industry (MEIS). This competitive process is also for students interested in either music minor.

To declare a CAM minor, please see the College of Arts & Media's Office of Advising and Student Services in Arts Building, 177. All courses must be taken at UC Denver unless approved by an MEIS faculty member. All other courses must be taken at UC Denver. Students pursuing a BS in Music may not declare a minor in Music. Consult a CAM advisor for details. All minor courses must be passed with a C (2.0) or better.

Program Requirements

MUSC 2450 - Introduction to Performing Arts and Events Management

Summer 2010 Registration **MUS 2450**

Introduces stage management of events in the performing arts. Development of leadership and organizational skills as well as a general understanding of the profession.

Cross-listed with THTR 2450. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MUSC 2470 - Music Applications on the Computer

Summer 2010 Registration **MUS 2470**

Introduces the use of computers in the music industry. Topics include basic computer operation, computer hardware, desktop publishing for music business, music notation, MIDI sequencing and digital audio. Students individually create several computer lab projects. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MUSC 2700 - Introduction to Music Business

Summer 2010 Registration **MUS 2700**

Introduces music as a business and a product, emphasizing music publishing, recording, broadcasting, marketing, licensing and legal aspects. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MUS ____ - Music Business or Tech Elective (3-4* semester hours)

PMUS 1023 - Piano Class I

Summer 2010 Registration **PMUS 1023**

This course focuses on beginning note reading in both treble and bass clefs, learning one octave major key scales, basic harmonization, and beginning improvisation. Students perform in both individual and group settings. Note: This course is restricted to Music-Majors only. Prereq: Acceptance to the MEIS program **Semester Hours: 1 to 1** Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1024 - Piano Class II

Summer 2010 Registration **PMUS 1024**

Continuation of PMUS 1023. This course focuses on more advanced note reading, technique, chord vocabulary, sight reading, and improvisation. Introduction of minor scales. Performances in both individual and group settings. Note: This course is restricted to Music-Majors only. Prereq: Acceptance to the MEIS program, PMUS 1023 or approval of instructor **Semester Hours: 1 to 1** Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1025 - Piano Class III

Summer 2010 Registration **PMUS 1025**

Continuation of PMUS 1024. This course assumes general fluency in major and minor scales. Focus on expanding chord vocabulary, sight reading, transposition, and performing more advanced repertoire. Performances in both individual and group settings. Note: This course is restricted to Music-Majors only. Prereq: Acceptance to the MEIS Program, PMUS 1023 and PMUS 1024, or approval of instructor. **Semester Hours: 1 to 1**

Registration is changing. Visit our website for details ucdenver.edu/registration.

and/or

PMUS 1026 - Piano Class IV

Summer 2010 Registration **PMUS 1026**

Continuation of PMUS 1025. This course assumes fluency in major and minor scales. Focus on harmonizing with complex chords, playing by ear, improvisation, and playing repertoire in broader range of key signatures. Students perform in both individual and group settings. Note: This course is restricted to Music-Majors only. Course meets in Roland Piano Lab. Prereq: Acceptance to the MEIS program, PMUS 1023, PMUS 1024 and PMUS 1025, or approval of instructor. **Semester Hours: 1 to 1**

Registration is changing. Visit our website for details ucdenver.edu/registration.

Note: Students must complete two semesters of piano class for a total of 2 credits. Piano placement is available; consult a CAM advisor.

PMUS 1100 - Music Theory I

Summer 2010 Registration **PMUS 1100**

Study of harmonic procedures as derived from the common practice period, and their relationship to contemporary concepts. Coreq: PMUS 1110 and PMUS 1023. **Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1110 - Ear Training and Sight Singing I

Summer 2010 Registration **PMUS 1110**

Laboratory course designed to help students listen to music analytically and to apply the harmonic principles learned in PMUS 1100 to the performance of music. Coreq: PMUS 1100 and PMUS 1023. **Semester Hours:** 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 3830 - History and Literature of Music I

Summer 2010 Registration **PMUS 3830**

This course provides a historical perspective of Western music literature from the medieval through the classical era. Prereq: Any semester of music theory. **Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 3831 - History and Literature of Music II

Summer 2010 Registration **PMUS 3831**

This course provides a historical perspective of Western music literature from the Romantic era through the present day. Prereq: Any semester of music theory. **Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 21-22 Hours

* Must be MUSC 2560, Audio Production II (4 semester hours), if student plans to apply for the MIS/tech or recording arts emphasis as a music major.

Philosophy Minor

A total of 15 semester hours is required for the minor in philosophy, with a minimum grade of C (2.0) in each course.

Program Requirements

Required Courses:

PHIL 1012 - Introduction to Philosophy: Relationship of the Individual to the World

Summer 2010 Registration **PHIL 1012**

Introductory course in philosophy that focuses on some of the central questions of philosophy, including theories of reality and the nature of knowledge and its limits. The knowledge of these areas is essential to the student for informed participation in the resolution of contemporary problems in today's society. **Semester Hours:** 3to 3

Pathways Category Key: GT-AH3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 3002 - Ancient Greek Philosophy

Summer 2010 Registration **PHIL 3002**

History of ancient Greek thought, including traditional myth, pre-Socratic fragments, Plato's dialogues, and Aristotle's systematic philosophy. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 3022 - Modern Philosophy

Summer 2010 Registration **PHIL 3022**

History of philosophy from Descartes through Kant. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

(It is recommended but not required that PHIL 3002 be taken before PHIL 3022.)

Total: 9 Hours

Electives

Choose two additional philosophy courses, one of which must be at the upper-division level.

Total: 6 Hours

Minor Total: 15 Hours

Religious studies courses cannot be used to fulfill the requirements for the minor.

Physics Minor

A total of 16 semester hours is required for a minor in physics. No grade below a C can be used to meet the requirements for the minor. At least 6 semester hours of the requirements for the minor must be completed at the Downtown Campus.

Program Requirements

Required Physics Courses

Either of the following two sequences:

PHYS 2010 - College Physics I

Summer 2010 Registration **PHYS 2010**

(This course is an approved Colorado Statewide Guaranteed Transfer Course). Mechanics, heat and sound. Prereq: College algebra and trigonometry. **Semester Hours:** 4to 4**GT Pathways Category Key:** GT-SC1
Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 2020 - College Physics II

Summer 2010 Registration **PHYS 2020**

Electricity, magnetism, light and modern physics. Prereq: PHYS 2010. **Semester Hours:** 4to 4**GT Pathways Category Key:** GT-SC1
Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 2030 - College Physics Lab I

Summer 2010 Registration **PHYS 2030**

Semester Hours: 1to 1**GT Pathways Category Key:** GT-SC1
Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 2040 - College Physics Lab II

Summer 2010 Registration **PHYS 2040**

Prereq: PHYS 2030. **Semester Hours:** 1to 1**GT Pathways Category Key:** GT-SC1
Registration is changing. Visit our website for details ucdenver.edu/registration.

Sequence Total: 10 Hours

-OR-

PHYS 2311 - General Physics I: Calculus-Based

Summer 2010 Registration **PHYS 2311**

Covers vector displacement, uniform and accelerated motion, force, momentum, energy, rotating systems, oscillations, and an introduction to thermodynamics. Emphasis is on basic principles. Coreq: MATH 1401. **Semester Hours:** 4to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 2321 - General Physics Lab I

Summer 2010 Registration **PHYS 2321**

Semester Hours: 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 2331 - General Physics II: Calculus-Based

Summer 2010 Registration **PHYS 2331**

Covers electrostatics, magnetic fields, electromagnetic waves (including light), and optics. Prereq: PHYS 2311. Coreq: MATH 2411. **Semester Hours:** 4to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 2341 - General Physics Lab II

Summer 2010 Registration **PHYS 2341**

Prereq: PHYS 2321. **Semester Hours:** 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

Sequence Total: 10 Hours

Elective Physics Courses

At least 3 of the 6 semester hours must be at the 3000 level or above.

Total: 6 Hours

Minor Total: 16 Hours

Political Science Minor

A student can earn an undergraduate minor in political science by completing 15 semester hours distributed as shown below. At least 9 of the 15 hours must be taken from Downtown Campus faculty.

Course Requirements

One lower-division course

PSCI 1001 - Introduction to Political Science: The Quest for Freedom and Justice

Summer 2010 Registration **P SC 1001**

Introduces the study of politics, its human importance, and its relationship to social institutions. Analysis of the relationship between individual political behavior and characteristics of the political system. Development of key concepts such as power, legitimacy, authority, political socialization, and revolution. Note: Required of all PSCI majors. **Semester Hours:** 3to 3**GT Pathways Category Key:** GT-SS1

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

PSCI 1101 - American Political System

Summer 2010 Registration **P SC 1101**

General introduction to the American political system with emphasis upon citizen involvement, the relationships among the various levels and branches of government, formal and informal institutions, processes, and behavior. Note: Required of all PSCI majors. **Semester Hours:** 3to 3**GT Pathways Category Key:** GT-SS1

Registration is changing. Visit our website for details ucdenver.edu/registration.

Four 4000-level courses

Choose one 4000-level course in each of four fields: political theory, American politics, comparative politics and international relations.

Minor Total: 15 Hours

Psychology Minor

Program Requirements

A minor in psychology requires the completion of 15 semester hours with a grade of C (2.0) or better, including the following courses:

PSYC 1000 - Introduction to Psychology I

Summer 2010 Registration PSY 1000

Introduces the scientific study of behavior, including an overview of the biological basis of behavior, sensation or perception, states of consciousness, learning and memory, thinking and language, intelligence, motivation and emotion. **Semester Hours:** 3to 3**GT Pathways Category Key:** GT-SS3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 1005 - Introduction to Psychology II

Summer 2010 Registration PSY 1005

Introduces the scientific study of behavior, including an overview of the history of psychology, development, personality, psychological disorders, therapy, health psychology and social behavior. PSYC 1000 is not a prerequisite for this course. **Semester Hours:** 3to 3**GT Pathways Category Key:** GT-SS3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 3205 - Human Development I: Child Psychology

Summer 2010 Registration PSY 3205

Studies human development covering birth, infancy, toddler, preschool and school-aged child. Covers biological, cognitive and social processes. Prereq: PSYC 1000 or 1005. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

PSYC 3305 - Abnormal Psychology

Summer 2010 Registration PSY 3305

Borderline disorders as extreme variations of the normal personality. Major functional and organic disorders. Theories of mental disorders and methods of psychotherapy.

Prereq: PSYC 1000.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

PSYC 4415 - Experimental Social Psychology

Summer 2010 Registration **PSY 4415**

Readings and lectures focused on the formulation of researchable problems in social psychology. Prereq: PSYC 1000 and 1005.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 3222 - Principles of Learning and Behavior

Summer 2010 Registration **PSY 3222**

Introduces the scientific study of learning and behavior, focusing on "Behaviorism."

Principles of operant and classical conditioning are discussed. A particular emphasis is placed on the relevance and application of these principles to understanding human behavior and psychopathology. Prereq: PSYC 1000.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

PSYC 4144 - Human Cognition

Summer 2010 Registration **PSY 4144**

Studies information processing in humans, with emphasis on memory, thinking and language. Prereq: PSYC 1000.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 4511 - History of Psychology

Summer 2010 Registration **PSY 4511**

Development of psychological theories since 500 B.C. Schools of psychology and their adherents. Readings of primary and secondary sources. Prereq: PSYC 1000 and 1005 plus 6 additional credit hours in psychology (12 hours total).**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

At least 6 upper-division semester hours must be taken from UC Denver Downtown Campus faculty. Further information about the department may be obtained from department advisors or by calling 303-556-8565.

Religious Studies Minor

Eighteen semester hours, at least 9 of which must be upper division and at least 9 semester hours taken with Downtown Campus faculty. A minimum cumulative GPA of 2.0 for all UC Denver courses taken in the minor is required, with no individual course grade lower than a C (2.0).

Program Requirements

Required Courses

RLST 1610 - Introduction to Religious Studies

Summer 2010 Registration **RLST 1610**

Religion is a complex phenomenon which involves social norms, beliefs and fears, and overarching world view. Religious experiences are among the most profound an individual can have. The course examines religious phenomena from various perspectives, including philosophical, historical, psychological, anthropological, political, sociological, the symbolic and ritual. **Semester Hours:** 3to 3**GT Pathways Category**

Key: GT-AH3

Registration is changing. Visit our website for details ucdenver.edu/registration.

One course in Western religions chosen from approved list:

RLST 2660 - World Religions

Summer 2010 Registration **RLST 2660**

Provides an introduction to the basic beliefs and concepts of the world's great religious traditions. Covers the history, development, belief patterns, and institutional forms of the world's religions, including Judaism, Zoroastrianism, Christianity, Islam, Hinduism, Buddhism, Confucianism, Taoism and Shintoism. **Semester Hours:** 3to 3**GT Pathways**

Category Key: GT-AH3

Registration is changing. Visit our website for details ucdenver.edu/registration.

RLST 3000 - Judaism, Christianity and Islam: Affinity and Difference

Summer 2010 Registration **RLST 3000**

Judaism, Christianity and Islam have much in common, beginning with their common patriarch Abraham. But there are also elements in each that are unrecognizable from the perspectives of the other two. This course will trace the relationships among the Children of Abraham across history and in today's turbulent world. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

RLST 3060 - History of Early Christianity

Summer 2010 Registration **RLST 3060**

History of the rise of Christianity and the decline of paganism in the Roman Empire from the birth of Jesus of Nazareth to ca. 500 A.D. Special emphasis on social, historical, legal, and cultural context of Christianity's rise and paganism's decline. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

RLST 2700 - The Bible as Literature

Summer 2010 Registration **RLST 2700**

Introduces students to biblical literature. Selections from the various genres of writing in Hebrew (history, wisdom, prophecy, literature) are read and discussed, as well as representative sections from the New Testament, including the gospels and the writings of Paul. Cross-listed with ENGL 2520. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

ENGL 2520 - The Bible as Literature

Summer 2010 Registration **ENGL 2520**

Introduces students to biblical literature. Selections from the various genres of writing in Hebrew (history, wisdom, prophecy, literature) are read and discussed, as well as representative sections from the New Testament, including the gospels and the writings of Paul. Cross-listed with RLST 2700. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

RLST 3740 - Biblical Traditions: Old Testament

Summer 2010 Registration **RLST 3740**

Investigates the history and nature of the Biblical text. Follows the tradition of critical scholarship beginning in the Enlightenment era and continued down to the present day, sometimes entitled "Secular Humanism." Topics include theories of authorship of the Torah, its general nature and content; the historical books of the Bible, the Prophets, and the Wisdom Literature. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

RLST 3760 - Biblical Studies: New Testament

Summer 2010 Registration **RLST 3760**

Examines the books of the New Testament from a scholarly, historical-critical perspective, which views it as a historically and culturally conditioned text, reflecting the beliefs and attitudes of the authors who produced it. The course covers the canonical gospels, letters, and other writings of the New Testament. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

RLST 3770 - Archaeological Discoveries Relating to the Bible

Summer 2010 Registration **RLST 3770**

Examines the revolutionary impact of archaeology on Biblical Studies. Among these discoveries are Egyptian, Mesopotamian, and Canaanite texts, the Dead Sea Scrolls, and the Gnostic texts. Through these investigations, the Bible will be placed in its appropriate historical, literary and cultural context. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

RLST 4070 - Western Religious Thought

Summer 2010 Registration **RLST 4070**

Focuses on philosophers and theologians who have contributed to the evolution of the three great religious traditions of the West: Judaism, Christianity and Islam. Targets thinkers from three periods: the ancient or formative era, the medieval era, and the contemporary era. Note: Specific philosophers chosen may vary in different semesters. Cross-listed with PHIL 4710. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

PHIL 4710 - Western Religious Thought

Summer 2010 Registration **PHIL 4710**

Focuses on philosophers and theologians who have contributed to the evolution of the three great religious traditions of the West: Judaism, Christianity and Islam. Targets thinkers from three periods: the ancient or formative era, the medieval era, and the contemporary era. Note: Specific philosophers chosen may vary in different semesters. Cross-listed with RLST 4070. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

RLST 4400 - Differing Concepts of God

Summer 2010 Registration **RLST 4400**

God, gods, and goddesses have been imagined in many different modes, forms, aspects, and guises throughout human history. This course investigates Paleolithic models of God, the Great Goddess of the Neolithic era, the gods of mythological traditions, Biblical God, the abstract God of the philosophers, the God of the pantheists, the deists, and the God of the mystics. Cross-listed with RLST 5400, PHIL 4650 and 5655. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

PHIL 4650 - Differing Concepts of God

Summer 2010 Registration **PHIL 4650**

God, gods, and goddesses have been imagined in many different modes, forms, aspects, and guises throughout human history. This course investigates Paleolithic models of God, the Great Goddess of the Neolithic era, the gods of mythological traditions, Biblical God, the abstract God of the philosophers, the God of the pantheists, the deists, and the God of the mystics. Cross-listed with PHIL 5655, RLST 4400 and 5400. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

RLST 4440 - Concepts of the Soul

Summer 2010 Registration **RLST 4440**

Asks the questions: What is the nature of the human being? What makes us "human?" Do humans have a "soul?" What is its nature? Is it different from the "spirit?" What is its ultimate fate? Examines the various theories put forward by philosophers of both Eastern and Western traditions. Cross-listed with RLST 5440 and PHIL 4470, 5470. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

PHIL 4470 - Concepts of the Soul

Summer 2010 Registration **PHIL 4470**

Asks the questions: What is the nature of the human being? What makes us "human?" Do humans have a "soul?" What is its nature? Is it different from the "spirit?" What is its ultimate fate? Examines the various theories put forward by philosophers of both Eastern and Western traditions. Cross-listed with PHIL 5470 and RLST 4440, 5440. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

RLST 4460 - Death and Concepts of Afterlife

Summer 2010 Registration **RLST 4460**

Examines how the major religious traditions approach the issue of death. Where the Egyptians were fascinated by death, their Mesopotamian and Hebrew neighbors saw no kind of experience continuing after death. Concepts of the Final Judgment Day and the end of the world follow Zoroastrianism, Christianity, and Islam, while Indian religions developed a sophisticated theory of reincarnation and the "art of dying." Finally, we will turn to Chinese belief in ancestral spirits. Cross-listed with RLST 5460. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

* Fulfills requirement for either Eastern or Western religion, but not both simultaneously

One course in Eastern religions chosen from approved list:

RLST 2660 - World Religions

Summer 2010 Registration **RLST 2660**

Provides an introduction to the basic beliefs and concepts of the world's great religious traditions. Covers the history, development, belief patterns, and institutional forms of the world's religions, including Judaism, Zoroastrianism, Christianity, Islam, Hinduism, Buddhism, Confucianism, Taoism and Shintoism. **Semester Hours: 3to 3GT Pathways**

Category Key: GT-AH3

Registration is changing. Visit our website for details ucdenver.edu/registration.

RLST 3400 - Asian Philosophies and Religions

Summer 2010 Registration **RLST 3400**

We in the Western world encounter a vastly different world, a radically different "universe of meaning," when we examine the traditions of the East. Even what we tacitly assume to be "real" is claimed by the Hindus and Buddhists of India to be a grand illusion. The world of China is, again, very different from India. An examination of Tibetan and Japanese religious forms will conclude our study of Asian thought. Cross-listed with PHIL 3666. **Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

PHIL 3666 - Asian Philosophies and Religions

Summer 2010 Registration **PHIL 3666**

We in the Western world encounter a vastly different world, a radically different "universe of meaning," when we examine the traditions of the East. Even what we tacitly assume to be "real" is claimed by the Hindus and Buddhists of India to be a grand illusion. The world of China is, again, very different from India. An examination of Tibetan and Japanese religious forms will conclude our study of Asian thought. Cross-listed with RLST 3400. **Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

RLST 3500 - Religions of India

Summer 2010 Registration **RLST 3500**

Examines the transcendentalist philosophy of India, which rests at the foundation of the great Eastern religious traditions of Hinduism and Buddhism. The Indian ideas of God, the soul, time, the nature of the universe, and its ultimate goal are examined. **Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

RLST 3660 - Chinese Philosophy and Culture

Summer 2010 Registration **RLST 3660**

China is a fascinating world with its own characteristic orientation to philosophical questions. Chinese thinkers produced the "Flowering of a Hundred Schools of Thought" in the Axial Age, the same period of time in which philosophy was coming to birth in ancient Greece. Covers some of the Chinese schools, including Confucianism, Taoism, Mohism, Legalism, Chinese "Logic", and the later schools of Neo-Confucianism, Neo-Taoism and Chinese Buddhism. Cross-listed with PHIL 3981. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

PHIL 3981 - Chinese Philosophy and Culture

Summer 2010 Registration **PHIL 3981**

China is a fascinating world with its own characteristic orientation to philosophical questions. Chinese thinkers produced the "Flowering of a Hundred Schools of Thought" in the Axial Age, the same period of time in which philosophy was coming to birth in ancient Greece. Covers some of the Chinese schools, including Confucianism, Taoism, Mohism, Legalis, Chinese "logic," and the later schools of Neo-Confucianism, Neo-Taoism and Chinese Buddhism. Cross-listed with RLST 3660. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

RLST 4080 - Eastern Religious Thought

Summer 2010 Registration **RLST 4080**

Parallels the course in Western religious thought. The great religious traditions of the East, including Hinduism, Buddhism, Confucianism, and Taoism, are examined as they are presented in the writings of key philosophical representatives of each tradition.

Cross-listed with PHIL 4720. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

PHIL 4720 - Eastern Religious Thought

Summer 2010 Registration **PHIL 4720**

Parallels the course in Western religious thought. The great religious traditions of the

East, including Hinduism, Buddhism, Confucianism, and Taoism, are examined as they are presented in the writings of key philosophical representatives of each tradition. Cross-listed with RLST 4080. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

RLST 4160 - Mysticism

Summer 2010 Registration **RLST 4160**

Explores the mystical strains within the world's great religious traditions. Jewish, Christian, and Islamic mystics did not always express the same beliefs and attitudes as mainstream adherents. When mystics are placed side-by-side, amazing similarities appear. One cannot always tell whether a given mystical statement is Hindu, Jewish, Sufi, or Christian. This class examines these mystical traditions, East and West. Cross-listed with RLST 5160. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

RLST 4440 - Concepts of the Soul

Summer 2010 Registration **RLST 4440**

Asks the questions: What is the nature of the human being? What makes us "human?" Do humans have a "soul?" What is its nature? Is it different from the "spirit?" What is its ultimate fate? Examines the various theories put forward by philosophers of both Eastern and Western traditions. Cross-listed with RLST 5440 and PHIL 4470, 5470. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

PHIL 4470 - Concepts of the Soul

Summer 2010 Registration **PHIL 4470**

Asks the questions: What is the nature of the human being? What makes us "human?" Do humans have a "soul?" What is its nature? Is it different from the "spirit?" What is its ultimate fate? Examines the various theories put forward by philosophers of both Eastern and Western traditions. Cross-listed with PHIL 5470 and RLST 4440, 5440. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

RLST 4460 - Death and Concepts of Afterlife

Summer 2010 Registration **RLST 4460**

Examines how the major religious traditions approach the issue of death. Where the Egyptians were fascinated by death, their Mesopotamian and Hebrew neighbors saw no kind of experience continuing after death. Concepts of the Final Judgment Day and the end of the world follow Zoroastrianism, Christianity, and Islam, while Indian religions developed a sophisticated theory of reincarnation and the "art of dying." Finally, we will turn to Chinese belief in ancestral spirits. Cross-listed with RLST 5460. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

* Fulfills requirement for either Eastern or Western religion, but not both simultaneously

Elective courses (9 hours):

The remaining 9 hours to equal the required 18 hours will count as electives, to be chosen from the full list of courses (below).

Other courses, such as certain special topics, art history courses featuring religious themes and others may count toward the minor at the discretion of the course instructor and the director.

RLST 1610 - Introduction to Religious Studies

Summer 2010 Registration **RLST 1610**

Religion is a complex phenomenon which involves social norms, beliefs and fears, and overarching world view. Religious experiences are among the most profound an individual can have. The course examines religious phenomena from various perspectives, including philosophical, historical, psychological, anthropological, political, sociological, the symbolic and ritual. **Semester Hours:** 3to 3 **GT Pathways Category**

Key: GT-AH3

Registration is changing. Visit our website for details ucdenver.edu/registration.

RLST 2660 - World Religions

Summer 2010 Registration **RLST 2660**

Provides an introduction to the basic beliefs and concepts of the world's great religious traditions. Covers the history, development, belief patterns, and institutional forms of the world's religions, including Judaism, Zoroastrianism, Christianity, Islam, Hinduism, Buddhism, Confucianism, Taoism and Shintoism. **Semester Hours:** 3to 3 **GT Pathways**

Category Key: GT-AH3

Registration is changing. Visit our website for details ucdenver.edu/registration.

RLST 2680 - The American Indian Experience

Summer 2010 Registration **RLST 2680**

Surveys the relationships between Indian and non-Indian peoples, particularly in the context of the unique interaction between tribes and the federal government. Cross-listed with ETST 2606. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

ETST 2606 - The American Indian Experience

Summer 2010 Registration **ETST 2606**

Surveys the relationships between Indian and non-Indian peoples, particularly in the context of the unique interaction between tribes and the federal government. Cross-listed with RLST 2680. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

RLST 2700 - The Bible as Literature

Summer 2010 Registration **RLST 2700**

Introduces students to biblical literature. Selections from the various genres of writing in Hebrew (history, wisdom, prophecy, literature) are read and discussed, as well as representative sections from the New Testament, including the gospels and the writings of Paul. Cross-listed with ENGL 2520. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

ENGL 2520 - The Bible as Literature

Summer 2010 Registration **ENGL 2520**

Introduces students to biblical literature. Selections from the various genres of writing in Hebrew (history, wisdom, prophecy, literature) are read and discussed, as well as representative sections from the New Testament, including the gospels and the writings of Paul. Cross-listed with RLST 2700. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

RLST 3000 - Judaism, Christianity and Islam: Affinity and Difference

Summer 2010 Registration **RLST 3000**

Judaism, Christianity and Islam have much in common, beginning with their common patriarch Abraham. But there are also elements in each that are unrecognizable from the perspectives of the other two. This course will trace the relationships among the Children

of Abraham across history and in today's turbulent world. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

RLST 3060 - History of Early Christianity

Summer 2010 Registration **RLST 3060**

History of the rise of Christianity and the decline of paganism in the Roman Empire from the birth of Jesus of Nazareth to ca. 500 A.D. Special emphasis on social, historical, legal, and cultural context of Christianity's rise and paganism's decline. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

RLST 3080 - Reformation Europe

Summer 2010 Registration **RLST 3080**

Between the early 16th and the middle 17th centuries, Europe was torn by explosive ideological conflicts, resulting in religious upheaval, political revolution, and civil and international wars, but also underwent important experiments in representative government and economic controls. Cross-listed with HIST 4022, 5022. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

HIST 4022 - Reformation Europe

Summer 2010 Registration **HIST 4022**

Between the early 16th and the middle 17th centuries, Europe was torn by explosive ideological conflicts, resulting in religious upheaval, political revolution, and civil and international wars, but also underwent important experiments in representative government and economic controls. Cross-listed with HIST 5022, RLST 3080. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

RLST 3100 - Islamic Politics and Culture

Summer 2010 Registration **RLST 3100**

Comprehensive, in-depth study of Islam and Muslims. Islam is viewed as a "way of life" with social, economic, psychological, spiritual, and political implications. Among topics to be examined are: women in Islam, Jihad, fundamentalism, Islamic movements, Islam and the West. Cross-listed with PSCI 4165. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

PSCI 4165 - Islamic Politics and Culture

Summer 2010 Registration **P SC 4165**

Comprehensive, in-depth study of Islam and Muslims. Islam is viewed as a "way of life" with social, economic, psychological, spiritual, and political implications. Among topics to be examined are: women in Islam, Jihad, fundamentalism, Islamic movements, Islam and the West. Cross-listed with RLST 3100. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

RLST 3300 - Shamanic Traditions

Summer 2010 Registration **RLST 3300**

Explores shamanic religious traditions across the world. This form of religion, involving spiritism, animism, trance states, and "mind power," is the oldest and most widespread religion in world history. Covers the "Shramana" disciplines of India, probable source for the name "Shamanism;" Tibet, Central Asia Korea, China, Japan, Australia; Pacific Island, Native American, and traditional African cultures. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

RLST 3400 - Asian Philosophies and Religions

Summer 2010 Registration **RLST 3400**

We in the Western world encounter a vastly different world, a radically different "universe of meaning," when we examine the traditions of the East. Even what we tacitly assume to be "real" is claimed by the Hindus and Buddhists of India to be a grand illusion. The world of China is, again, very different from India. An examination of Tibetan and Japanese religious forms will conclude our study of Asian thought. Cross-listed with PHIL 3666. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

PHIL 3666 - Asian Philosophies and Religions

Summer 2010 Registration **PHIL 3666**

We in the Western world encounter a vastly different world, a radically different "universe of meaning," when we examine the traditions of the East. Even what we tacitly assume to be "real" is claimed by the Hindus and Buddhists of India to be a grand illusion. The world of China is, again, very different from India. An examination of Tibetan and Japanese religious forms will conclude our study of Asian thought. Cross-listed with RLST 3400. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

RLST 3500 - Religions of India

Summer 2010 Registration **RLST 3500**

Examines the transcendentalist philosophy of India, which rests at the foundation of the great Eastern religious traditions of Hinduism and Buddhism. The Indian ideas of God, the soul, time, the nature of the universe, and its ultimate goal are examined. **Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

RLST 3660 - Chinese Philosophy and Culture

Summer 2010 Registration **RLST 3660**

China is a fascinating world with its own characteristic orientation to philosophical questions. Chinese thinkers produced the "Flowering of a Hundred Schools of Thought" in the Axial Age, the same period of time in which philosophy was coming to birth in ancient Greece. Covers some of the Chinese schools, including Confucianism, Taoism, Mohism, Legalism, Chinese "Logic", and the later schools of Neo-Confucianism, Neo-Taoism and Chinese Buddhism. Cross-listed with PHIL 3981. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

PHIL 3981 - Chinese Philosophy and Culture

Summer 2010 Registration **PHIL 3981**

China is a fascinating world with its own characteristic orientation to philosophical questions. Chinese thinkers produced the "Flowering of a Hundred Schools of Thought" in the Axial Age, the same period of time in which philosophy was coming to birth in ancient Greece. Covers some of the Chinese schools, including Confucianism, Taoism, Mohism, Legalis, Chinese "logic," and the later schools of Neo-Confucianism, Neo-Taoism and Chinese Buddhism. Cross-listed with RLST 3660. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

RLST 3720 - Religious Narratives

Summer 2010 Registration **RLST 3720**

Investigates the language and structure of religious discourse in Western literature. Welcomes interdisciplinary and comparative perspectives with a focus on cultural constructions of the sacred. Cross-listed with ENGL 3520. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

ENGL 3520 - Religious Narratives

Summer 2010 Registration **ENGL 3520**

Investigates the language and structure of religious discourse in Western literature. Welcomes interdisciplinary and comparative perspectives with a focus on cultural

constructions of the sacred. Prereq: Must have 30 semester hours or permission of the instructor. Cross-listed with RLST 3720.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

RLST 3740 - Biblical Traditions: Old Testament

Summer 2010 Registration **RLST 3740**

Investigates the history and nature of the Biblical text. Follows the tradition of critical scholarship beginning in the Enlightenment era and continued down to the present day, sometimes entitled "Secular Humanism." Topics include theories of authorship of the Torah, its general nature and content; the historical books of the Bible, the Prophets, and the Wisdom Literature.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

RLST 3760 - Biblical Studies: New Testament

Summer 2010 Registration **RLST 3760**

Examines the books of the New Testament from a scholarly, historical-critical perspective, which views it as a historically and culturally conditioned text, reflecting the beliefs and attitudes of the authors who produced it. The course covers the canonical gospels, letters, and other writings of the New Testament.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

RLST 3770 - Archaeological Discoveries Relating to the Bible

Summer 2010 Registration **RLST 3770**

Examines the revolutionary impact of archaeology on Biblical Studies. Among these discoveries are Egyptian, Mesopotamian, and Canaanite texts, the Dead Sea Scrolls, and the Gnostic texts. Through these investigations, the Bible will be placed in its appropriate historical, literary and cultural context.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

RLST 4000 - Religion and Cultural Diversity

Summer 2010 Registration **RLST 4000**

Religion is one of the key elements which creates multiculturalism. This course explores issues in religion and religious identity in contemporary America, including Native American spiritual traditions, Jewish-American traditions, Muslim-American traditions, Asian-American traditions, the African-American Pentecostal movement, and the growth of the Black Muslim movement. Attention is also given to the question of gender issues, as the traditional model for gender roles was formulated, in part, from a religious basis.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

RLST 4010 - Comparative Religious Systems

Summer 2010 Registration **RLST 4010**

A cross-cultural analysis of religious belief and behavior. Emphasis is placed on religions found among non-Western cultural groups and includes consideration of how major religions of the world are manifested on local levels. Cross-listed with ANTH 4130, 5130, RLST 5010. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

ANTH 4130 - Comparative Religious Systems

Summer 2010 Registration **ANTH 4130**

A cross-cultural analysis of religious belief and behavior. Emphasis is placed on religions found among non-Western cultural groups and includes consideration of how major religions of the world are manifested on local levels. Prereq: ANTH 2102 or equivalent. Cross-listed with ANTH 5130, RLST 4010, 5010. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

RLST 4020 - Sociology of Religion

Summer 2010 Registration **RLST 4020**

An intensive review and analysis of the fundamental tenets of religion as a social institution, with emphasis on present-day religious cults, their beliefs and activities in society. Cross-listed with RLST 5020 and SOCY 4610, 5610. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

SOCY 4610 - Sociology of Religion

Summer 2010 Registration **SOC 4610**

An intensive review and analysis of the fundamental tenets of religion as a social institution, with emphasis on present-day religious cults, their beliefs and activities in society. Cross-listed with SOCY 5610, RLST 4020, 5020. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

RLST 4040 - Psychology of Religion

Summer 2010 Registration **RLST 4040**

Examines the theories developed by some of the great names in the field of psychology and their approaches to religion. Questions addressed include why people become religious, how religion functions in their lives, religious experience and assessment of the validity of religious claims. Key theorists studied include: William James, Sigmund Freud, Carl G. Jung, Abraham Maslow and Erich Fromm. Cross-listed with RLST

5040.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

RLST 4060 - Philosophy of Religion

Summer 2010 Registration **RLST 4060**

Nature of religion and methods of studying it. Cross-listed with HUMN 5600, PHIL 4600, 5600, RLST 5060, and SSCI 5600.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

PHIL 4600 - Philosophy of Religion

Summer 2010 Registration **PHIL 4600**

Nature of religion and methods of studying it. Cross-listed with HUMN 5600, PHIL 5600, RLST 4060, 5060, and SSCI 5600.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

RLST 4070 - Western Religious Thought

Summer 2010 Registration **RLST 4070**

Focuses on philosophers and theologians who have contributed to the evolution of the three great religious traditions of the West: Judaism, Christianity and Islam. Targets thinkers from three periods: the ancient or formative era, the medieval era, and the contemporary era. Note: Specific philosophers chosen may vary in different semesters. Cross-listed with PHIL 4710.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

PHIL 4710 - Western Religious Thought

Summer 2010 Registration **PHIL 4710**

Focuses on philosophers and theologians who have contributed to the evolution of the three great religious traditions of the West: Judaism, Christianity and Islam. Targets thinkers from three periods: the ancient or formative era, the medieval era, and the contemporary era. Note: Specific philosophers chosen may vary in different semesters. Cross-listed with RLST 4070.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

RLST 4080 - Eastern Religious Thought

Summer 2010 Registration **RLST 4080**

Parallels the course in Western religious thought. The great religious traditions of the East, including Hinduism, Buddhism, Confucianism, and Taoism, are examined as they

are presented in the writings of key philosophical representatives of each tradition.
Cross-listed with PHIL 4720.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

PHIL 4720 - Eastern Religious Thought

Summer 2010 Registration **PHIL 4720**

Parallels the course in Western religious thought. The great religious traditions of the East, including Hinduism, Buddhism, Confucianism, and Taoism, are examined as they are presented in the writings of key philosophical representatives of each tradition.

Cross-listed with RLST 4080.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

RLST 4100 - Special Topics in Religion

Summer 2010 Registration **RLST 4100**

This special topics course allows for a variety of subjects to be explored in different semesters, including such issues as the nature of religious experience, communication with the divine, specific historical themes and events in religion.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

RLST 4160 - Mysticism

Summer 2010 Registration **RLST 4160**

Explores the mystical strains within the world's great religious traditions. Jewish, Christian, and Islamic mystics did not always express the same beliefs and attitudes as mainstream adherents. When mystics are placed side-by-side, amazing similarities appear. One cannot always tell whether a given mystical statement is Hindu, Jewish, Sufi, or Christian. This class examines these mystical traditions, East and West. Cross-listed with RLST 5160.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

RLST 4260 - Kosmos: Theories of the Universe

Summer 2010 Registration **RLST 4260**

A course in philosophical cosmology using material from the sciences, history and philosophy. The goal is to illuminate our present theories concerning the nature of the universe and the place of life within it. Cross-listed with PHIL 3420.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

PHIL 3420 - Kosmos: Theories of the Universe

Summer 2010 Registration **PHIL 3420**

A course in philosophical cosmology using material from the sciences, history and philosophy. The goal is to illuminate our present theories concerning the nature of the universe and the place of life within it. Cross-listed with RLST 4260. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

RLST 4280 - Current Perspectives on the Evolution of Consciousness and Culture

Summer 2010 Registration **RLST 4280**

Studies of evolution traditionally regard morphology (anatomy) / behavior and mind/consciousness as separate fields that belong either in biology/paleontology or in psychology/philosophy. The "middle ground" behavior, anthropology, social systems, is also treated separately in most cases. Recent approaches tend toward a more holistic view using unifying principles and "laws of nature" that show similar processes (dissipative effects, information theory, development theory) operating across all fields. Examines the relationships and common threads between the physical anatomical evolution of organisms and their behavior perception and consciousness. Prereq: Introductory course in evolution (biology/paleontology), psychology, philosophy, anthropology, or permission of instructor. Cross-listed with GEOL 3100 and PHIL 3100. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

GEOL 3100 - Current Perspectives on the Evolution of Consciousness and Culture

Summer 2010 Registration **GEOL 3100**

Studies of evolution traditionally regard morphology (anatomy)/behavior and mind/consciousness as separate fields that belong either in biology/paleontology or in psychology/philosophy. The "middle ground" behavior, anthropology, social systems, is also treated separately in most cases. Recent approaches tend toward a more holistic view using unifying principles and "laws of nature" that show similar processes (dissipative effects, information theory, development theory) operating across all fields. Examines the relationships and common threads between the physical anatomical evolution of organisms and their behavior perception and consciousness. Prereq: Introductory course in evolution (biology/paleontology), psychology, philosophy, anthropology or permission of instructor. Cross-listed with PHIL 3100 and RLST 4280. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

PHIL 3100 - Current Perspectives on the Evolution of Consciousness and Culture

Summer 2010 Registration **PHIL 3100**

Studies of evolution traditionally regard morphology (anatomy)/behavior and mind/consciousness as separate fields that belong either in biology/paleontology or in psychology/philosophy. The "middle ground" behavior, anthropology, social systems, is also treated separately in most cases. Recent approaches tend toward a more holistic view using unifying principles and "laws of nature" that show similar processes (dissipative effects, information theory, development theory) operating across all fields. Examines the relationships and common threads between the physical anatomical evolution of organisms and their behavior perception and consciousness. Prereq: Introductory course in evolution (biology/paleontology), psychology, philosophy, anthropology or permission of instructor. Cross-listed with GEOL 3100 and RLST 4280. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

RLST 4300 - Myth and Symbol

Summer 2010 Registration **RLST 4300**

Approaches the field of classical Greek mythology and religion from the perspective of Jungian archetypal theory. The deities of the ancient Greeks are presented as archetypal patterns with universal correlates elsewhere in world religions. A foundation in C. G. Jung's archetypal theory will be offered to ground the course material. Cross-listed with RLST 5300. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

RLST 4320 - Spirituality in the Modern World

Summer 2010 Registration **RLST 4320**

Examines the issue of spiritual currents in the modern world. Joseph Campbell claimed that Western culture long ago lost an active sense of the sacred and that the traditional religions have not been the spiritual center for the vast majority of moderns for centuries. This class looks at the modern spiritual awakening in Shamanism, Eastern thought, the New Age movement, the men's movement, paganism and goddess religion, and the revival of traditional religious forms in recent decades. Prereq: RLST 4300. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

RLST 4340 - The Hero's Journey

Summer 2010 Registration **RLST 4340**

The myth of the hero's journey serves as a metaphor for the vicissitudes life puts each of US through. The hero or her represents the ego-self who undertakes the journey--a grand adventure into the realm of the unknown--to seek the treasure. He or she is

greatly transformed by the process, ultimately into the great self, who wins the boon to share with all humanity. Versions of the story are found all over the world, such as in the sagas of Gilgamesh, Odysseus, Psyche, King Arthur, Dorothy of Oz, and Luke Skywalker from a galaxy far, far, away. Cross listed with ENGL 3530. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

ENGL 3530 - The Hero's Journey

Summer 2010 Registration **ENGL 3530**

The myth of the hero's journey serves as a metaphor for the vicissitudes life puts each of us through. The hero or her represents the ego-self who undertakes the journey--a grand adventure into the realm of the unknown--to seek the treasure. He or she is greatly transformed by the process, ultimately into the great self, who wins the boon to share with all humanity. Versions of the story are found all over the world, such as in the sagas of Gilgamesh, Odysseus, Psyche, King Arthur, Dorothy of Oz, and Luke Skywalker from a galaxy far, far, away. Prereq: Must have 30 semester hours or permission of the instructor. Cross listed with RLST 4340. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

RLST 4360 - Freudian and Jungian Perspectives in Dream Analysis

Summer 2010 Registration **RLST 4360**

Focuses on the phenomenon of dreams in a way that differs distinctly from the traditional approach to the subject in the field of psychology. Throughout history, dreams have been regarded as prophetic, as the voice of the gods. These "spiritual" approaches to dreams are examined, as well as some major theorists on dreams, especially the work of Sigmund Freud and C. G. Jung. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

RLST 4400 - Differing Concepts of God

Summer 2010 Registration **RLST 4400**

God, gods, and goddesses have been imagined in many different modes, forms, aspects, and guises throughout human history. This course investigates Paleolithic models of God, the Great Goddess of the Neolithic era, the gods of mythological traditions, Biblical God, the abstract God of the philosophers, the God of the pantheists, the deists, and the God of the mystics. Cross-listed with RLST 5400, PHIL 4650 and 5655. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

PHIL 4650 - Differing Concepts of God

Summer 2010 Registration **PHIL 4650**

God, gods, and goddesses have been imagined in many different modes, forms, aspects, and guises throughout human history. This course investigates Paleolithic models of God, the Great Goddess of the Neolithic era, the gods of mythological traditions, Biblical God, the abstract God of the philosophers, the God of the pantheists, the deists, and the God of the mystics. Cross-listed with PHIL 5655, RLST 4400 and 5400. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

RLST 4420 - Goddess Traditions

Summer 2010 Registration **RLST 4420**

Explores the many forms which goddesses have assumed through history, including the Neolithic Great Mother and her heiresses in the ancient Mediterranean cultures, such as: Isis, Ishtar, Demeter, Hecate, Aphrodite, Artemis, Athena and others, and their parallels in India. Goddess traditions have encompassed a full spectrum from virgins to Great Mothers to dark underworld goddesses of death and destruction. Cross-listed with RLST 5420 and WGST 4420. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

WGST 4420 - Goddess Traditions

Summer 2010 Registration **WGST 4420**

Explores the many forms which goddesses have assumed through history, including the Neolithic Great Mother and her heiresses in the ancient Mediterranean cultures, such as: Isis, Ishtar, Demeter, Hecate, Aphrodite, Artemis, Athena and others, and their parallels in India. Goddess traditions have encompassed a full spectrum from virgins to Great Mothers to dark underworld goddesses of death and destruction. Cross-listed with RLST 4420, RLST 5420. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

RLST 4440 - Concepts of the Soul

Summer 2010 Registration **RLST 4440**

Asks the questions: What is the nature of the human being? What makes us "human?" Do humans have a "soul?" What is its nature? Is it different from the "spirit?" What is its ultimate fate? Examines the various theories put forward by philosophers of both Eastern and Western traditions. Cross-listed with RLST 5440 and PHIL 4470, 5470. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

PHIL 4470 - Concepts of the Soul

Summer 2010 Registration **PHIL 4470**

Asks the questions: What is the nature of the human being? What makes us "human?" Do humans have a "soul?" What is its nature? Is it different from the "spirit?" What is its ultimate fate? Examines the various theories put forward by philosophers of both Eastern and Western traditions. Cross-listed with PHIL 5470 and RLST 4440, 5440. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

RLST 4460 - Death and Concepts of Afterlife

Summer 2010 Registration **RLST 4460**

Examines how the major religious traditions approach the issue of death. Where the Egyptians were fascinated by death, their Mesopotamian and Hebrew neighbors saw no kind of experience continuing after death. Concepts of the Final Judgment Day and the end of the world follow Zoroastrianism, Christianity, and Islam, while Indian religions developed a sophisticated theory of reincarnation and the "art of dying." Finally, we will turn to Chinese belief in ancestral spirits. Cross-listed with RLST 5460. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

RLST 4480 - Perspectives on Good and Evil

Summer 2010 Registration **RLST 4480**

Examines the "problem of evil." As formulated in the philosophical tradition: if the deity is understood as perfect, then why is there evil? How can a perfect entity create imperfection? Why would an absolutely benevolent God cause or allow the innocent to suffer? Presents the classical formulation of the problem, the traditional solutions offered, and the classical critiques of each answer. Considers the perspectives of the various religious orientations, each of which deals differently with the question of suffering. Cross-listed with PHIL 4480. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

PHIL 4480 - Perspectives on Good and Evil

Summer 2010 Registration **PHIL 4480**

Examines the "problem of evil." As formulated in the philosophical tradition: if the deity is understood as perfect, then why is there evil? How can a perfect entity create imperfection? Why would an absolutely benevolent God cause or allow the innocent to suffer? Presents the classical formulation of the problem, the traditional solutions

offered, and the classical critiques of each answer. Considers the perspectives of the various religious orientations, each of which deals differently with the question of suffering. Cross-listed with RLST 4480. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

RLST 4500 - Religion and Politics

Summer 2010 Registration **RLST 4500**

Exploration of: (1) theoretical perspectives on the relationship between religion and politics; (2) causes of and justifications for the historical development of the Western separation of "church" and state; (3) contemporary responses to and analyses of this separation; and (4) several current debates about public policy in America that reveal tensions between these two spheres. Cross-listed with PSCI 4057, 5057 and RLST 5500. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

PSCI 4057 - Religion and Politics

Summer 2010 Registration **P SC 4057**

Exploration of: (1) theoretical perspectives on the relationship between religion and politics; (2) causes of and justifications for the historical development of the Western separation of "church" and state; (3) contemporary responses to and analyses of this separation; and (4) several current debates about public policy in America that reveal tensions between these two spheres. Cross-listed with PSCI 5057 and RLST 4500, 5500. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

RLST 4730 - Whores and Saints: Medieval Women

Summer 2010 Registration **RLST 4730**

Studies how women are presented in texts, as well as works by women. Investigates the roles open to women and societal attitudes toward women, who were considered seductresses, saints, scholars and warriors in the middle ages. Prereq: Nine hours of literature courses or instructor permission. Cross-listed with ENGL 4510, ENGL 5510, RLST 5730 and WGST 4510. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

ENGL 4510 - Whores and Saints: Medieval Women

Summer 2010 Registration **ENGL 4510**

Studies how women are presented in texts, as well as works by women. Investigates the roles open to women and societal attitudes toward women, who were considered

seductresses, saints, scholars and warriors in the middle ages. Prereq: Nine hours of literature courses or instructor permission. Cross-listed with ENGL 5510, RLST 4730 and RLST 5730, WGST 4510. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

WGST 4510 - Whores and Saints: Medieval Women

Summer 2010 Registration **WGST 4510**

Studies how women are presented in texts, as well as works by women. Investigates the roles open to women and societal attitudes toward women, who were considered seductresses, saints, scholars and warriors in the middle ages. Prereq: Nine hours of literature courses or instructor permission. Cross-listed with ENGL 4510, Engl 5510, RLST 4730, RLST 5730. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

RLST 4840 - Independent Study: RLST

Summer 2010 Registration **RLST 4840**

Various topics in religious studies pursued in independent research. **Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Minor Total: 18 Hours

Sculpture Minor

To declare a CAM minor, please see the College of Arts & Media's Office of Advising and Student Services in Arts Building, 177.

Students may transfer up to 6 semester hours of non-UC Denver courses toward a minor. All other courses must be taken at UC Denver. Each course must be completed with a C/2.0 or better. Students pursuing a BA in fine arts (art history emphasis) may use up to 9 semester hours to fulfill major and minor requirements; the remaining semester hours must be taken in addition to the major requirements. Students pursuing a major in any of the studio arts may not pursue this minor. Consult a CAM advisor for further details.

Program Requirements

FINE 1500 - Three-Dimensional Design

Summer 2010 Registration F A 1500

Students explore the elements of art and the principles of design applied to three-dimensional design while developing an understanding of material properties, techniques, processes and tools. Creative practice is accompanied by written, theoretical and verbal critical thinking skills. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 2500 - Bronze Casting and Metal Sculpture

Summer 2010 Registration F A 2500

Students learn lost wax casting with ceramic shell investment and bonded sand. Modeling, foundry work, centrifugal casting and welding for cast metal is introduced, as is steel fabrication and mixed media. Individual vocabularies are explored and design skills required. Prereq: FINE 1500. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 2510 - Wood and Metal Sculpture

Summer 2010 Registration F A 2510

Wood, metal fabrication and introduction of the found object are premise for the exploration of individual visual vocabularies. Investigation and design are applied towards developing conceptual ideas while students advance skills in the metal and wood studios. Prereq: FINE 1500, FINE 2500 (Can be taken concurrently with FINE 2500). **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

_____ - Art History Elective (3 semester hours)

Select three courses from the following:

FINE 3500 - Modeling and Casting the Figure

Summer 2010 Registration F A 3500

Study of the human figure from life and imagination directs visual vocabulary towards expression three dimensionally. Mold making using rubber, alginate and plaster is introduced for casting in metal, resin, synthetics, plastic, paper and biodegradable materials. Drawing is included. Prereq: FINE 1015, FINE 1100, FINE 1400, FINE 1500, FINE 2015, FINE 2600, FINE 2610, FINE 2500, FINE 2510. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3510 - Installation Art

Summer 2010 Registration F A 3510

Students learn to modify the way a particular space is experienced through material intervention in everyday public or private spaces. Material use ranges from everyday and

natural materials to new media such as video, sound, performance, computers and the Internet. Prereq: FINE 1015, FINE 1100, FINE 1400, FINE 1500, FINE 2015, FINE 2500, FINE 2510, FINE 2600, FINE 2610. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 4500 - Kinetic Sculpture

Summer 2010 Registration F A 4500

Students explore movement and balance in sculptural work using pivot points and motors. Sound, projection, sensors and mechanics provide cause and effect scenarios in conjunction with knowledge, materials, and techniques acquired to date in the program. Prereq: FINE 1015, FINE 1100, FINE 1400, FINE 1500, FINE 2015, FINE 2500, FINE 2510, FINE 2600, FINE 2610. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 4510 - Advanced Sculpture

Summer 2010 Registration F A 4510

Individual decision-making is stressed in developing a strong body of work. Competent technical skills and conceptual ideology are expanded to achieve complete visual experiences and development of conceptual ideas. Prereq: FINE 1015, FINE 1100, FINE 1400, FINE 1500, FINE 2015, FINE 2500, FINE 2510, FINE 2600, FINE 2610, FINE 3500, FINE 3510, FINE 3515, FINE 3525, FINE 3530, FINE 3535, FINE 4500. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 21 Hours

Social Justice Minor

Requirements for the Minor

The minor consists of 18 semester hours, structured as follows:

- A required introductory class (with either a social science or humanities focus); see below.
- An experiential learning component of 3 semester hours.
- Upper-division course work to be determined by individual students in consultation with the social justice minor director. At least two disciplines must be represented.
- A 3-semester-hour capstone seminar that will provide opportunity for further reflection on the experiential learning projects and student group projects.

Required course

Choose one:

SJUS 2010 - Social Justice: Theories, Narratives, and Technologies

Summer 2010 Registration **SJUS 2010**

How can citizens of a democracy address social justice issues? This course examines theoretical perspectives relevant to social justice, the narratives which express and question social order, and the technologies which alternately shape and reflect local, regional, and global cultures. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

SJUS 2000 - Democratic Participation and Social Justice

Summer 2010 Registration **SJUS 2000**

Examines how well the United States, Colorado and Denver are doing in addressing issues of social justice, such as inequality and environmental degradation. Explores various modes of democratic participation--electoral politics, community activism, and lifestyle changes--in advancing social justice. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 3 Hours

Internship

A 3-semester-hour internship in any discipline of the social sciences or humanities, involving community work and including a reflective component and public dissemination or report.

Total: 3 Hours

Upper-Division Courses

Choose three (below is a sample list of upper-division courses, but other courses may be considered):

ANTH 3142 - Cultural Diversity in the Modern World

Summer 2010 Registration **ANTH 3142**

An in-depth analysis of the phenomena of culture and application of the culture concept to understanding cultural diversity in the modern world. Applies the concept of culture to several basic aspects of human social life, for example: social class and gender relations, ethnicity, racism and sexism, education, health and economic behavior. Students explore these issues in the context of case studies of particular groups and/or communities, focusing primarily on the diversity of cultural expression in contemporary U.S. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 4070 - Culture of Development and Globalization

Summer 2010 Registration **ANTH 4070**

Anthropological critiques of development and globalization point out that they have occurred without regard for the diversity of human culture and human need. Beginning with this analysis, this course goes one step further by examining culture and values of development and how they affect the way development gets done. Prereq: Upper division standing and permission of instructor. Cross-listed with ANTH 5070. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 4022 - Critical Analysis of Communication

Summer 2010 Registration **CMMU 4022**

Surveys research methods used to analyze messages from rhetorical and critical perspectives. Cross-listed with COMM 5022. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 4200 - Persuasion

Summer 2010 Registration **CMMU 4200**

Examines influence and communication at individual, group, organizational and societal levels. a theoretical and applied analysis of persuasion, including examination of public opinion, individual attitudes, beliefs, values, sources, credibility, ethics, and certain message and audience variables. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 4260 - Communication and Conflict

Summer 2010 Registration **CMMU 4260**

Studies the influence of communication on intrapersonal, interpersonal, intragroup and

intergroup conflict situations. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 3795 - Race and Ethnicity in American Literature

Summer 2010 Registration **ENGL 3795**

Focuses alternately on one of several ethnic American literary traditions (e.g. African American, Chicano) and their historical, geographical, social and economic communities. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 4280 - Proposal and Grant Writing

Summer 2010 Registration **ENGL 4280**

Focuses on research, design, composition, and editing original proposals. Includes idea development, identification of funding sources, and the creation of persuasive documents. Prereq: ENGL 1020. Cross-listed with ENGL 5280. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 4701 - Multimedia in the Community

Summer 2010 Registration **ENGL 4701**

Produce dossier-quality multimedia shorts by researching and writing digital compositions for selected community organizations. Topics for research range across numerous social issues and involve all disciplines. Prereq: ENGL 2030, 3154, and 3170 or permission of instructor. Cross-listed with ENGL 5701. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ETST 3108 - Chicano/a and Latino/a History

Summer 2010 Registration **ETST 3108**

An historical analysis of person's descendant from Mexico and Latin America. Areas of focus include ethnohistorical backgrounds, current interrelations, and social movements in both rural and urban groups. Other topics include: cultural patterns, identity maintenance, social reforms and problems of national incorporation. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ETST 3274 - Power, Poverty, Culture

Summer 2010 Registration **ETST 3274**

Studies the process that has rendered certain groups poor for generations. Studies African Americans, Whites, Chicanos/as and Latinos/as, and other ethnic groups that

have lived in this society in a state of poverty. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ETST 3396 - History of the American Indian

Summer 2010 Registration **ETST 3396**

Indigenous nations in North America comprise hundreds of diverse cultures. This course examines U.S. Indian policy and how indigenous nations responded; how they creatively adapted, and resisted cultural change; and how they continue to persist culturally, socially, and politically. Cross-listed with HIST 3396. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ETST 3704 - Culture, Racism and Alienation

Summer 2010 Registration **ETST 3704**

The effects of racism on the personality of participants in racist cultures. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 3411 - Globalization and Regional Development

Summer 2010 Registration **GEOG 3411**

Addresses global political-restructuring and its implications for regional development in the U.S. Both historical and contemporary processes of globalization are examined. Topics include: the environmental basis of American industrial growth, the relationship between technological change and geographical shifts, the rise and decline of Fordism, the transfer of Japanese manufacturing methods to the U.S., the role of regional and national industrial policy, and the social consequences of globalization for labor and communities. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4335 - Contemporary Environmental Issues

Summer 2010 Registration **GEOG 4335**

Provides an overview of environmental challenges facing society today, focusing on how humans impact and change the environment. Opposing views and environmental policy at the local, state, national, and international levels are explored. Cross-listed with GEOG 5335. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4640 - Urban Geography: Denver and the U.S.

Summer 2010 Registration **GEOG 4640**

Uses a combined lecture/seminar format to explore research themes in urban geography. Topics covered include both historical and contemporary processes of urban development and transformation. Particular emphasis is placed on the U.S. and Colorado's Front Range. Cross-listed with GEOG 5640. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HBSC 3041 - Health, Culture and Society

Summer 2010 Registration **HBSC 3041**

A critical, holistic interpretation of health, illness, and human bodies that emphasizes power as a key social-structural factor in health and societal responses to illness. Explores those areas of social and cultural life where power differences are most evident in their impact on health. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HBSC 4021 - Community Health Assessment

Summer 2010 Registration **HBSC 4021**

Introduces applied methods of public health, including: analyzing community-level assessment data, developing a casual model for selected health outcomes, maximizing community participation in the assessment process, developing assessments as a team, and setting the stage for effective intervention and evaluation. Prereq: Upper division standing, a course in statistics, and an introductory course in epidemiology (HBSC 4001, 5001). Cross-listed with HBSC 5021. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 3345 - Immigration and Ethnicity in American History

Summer 2010 Registration **HIST 3345**

Explores the personal and collective experience of immigrants to America. Discusses problems of assimilation, urban and rural experiences, and implications for politics, the economy and social attitudes. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4217 - Consumer Culture

Summer 2010 Registration **HIST 4217**

This interdisciplinary course examines the dynamics of the consumer culture in the context of social, economic, and technological history. The analysis begins with 17th century European origins, and continues through recent world developments, emphasizing the U.S. since 1800. Note: Open to all students. Cross-listed with HIST

5217.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4219 - Depression, Affluence and Anxiety: U.S. History, 1929 to the Present

Summer 2010 Registration HIST 4219

Examines major developments, focusing on the causes of the Depression and efforts to combat it; World War II and postwar readjustments; the Cold War and challenges of world leadership; unparalleled prosperity; Civil Rights movement; the Vietnam War; and economic uncertainties amidst general prosperity. Cross-listed with HIST

5219.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 3200 - Social and Political Philosophy

Summer 2010 Registration PHIL 3200

Examines basic issues in social and political philosophy, including justice, freedom, individuality, power and community.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 3280 - War and Morality

Summer 2010 Registration PHIL 3280

Attempts to identify and analyze some of the major moral issues of war. When is a war just, when is it not? What are morally acceptable rules of engagement? What, if anything, justifies violating them? How does one evaluate terrorism and war against terrorism? What are moral alternatives to the violence of war?**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 3500 - Ideology and Culture: Racism and Sexism

Summer 2010 Registration PHIL 3500

Surveys the nature and role of racism and sexism. Topics may include ideology theory, naturalism, the equal protection clause, recent scientific discussion, sociolegal history, and social constructionism. Cross-listed with WGST 3500.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 4920 - Philosophy of Media and Technology

Summer 2010 Registration PHIL 4920

A philosophical examination of interrelationships between contemporary media, technology, and their impacts upon character of contemporary life and values. Topics

may include ethics, epistemology, democracy, advertising, media literacy and criticism. Cross-listed with PHIL 5920, HUMN 5920, SSCI 5920. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

PHIL 5920 - Philosophy of Media and Technology

Summer 2010 Registration **PHIL 5920**

A philosophical examination of interrelationships between contemporary media, technology, and their impacts upon character of contemporary life and values. Topics may include ethics, epistemology, democracy, advertising, media literacy and criticism. Cross-listed with PHIL 4920, HUMN 5920, SSCI 5920. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 3034 - Race, Gender, Law and Public Policy

Summer 2010 Registration **P SC 3034**

Historical overview of race and gender relations in the U.S. and an examination of the treatment of issues of race and gender in the judicial system and public policy. Cross-listed with WGST 3034. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4025 - Local Governance and Globalization

Summer 2010 Registration **P SC 4025**

Introduces international political economy, consequences of globalization for localities, interplay between wealth and power among nations, multinational corporations, NGOs and the UN, and impact of their actions on local governments. Topics include development, aid, trade, outsourcing, eco-sustainability and global equity. Prereq: Graduate standing or permission of instructor. Cross-listed with PSCI 5025. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4207 - Theories of Social and Political Change

Summer 2010 Registration **P SC 4207**

Conservative, radical, and incremental approaches to change. Role of psychological and sociological factors in political change. Comparative perspectives on change. Self-perpetuation processes of power systems and their vulnerabilities. Requisites of system maintenance and system change. Selected case studies. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

RLST 4000 - Religion and Cultural Diversity

Summer 2010 Registration **RLST 4000**

Religion is one of the key elements which creates multiculturalism. This course explores issues in religion and religious identity in contemporary America, including Native American spiritual traditions, Jewish-American traditions, Muslim-American traditions, Asian-American traditions, the African-American Pentecostal movement, and the growth of the Black Muslim movement. Attention is also given to the question of gender issues, as the traditional model for gender roles was formulated, in part, from a religious basis. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SOCY 3001 - Urban Sociology

Summer 2010 Registration **SOC 3001**

The city and urban society are examined in terms of social structure, residential and institutional patterning, process of interaction, demographic processes, and patterns of growth and change. Cross-listed with ETST 3001. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SOCY 3030 - Social Change

Summer 2010 Registration **SOC 3030**

Process of change in Western societies and its effects on the individual, communities, and economic and political institutions. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SOCY 4440 - Social Stratification

Summer 2010 Registration **SOC 4440**

The relations among the concentration of income and wealth, economic organization and power, power and class phenomena in the United States. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 9 Hours

Capstone

Total: 3 Hours

Minor Total: 18 Hours

Sociology Minor

For an undergraduate minor in sociology, a minimum of 15 semester hours in sociology must be completed with a grade of C or better. Nine of these hours must be taken from Downtown Campus faculty.

Course Requirements

Required Courses

SOCY 1001 - Introduction to Sociology

Summer 2010 Registration **SOC 1001**

A survey course in which the main concepts that define the sociological perspective are presented, and a picture of society is provided by examining major social institutions and forms of social organization within society. **Semester Hours: 3 to 3** **GT Pathways**

Category Key: GT-SS3

Registration is changing. Visit our website for details ucdenver.edu/registration.
and

SOCY 4150 - History of Sociological Theory

Summer 2010 Registration **SOC 4150**

An analysis of the major contributions and determinants of earlier social analysts to present-day social thought and analysis of pertinent sociological issues. **Semester**

Hours: 3 to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 6 Hours

Electives

Nine hours of sociology elective courses, completed with a grade of C or better.

Total: 9 Hours

Minor Total: 15 Hours

Spanish Minor

Students minoring in Spanish for the BA degree must complete 15 semester hours of upper-division Spanish courses (courses numbered 3000 and higher). All course work must be taught in Spanish.

The minor in Spanish must include at least one culture and civilization class, chosen from the following:

Required Courses

Choose one:

SPAN 3070 - Bilingual Communities: Spanish as a Language of Contact

Summer 2010 Registration **SPAN 3070**

Explores bilingualism by tracing the series of linguistic and ethnic contacts that converted Castilian from a Latin dialect to the language of the Spanish empire, the primary language of Latin America, and a fast-growing language in the United States. Prereq: SPAN 3010 for majors, or permission of instructor for non-majors. **Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPAN 3212 - Spanish American Culture and Civilization

Summer 2010 Registration **SPAN 3212**

Surveys the social, political, economic, religious, literary, and artistic life of Spanish America from the conquest to the present. Note: Taught in Spanish for major and minor credit. Prereq: SPAN 2120 or 2130. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPAN 3221 - Culture and Civilization of Spain I

Summer 2010 Registration **SPAN 3221**

From prehistoric times through Phoenician, Greek, Roman, and Visigothic eras to the Moorish invasion in 711; the Arab period; the Reconquest; the Catholic Kings; the Imperial Period; and the Inquisition. Prereq: Upper division standing in Spanish. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPAN 3222 - Culture and Civilization of Spain II

Summer 2010 Registration **SPAN 3222**

(Continuation of 3221.) Studies the social, intellectual, and artistic development of Spain from the time of the Bourbons (18th century) through the civil war of 1936, and the Franco regime to the restoration of democracy under Juan Carlos I and the present day.

Prereq: Upper division standing in Spanish. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPAN 3230 - Ibero-American Cultures through Film

Summer 2010 Registration **SPAN 3230**

A study of the Ibero-American cultures through their most representative films. Films will be windows to access the complexities and the contradictions lived in Ibero-American countries regarding a set of contemporary issues, such as violence, linguistic diversity, religious beliefs, sexuality, politics, history, social class, and globalization. Prereq: SPAN 2120 or SPAN 2130, or consent of the instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPAN 4230 - Modern Culture of Spain through Film and Narrative

Summer 2010 Registration **SPAN 4230**

Culture of modern Spain studied through Spanish film. The death of military dictator Francisco Franco opened the process for the recuperation of a usurped democratic, representational system that has become the basis of a cultural and economic resurgence. Taught in Spanish. Prereq: SPAN 3252 and one other Spanish/Spanish American literature course at the 3000-level. Cross-listed with SPAN 5230. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 3 Hours

Electives

In addition, students minoring in Spanish must complete four additional upper-division Spanish courses.

Total: 12 Hours

Minor Total: 15 Hours

Studio Art Minor

To declare a CAM minor, please see the College of Arts & Media's Office of Advising and Student Services in Arts Building, 177.

Students may transfer up to 6 semester hours of non-UC Denver courses toward a minor. All other courses must be taken at UC Denver. Each course must be completed with a C/2.0 or better. Students pursuing a BA in fine arts (art history emphasis) may use up to 6 semester hours to fulfill major and minor requirements; the remaining semester hours must be taken in addition to the major requirements. Students pursuing a major in any of the studio arts may not pursue this minor. Consult a CAM advisor for further details.

Program Requirements

Select two courses from the following:

FINE 1015 - Interdisciplinary Foundations

Summer 2010 Registration F A 1015

Students will work across 2-D, 3-D, and 4-D media to develop interdisciplinary skills, strategies and methodologies for investigating contemporary ideas informed by theories of visual culture. Critical concepts are integrated into creative production through projects, research assignments, critiques and presentations. Note: Students missing the first 2 classes of this course may be administratively dropped. Students will not be allowed to add course if they have missed the first 2 classes. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 1100 - Drawing I

Summer 2010 Registration F A 1100

This course explores the act of drawing as a process of visual thought as an initial step to artistic expression. Students will develop an understanding of the basic principles of drawing as a way of learning to see. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 1150 - Introduction to Photography

Summer 2010 Registration F A 1150

Students learn traditional, film-based photographic practice. Topics such as camera functions, film processing, black and white darkroom printing, color theory and alternative darkroom techniques are explored through demonstrations, critiques, readings and discussions of historical and contemporary photography. **Semester Hours:**

3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 1400 - Two Dimensional Design

Summer 2010 Registration F A 1400

Focuses on the concepts and visual elements of all forms of two-dimensional art. Students gain an understanding of basic design principles as they analyze and visually articulate formal concerns in viewing contemporary and historical artworks as applied to studio problems. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 1500 - Three-Dimensional Design

Summer 2010 Registration F A 1500

Students explore the elements of art and the principles of design applied to three-dimensional design while developing an understanding of material properties, techniques, processes and tools. Creative practice is accompanied by written, theoretical and verbal critical thinking skills. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 2015 - Intermedia Foundations

Summer 2010 Registration F A 2015

Students will develop techniques, strategies and methodologies for investigating contemporary ideas informed by theories of visual culture while implementing critical concepts into creative production centered in digital media. Course work includes creative projects, research assignments, critiques and presentations. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 2200 - Painting I

Summer 2010 Registration F A 2200

This course is an introduction to the language of painting. Students will learn to develop composition in layers, working from value to color and from direct observation to abstraction while exploring the range of visual possibilities that painting offers. Note: Students missing the first 2 classes of this course may be administratively dropped. Students will not be allowed to add course if they have missed the first 2 classes.

Prereq: FINE 1015, 1100, 1400, 1600. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

- _____ - Art History Elective (3 semester hours)
- _____ - Studio Arts Electives (6 semester hours)
- _____ - Upper-division Studio Arts Elective (3 semester hours)

Total: 18 Hours

Studio Photography Minor

To declare a CAM minor, please see the College of Arts & Media's Office of Advising and Student Services in Arts Building, 177.

Students may transfer up to 6 semester hours of non-UC Denver courses toward a minor. All other courses must be taken at UC Denver. Each course must be completed with a C/2.0 or better. Students pursuing a BA in fine arts (art history emphasis) may use up to 6 semester hours to fulfill major and minor requirements; the remaining semester hours must be taken in addition to the major requirements. Students pursuing a major in any of the studio arts may not pursue this minor. Consult a CAM advisor for further details.

Program Requirements

FINE 1150 - Introduction to Photography

Summer 2010 Registration F A 1150

Students learn traditional, film-based photographic practice. Topics such as camera functions, film processing, black and white darkroom printing, color theory and alternative darkroom techniques are explored through demonstrations, critiques, readings and discussions of historical and contemporary photography. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 2155 - Introduction to Digital Photography

Summer 2010 Registration F A 2155

Students learn digital image manipulation, input and output strategies, and digital camera functions through assignments that emphasize conceptual development. Presentations, readings, projects and class discussions help students gain an understanding of the role of digital imaging in contemporary photography. Prereqs: FINE 1150. Priority given to Photography Majors and Minors. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3630 - History of Photography

Summer 2010 Registration F A 3630

Students examine the history of photography from its origins to the present. Emphasis is placed on photography as an artistic medium. Topics covered include important

movements, photographers, and technical innovations, as well as photographer's broader role in visual culture. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

Select three courses from the following:

FINE 3160 - Color and Studio Lighting

Summer 2010 Registration F A 3160

Students explore traditional color photography, studio lighting, concept development, critical thinking, and expressive uses of the medium. Topics include chromogenic printing, color theory, 4x5 technique and studio lighting. Students gain insight into the creative impact of color on photographic representation. FINE 1150, FINE 2155. Photography majors must also have completed the Fine Arts Foundation Core including: FINE 1015, FINE 1100, FINE 1400, FINE 1500, FINE 2015, FINE 2600, FINE 2610. Photography majors and minors must apply to the program to enroll in this class. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3161 - The Silver Fine Print

Summer 2010 Registration F A 3161

Students learn advanced black and white darkroom techniques while translating ideas into photographic form. Techniques include the zone system, split filter printing, toning, montage printing, and film/paper choices. Students gain insight into photographic artists, techniques, and movements. Prereq: FINE 1150, FINE 2155. Photography majors must also have completed the Fine Arts Foundation Core including: FINE 1015, FINE 1100, FINE 1400, FINE 1500, FINE 2015, FINE 2600, FINE 2610. Photography majors and minors must apply to the program to enroll in this class. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.
Note: must be completed before 3171

FINE 3162 - The Digital Fine Print

Summer 2010 Registration F A 3162

Students learn the fine art of digital printing as it relates to photographic practice and theory. Assignments focus on conceptual development, advanced image manipulation, workflow, and color management. Students gain insight into the role of digital imaging in contemporary photography. Prereq: FINE 1150, FINE 2155. Photography majors must also have completed the Fine Arts Foundation Core including: FINE 1015, FINE 1100, FINE 1400, FINE 1500, FINE 2015, FINE 2600, FINE 2610. Photography majors and minors must apply to the program to enroll in this class. **Semester Hours:** 3to 3 **When Offered:** FALL
Registration is changing. Visit our website for details ucdenver.edu/registration.

Note: must be completed before 3172

FINE 3171 - Concepts and Processes in Photography

Summer 2010 Registration F A 3171

Students develop skills in alternative photographic techniques. Processes covered include cameraless and pinhole photography, reticulation, non-silver printing, enlarged negatives, liquid emulsions and digital/traditional cross-manipulation. Students gain insights into the relationship between ideas and experimental ways of creating images. Prereq: FINE 1150, FINE 2155, FINE 3161. Photography majors must also have completed the Fine Arts Foundation Core including: FINE 1015, FINE 1100, FINE 1400, FINE 1500, FINE 2015, FINE 2600, FINE 2610. Photography majors and minors must apply to the program to enroll in this class. **Semester Hours: 3to 3** **When Offered: SPRING**

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3172 - Digital Bookmaking

Summer 2010 Registration F A 3172

Students create handmade artists books using digital technologies. Projects build skills in idea development, use of text and image, digital image manipulation, digital printing, scanning and book binding. Students learn strategies for creating visual narratives through photography. Prereq: FINE 1150, FINE 2155, FINE 3162. Photography majors must also have completed the Fine Arts Foundation Core including: FINE 1015, FINE 1100, FINE 1400, FINE 1500, FINE 2015, FINE 2600, FINE 2610. Photography majors and minors must apply to the program to enroll in this class. **Semester Hours: 3to 3** **When Offered: SPRING**

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3175 - Creative Commercial Applications

Summer 2010 Registration F A 3175

Students learn how photographers apply creative, technical and conceptual skills to commercial photographic practice. Topics covered may include editorial strategies; studio or location photography; commercial business practices; advertising photography; shooting and lighting techniques; and professional presentation. Prereq: FINE 1150, FINE 2155, FINE 3160. Photography majors must also have completed the Fine Arts Foundation Core including: FINE 1015, FINE 1100, FINE 1400, FINE 1500, FINE 2015, FINE 2600, FINE 2610. Priority given to photography majors and minors. Photography majors and minors must apply to the program to enroll in this class. **Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 18 Hours

Sustainability Minor

The sustainability minor is interdisciplinary, drawing on the expertise across CLAS departments: anthropology, biology, chemistry, communication, economics, environmental sciences, geography, geology, history, economics, philosophy, physics and political science. The core courses are taught by a faculty team from natural sciences and social sciences, who will present the concepts from the empirical and humanistic perspectives. The teaching team changes each term so that faculty from any given CLAS department will rotate through the core courses every 3-4 years.

The minor comprises 18 hours, distributed as follows:

- two core courses that introduce students to the systems theories that document how living things affect and are affected by their environments
- two electives chosen from an approved list of CLAS courses
- students select either a field study, internship, service learning or related travel study course
- capstone course in sustainability

Requirements for the Minor

Core Courses

SUST 3010 - The Non-Sustainable Past

Summer 2010 Registration **SUST 3010**

This is the first of a two-course sequence that assesses the interrelations among the historical, political, cultural, ecological, and economic aspects of contemporary environmental issues. SUST I focuses on the non-sustainable use of water, land, energy, manufactured goods, and food. Prereq: 1 Natural Science Core and 1 Social Science Core. **Semester Hours:** 3 to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SUST 3011 - Toward a Sustainable Future

Summer 2010 Registration **SUST 3011**

This is the second of a two-course sequence that examines the interrelations among the historical, political, cultural, ecological, and economic aspects of contemporary environmental issues. Provides students with theoretical perspectives on sustainability through a series of current, problem-oriented case studies. Prereq: One natural science

core and one social science core. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 6 Hours

Electives

Choose two from the following list of approved electives:

Anthropology

ANTH 1302 - Introduction to Archaeology

Summer 2010 Registration **ANTH 1302**

Introduces the study of past cultures and their environments. Emphasis is on the scientific method, aspects of research design and analytical techniques used by archaeologists to determine chronology, taphonomy, source production areas, exchange networks, and human-environment interactions. Note: Three hours of lecture and a two-hour lab each week. **Semester Hours:** 4to 4 **GT Pathways Category Key:** GT-SS3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 1303 - Introduction to Biological Anthropology

Summer 2010 Registration **ANTH 1303**

Introduces the study of human biological evolution, both processes and outcomes, from primate ancestors to fossil hominids to contemporary human populations. Methods of obtaining and interpreting data concerning the genetic, biological and evolutionary basis of physical variation in living and skeletal populations. Note: 3 hours of lecture and a 2 hour lab each week. **Semester Hours:** 4to 4 **GT Pathways Category Key:** GT-SC1
Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 2102 - Culture and the Human Experience

Summer 2010 Registration **ANTH 2102**

An application of the concept of culture to several aspects of the human experience, including gender relations, emotion and personality, cognition, language, health and healing and economic behavior. In exploring these dimensions of the human experience, the course focuses on selected cultures from each of the world's major geographic areas. **Semester Hours:** 3to 3 **GT Pathways Category Key:** GT-SS3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 3006 - Development, Environment and Culture

Summer 2010 Registration **ANTH 3006**

Investigates theories, issues and problems in development and its relationship to social and environmental problems. Considers the connections between development and underdevelopment, the success and failures of development policies and five case studies in development. Prereq: Anthropology and microeconomics or macroeconomics. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 3301 - World Prehistory

Summer 2010 Registration **ANTH 3301**

Explores of 3.5 million years of human cultural development that examines the prehistory of Africa, Asia, Europe and the Americas. Patterns and processes that underlie the earliest hominid expansion out of Africa, tool use, origins of fire, the peopling of the Americas, the development of metallurgy, the domestication of plants and animals and the rise of cities and the state are examined. Emphasis is on both regional developments and landmark projects that have helped clarify prehistory. Prereq: Introductory course in archaeology. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 3512 - Human Evolution

Summer 2010 Registration **ANTH 3512**

Provides an overview of the fossil and archaeological evidence for human origins. Theory and method in paleoanthropology is emphasized. The goal is to outline current knowledge of human biological evolution and the lifeways of our evolutionary relatives. Prereq: ANTH 1303. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 4030 - Ethnobiology

Summer 2010 Registration **ANTH 4030**

Considers the relationship between human society and plants and animals in the natural world. Primary focus on the perception and cognitive organization of the environment and how that affects the definition and use of plants and animals as resources. Prereq: Introductory anthropology and/or biology. Cross-listed with ANTH 5030. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 4060 - Evolutionary Medicine

Summer 2010 Registration **ANTH 4060**

Applies evolutionary principles to an understanding of human health and illness. The view complements perspectives on health and disease emanating from biological and

social sciences, but considers the health or disease process from the perspective of pathogen and host, current and previous environments, and various phases of the life cycle. Prereq: ANTH 1303. Cross-listed with ANTH 5060, HBSC 4060 and 5060. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 4070 - Culture of Development and Globalization

Summer 2010 Registration **ANTH 4070**

Anthropological critiques of development and globalization point out that they have occurred without regard for the diversity of human culture and human need. Beginning with this analysis, this course goes one step further by examining culture and values of development and how they affect the way development gets done. Prereq: Upper division standing and permission of instructor. Cross-listed with ANTH 5070. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 4170 - Culture and the Environment

Summer 2010 Registration **ANTH 4170**

Examines the historical origins of Western and non-Western ideas of the environment and the place of people within it. The imposition of Western ideas on non-Western groups regarding environmental policy is also examined, with special attention given to practices of conservation, development and transnational monetary policy. Prereq: ANTH 2102 or equivalent. Cross-listed with ANTH 5170. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 4220 - Community in Global Context

Summer 2010 Registration **ANTH 4220**

Presents the community study method from the perspective of anthropology and as a widely applicable research technique in planning, development and other areas of public affairs. Also includes analyses of case studies and student field research. Prereq: Introductory course in cultural anthropology. Cross-listed with ANTH 5220. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 4250 - Culture Change in the Modern World

Summer 2010 Registration **ANTH 4250**

Processes and dilemmas of culture change using macro-level theories as well as models of change for communities and individuals. Conceptual and practical problems of modernity relating to globalization, urbanization, environmental degradation and technological change. Prereq: At least one course in cultural anthropology. **Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 4450 - Development and Conservation: Contemporary Issues

Summer 2010 Registration **ANTH 4450**

Applies the theoretical paradigms of political ecology to contemporary issues of sustainable development. Case studies are chosen illustrating topics based on faculty expertise and student interaction. The first part of the course presents theoretical perspectives relevant to the chosen topic. In the second half, students participate in directed problem solving activities. Prereq: ANTH 4070, ANTH 4170 and graduate standing or permission of instructor. Cross-listed with ANTH 5450. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 4460 - Development and Conservation: Theory and Practice

Summer 2010 Registration **ANTH 4460**

Examines the praxis of anthropological knowledge of human ecosystem interaction and development of economic opportunities. Issues of biodiversity, resource conservation, sustainable development and globalization are studied. Prereq: ANTH 4450 or permission of instructor. Cross-listed with ANTH 5460. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 4560 - Human Ecology

Summer 2010 Registration **ANTH 4560**

Studies demographic and ecological variables as they relate to human populations. Aspects of natural selection, overpopulation and environmental deterioration are considered. Prereq: Introductory course in biological or physical anthropology. Cross-listed with ANTH 5560. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

Biology

BIOL 1550 - Basic Biology: Ecology and the Diversity of Life

Summer 2010 Registration **BIOL 1550**

Introduces important biological concepts, including: the process of science, biological diversity, evolution, basic ecological principles and environmental issues. Lectures emphasize current issues. Note: For students who are not majoring in biology. Biology and health career majors should not take this course. **Semester Hours:** 4to 4GT

Pathways Category Key: GT-SC1

Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 3330 - Plant Diversity

Summer 2010 Registration **BIOL 3330**

Surveys all major plant groups using evolutionary and ecological principles to interpret patterns of diversity in form and function. Topics include reproduction and life cycles, adaptations and ecological interactions, paleobotany and biogeography, classification and taxonomy and evolution. Prereq: One year of general biology with a grade of "C" (2.0) or higher. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 3411 - Principles of Ecology

Summer 2010 Registration **BIOL 3411**

A lecture course that examines the interrelationships between organisms and their environments. Subject matter includes organism, population and ecosystem levels of study and application to current environmental issues. The emphasis is on the underlying principles of ecology that involve all types of organisms. Note: Satisfies core ecology requirement for biology major. May not be used as upper division biology elective. No co-credit with BIOL 3412. Prereq: One year of general biology with a grade of "C" (2.0) or higher. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 3412 - Fundamentals of Applied Ecology

Summer 2010 Registration **BIOL 3412**

Ecology is the science of interrelationships between organisms, including humans and their environment. This lecture course examines applications of ecological principles to human needs and environmental protection. Covers the ecology of humans and managed systems. Note: Satisfies core ecology requirement for biology major. May not be used as upper division biology elective. No co-credit with BIOL 3411. Prereq: One year of general biology with a grade of "C" (2.0) or higher. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 3521 - Vertebrate Biology

Summer 2010 Registration **BIOL 3521**

The subphylum vertebrata consists of fish, amphibians, reptiles, birds and mammals-- some of the most fascinating and most threatened species on earth. This course covers the geological record, evolution, taxonomy, anatomy, physiology, ecology and

conservation of these organisms. Prereq: One year of general biology with a grade of "C" (2.0) or higher. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 4154 - Conservation Biology

Summer 2010 Registration **BIOL 4154**

Basic concepts and theories in population biology and genetics as they apply to issues relating to the preservation of biodiversity, such as the genetics of small populations, captive propagation, restoration ecology and the design of nature reserves. Prereq: Introductory ecology (BIOL 3411, 3412 or equivalent) with a grade of "C" (2.0) or higher. Cross-listed with BIOL 5154. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

Business

MGMT 4950 - Special Topics in Management

Summer 2010 Registration **MGMT 4950**

A number of different topics in management are offered under this course number. Consult the 'Schedule Planner' for current course offerings. Prerequisites vary depending on the topic and instructor requirements. Cross-listed with MGMT 5800. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.
when offered as Business and Sustainability

MKTG 4950 - Special Topics

Summer 2010 Registration **MKTG 4950**

Courses offered on an irregular basis for the purpose of presenting new subject matter in marketing. Prerequisites vary depending upon the particular topic and instructor requirements. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.
when offered as Nonprofit and Social Marketing

Chemistry

CHEM 1474 - Core Chemistry: Chemistry For the Consumer

Summer 2010 Registration **CHEM 1474**

Focuses on the common household chemicals that affect US on a daily basis. Students learn the underlying chemistry of nuclear power, sunscreens, food, cleaning agents, etc. Home-based laboratory experiments with safe, common substances. **Semester Hours:** 4to 4 **GT Pathways Category Key:** GT-SC1

Registration is changing. Visit our website for details ucdenver.edu/registration.

CHEM 4700 - Environmental Chemistry

Summer 2010 Registration **CHEM 4700**

A discussion of the sources, reactions, transport, effects, and fates of chemical species in the water, soil, and air environments. Prereq: CHEM 3111 or 3411. Cross-listed with CHEM 5700. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CHEM 5700 - Environmental Chemistry

Summer 2010 Registration **CHEM 5700**

A discussion of the sources, reactions, transport, effects, and fates of chemical species in the water, soil and air environments. Prereq: CHEM 3111, 3411, and graduate standing. Cross-listed with CHEM 4700. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Communication

COMM 4282 - Environmental Communication

Summer 2010 Registration **CMMU 4282**

Studies the communication processes involved in policies and practices affecting natural and human environments. Cross-listed with COMM 5282. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 5282 - Environmental Communication

Summer 2010 Registration **CMMU 5282**

Studies the communication processes involved in policies and practices affecting natural and human environments. Prereq: Undergraduates with senior standing may enroll with permission of instructor. Cross-listed with COMM 4282. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Economics

ECON 4530 - Economics of Natural Resources

Summer 2010 Registration **ECON 4530**

Examines economic models of renewable resource management and models of exhaustible resource depletion. Analyzes decisions made by private firms and governments affecting the methods and rate of resource development. Examines the effects of resource development on economic growth and environmental quality and the effects of economic development on resource scarcity. Prereq: ECON 2022. Cross-listed with ECON 5530. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 4540 - Environmental Economics

Summer 2010 Registration **ECON 4540**

Economic approach to environmental problems: relationship between ownership structures, externalities and environmental damage; poverty, population pressure, and environmental degradation; valuation of environmental amenities; sustainability of economic activity; cost-benefit analysis applied to the environment; evaluation of alternative instruments for environmental control. Prereq: ECON 2022. Cross-listed with ECON 5540. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 4770 - Economic Development--Theory and Problems

Summer 2010 Registration **ECON 4770**

Introduces theory and practice of economic development. Topics include development and growth models, economic planning, income distribution, human and capital resources, foreign investment and the multinationals, technology transfer, trade and development. Discussions of current issues regarding world debt, economic stabilization, the new protectionism, empirical studies, and examples of development in various countries. Prereq: ECON 2012 or ECON 2022. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 5530 - Economics of Natural Resources

Summer 2010 Registration **ECON 5530**

Examines economic models of renewable resource management and models of exhaustible resource depletion. Analyzes decisions made by private firms and governments affecting the methods and rate of resource development. Examines the effects of resource development on economic growth and environmental quality and the effects of economic development on resource scarcity. Prereq: ECON 5073. Cross-listed with ECON 4530. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 5540 - Environmental Economics

Summer 2010 Registration **ECON 5540**

Economic approach to environmental problems: relationship between ownership structures, externalities and environmental damage; poverty, population pressure, and environmental degradation; valuation of environmental amenities; sustainability of economic activity; cost-benefit analysis applied to the environment; evaluation of alternative instruments for environmental control. Prereq: ECON 5073. Cross-listed with ECON 4540. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Geography / Geology / Environmental Science

ENVS 1042 - Introduction to Environmental Sciences

Summer 2010 Registration **ENVS 1042**

This laboratory or survey course develops a basic understanding of ecological relationships and environmental systems. Issues such as the effects of human activities on earth's environment, extinction or diversity, greenhouse effect, hazardous or toxic wastes and human population growth are discussed. **Semester Hours:** 4to 4**GT**

Pathways Category Key: GT-SC1

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENVS 1342 - Introduction to Environment and Society

Summer 2010 Registration **ENVS 1342**

Overview of perspectives on environmental issues within the context of sustainable development and taking a systems approach. The focus is on social science approaches to explore the human footprint on the earth, environmentalism, scientific uncertainty, policy creation and social change. **Semester Hours:** 3to 3**GT Pathways Category Key:** GT-SS2

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENVS 3082 - Energy and the Environment

Summer 2010 Registration **ENVS 3082**

For students of various backgrounds who wish to increase their understanding of the environmental and technical issues of supplying the energy demands of our society. Alternative energy sources and conservation are explored as solutions to promote a sustainable society. Prereq: One course in college science or mathematics. Cross-listed with PHYS 3082. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 1202 - Introduction to Physical Geography

Summer 2010 Registration **GEOG 1202**

The science that studies the processes, forms, and spatial or geographic structures of natural systems operating at or near the earth's surface, including weather, climate, and landform processes. **Semester Hours:** 3to 3 **GT Pathways Category Key:** GT-SC2
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 3302 - Water Resources

Summer 2010 Registration **GEOG 3302**

Introduces water resources aimed at students with little or no background in the field. This is a broad course covering topics ranging from the physical aspects of water to water politics and international law. While the course is largely a lecture format, discussion of current issues is a significant part of the class. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 3411 - Globalization and Regional Development

Summer 2010 Registration **GEOG 3411**

Addresses global political-restructuring and its implications for regional development in the U.S. Both historical and contemporary processes of globalization are examined. Topics include: the environmental basis of American industrial growth, the relationship between technological change and geographical shifts, the rise and decline of Fordism, the transfer of Japanese manufacturing methods to the U.S., the role of regional and national industrial policy, and the social consequences of globalization for labor and communities. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4010 - Landscape Geochemistry

Summer 2010 Registration **GEOG 4010**

A holistic approach to studying the role chemical elements play in synthesis/decomposition cycles, and the resultant environment from interaction of the lithosphere with the hydrosphere, atmosphere, biosphere, and pedosphere during geological and ecological timeframes, together with anthropogenic activities. Prereq: Introductory college-level physical geography or environmental science course or permission of instructor. Cross-listed with GEOL 4010/ENVS 5010. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4020 - Earth Environments and Human Impacts

Summer 2010 Registration **GEOG 4020**

Basic concepts describing earth's biomes and physical environment are presented in a systems context. Global warming assessment, from both political and scientific perspectives, is then presented. Model visualization of these concepts to consider human impacts on Earth's biomes is discussed. Earth system viewpoint, having links of Earth's biomes to oceans and atmosphere, completes the course discussion. Prereq: GEOG 1202 and 3232 or permission of instructor. Cross-listed with ENVS 5020, GEOL 4020. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOL 4030 - Environmental Geology

Summer 2010 Registration **GEOL 4030**

Applies geological information to interactions between people and the physical environment. Increasing awareness of its importance in our society means that this is an expanding field as companies are required to address the environmental consequences of their actions. Prereq: Entry into MSES program, senior standing in sciences or geography, or permission of instructor. Cross-listed with ENVS 5030 and GEOL 5030. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4090 - Environmental Modeling with Geographic Information Systems

Summer 2010 Registration **GEOG 4090**

Expands the basic knowledge of GIS to spatial models. Establishes a comprehensive framework that can be used to address a wide range of applications in natural and built environments. Prereq: GEOG 4080 or GEOG 5080 or permission of instructor. Cross-listed with GEOG 5090. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4230 - Hazard Mitigation and Vulnerability Assessment

Summer 2010 Registration **GEOG 4230**

Examines hazard mitigation and its planning and policy implications, emphasizing how vulnerability assessments play an integral role. Students explore how mitigation minimizes the impacts from hazards and use GIS to conduct a local study. Prereq: GEOG 2202 or permission of instructor. Cross-listed with GEOG 5230. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4265 - Sustainability in Resources Management

Summer 2010 Registration **GEOG 4265**

Sustainability and sustainable development are the dominant economic, environmental

and social issues of the 21st century. Follows a multi-disciplinary approach to these concepts. Case studies demonstrate their implementation in different geographical, ecological and socio-economic conditions worldwide. Prereq: ENVS 1042 or permission of instructor. Cross-listed with GEOG 5265. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4335 - Contemporary Environmental Issues

Summer 2010 Registration **GEOG 4335**

Provides an overview of environmental challenges facing society today, focusing on how humans impact and change the environment. Opposing views and environmental policy at the local, state, national, and international levels are explored. Cross-listed with GEOG 5335. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4350 - Environment and Society in the American Past

Summer 2010 Registration **GEOG 4350**

Overview of the geographical development of North American society from the late 15th century to the mid-20th century. A comparative regional approach emphasizing relationships between natural resource exploitation, cultural landscape formation and environmental change. Cross-listed with GEOG 5350. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4640 - Urban Geography: Denver and the U.S.

Summer 2010 Registration **GEOG 4640**

Uses a combined lecture/seminar format to explore research themes in urban geography. Topics covered include both historical and contemporary processes of urban development and transformation. Particular emphasis is placed on the U.S. and Colorado's Front Range. Cross-listed with GEOG 5640. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 5090 - Environmental Modeling with Geographic Information Systems

Summer 2010 Registration **GEOG 5090**

Expands the basic knowledge of GIS to spatial models. Establishes a comprehensive framework that can be used to address a wide range of applications in natural and built environments. Prereq: GEOG 4080 or GEOG 5080 or permission of instructor. Cross-listed with GEOG 4090. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 5230 - Hazard Mitigation and Vulnerability Assessment

Summer 2010 Registration **GEOG 5230**

Examines hazard mitigation and its planning and policy implications, emphasizing how vulnerability assessments play an integral role. Students explore how mitigation minimizes the impacts from hazards and use GIS to conduct a local study. Prereq: GEOG 2202 or permission of instructor. Cross-listed with GEOG 4230. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 5265 - Sustainability in Resources Management

Summer 2010 Registration **GEOG 5265**

Sustainability and sustainable development are the dominant economic, environmental and social issues of the 21st century. Follows a multi-disciplinary approach to these concepts. Case studies demonstrate their implementation in different geographical, ecological and socio-economic conditions worldwide. Prereq: ENVS 1042 or permission of instructor. Cross-listed with GEOG 4265. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 5335 - Contemporary Environmental Issues

Summer 2010 Registration **GEOG 5335**

Provides an overview of environmental challenges facing society today, focusing on how humans impact and change the environment. Opposing views and environmental policy at the local, state, national, and international levels are explored. Cross-listed with GEOG 4335. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 5350 - Environment and Society in the American Past

Summer 2010 Registration **GEOG 5350**

Overview of the geographical development of North American society from the late 15th century to the mid-20th century. A comparative regional approach emphasizing relationships between natural resource exploitation, cultural landscape formation and environmental change. Cross-listed with GEOG 4350. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 5640 - Urban Geography: Denver and the U.S.

Summer 2010 Registration **GEOG 5640**

Uses a combined lecture/seminar format to explore research themes in urban geography. Topics covered include both historical and contemporary processes of urban development and transformation. Particular emphasis is placed on the U.S. and Colorado's Front Range. Cross-listed with GEOG 4640. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

History

HIST 3350 - Colonial Latin America

Summer 2010 Registration **HIST 3350**

Surveys the creation of colonial empires by Spain and Portugal, 1492-1808. Topics include Native American responses to European incursions, women in colonial society, and slavery in Latin America. Cross-listed with ETST 3350. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 3360 - Denver History

Summer 2010 Registration **HIST 3360**

Introduces the social, political, economic, and cultural life of this mile high metropolis. Founded in the 1858 gold rush, Denver has grown into a five-county metropolis of over two million. Explore this boom and bust history in lectures, slide shows and walking tours. This course offers students a chance to do their own primary source research project, as well as exams and book reports. Note: Open to all students. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 3366 - Environmental History of North America

Summer 2010 Registration **HIST 3366**

Examines the conversation that the peoples of North America have had with the earth, from Indian prehistory to modern industrial civilization. Out of the people-land dialogue has emerged a variety of cultures, some of which, as we shall see, successfully adapted to their environment, while others failed. Prereq: HIST 1361, 1362, 1381 or 1382. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 3451 - Introduction to African History

Summer 2010 Registration **HIST 3451**

By looking at specific examples of the cultural, political, and economic experience of African society, this course attempts to introduce and make comprehensive the diverse history of the people of Africa. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 3460 - Introduction to Latin American History

Summer 2010 Registration **HIST 3460**

Surveys the historical development of the modern Latin American countries, beginning with the independence movements of the early 19th century. Emphasizes the 20th century issues and problems that have characterized these countries and affected their relations with the United States. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 3470 - Introduction to Asian History

Summer 2010 Registration **HIST 3470**

Introduces the origin and development of civilization in China, Japan and Korea. Explores the relationship between culture and civilization. Readings are drawn from literature, religion, philosophy, anthropology and history. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 3606 - Science, Technology, and Society in the Modern World

Summer 2010 Registration **HIST 3606**

Examines the relationships among science, technology, and society from the early 19th century to the present. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4217 - Consumer Culture

Summer 2010 Registration **HIST 4217**

This interdisciplinary course examines the dynamics of the consumer culture in the context of social, economic, and technological history. The analysis begins with 17th century European origins, and continues through recent world developments, emphasizing the U.S. since 1800. Note: Open to all students. Cross-listed with HIST 5217. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4226 - U.S. Business History

Summer 2010 Registration **HIST 4226**

Surveys the major changes in business practices from colonial times to the present. Primary emphasis is placed on the Industrial Revolution and after. Topics include the emergence of major personalities in the Industrial Revolution; the rise of giant corporations; the response of industrial labor unions; government intervention and regulations and the emergence of the post-industrial society. Cross-listed with HIST 5226. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4227 - American West

Summer 2010 Registration **HIST 4227**

Introduces the diverse peoples, places, and approaches to the development of the trans-Missouri West from prehistoric times to the present. Cross-listed with HIST

5227. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4236 - Colorado Mining and Railroads

Summer 2010 Registration **HIST 4236**

Focuses on the transportation network that shaped the inland West, and its key role in the extractive industry that gave Colorado its start and nourished the highest state through adolescence. Cross-listed with HIST 5236. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4411 - Modern Mexico

Summer 2010 Registration **HIST 4411**

Designed to familiarize students with the critical issues in Mexican political, economic and social history. Traces the emergence of independence and the difficult consolidation of an independent nation state. Cross-listed with HIST 5411, ETST 4411. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4417 - Commodities and Globalization: Dessert in World History

Summer 2010 Registration **HIST 4417**

Traces the impact of "dessert commodities" (sugar, cacao, vanilla and coffee) on Latin America during an early period of globalization (nineteenth century). Explores cultural shifts in North Atlantic countries that created the incessant demand for dessert. Prereq: Senior or graduate student standing. Cross-listed with HIST 5417. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4421 - Modern China

Summer 2010 Registration **HIST 4421**

Surveys Chinese history in the modern era. Includes examination of Western domination of China; revolution and internal fragmentation of China; Japanese attacks and World War II; and civil war and the communist revolution. Cross-listed with HIST

5421.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4431 - Modern Japan

Summer 2010 Registration **HIST 4431**

Course of Japanese history since the Perry expedition. Covers Japanese Westernization and industrialization, the expansion of empire and defeat in World War II, the occupation, and the amazing technological and social transformation since the occupation years. Cross-listed with HIST 5431.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4451 - Southern Africa

Summer 2010 Registration **HIST 4451**

An in-depth history of the clash of peoples and cultures in Africa south of the Zambezi River. African and Afrikaner political, economic and cultural development in a single land and the consequences of several competing nationalisms existing side by side are examined. Apartheid and African opposition to it are analyzed. Cross-listed with HIST 5451.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4461 - The Modern Middle East

Summer 2010 Registration **HIST 4461**

Cross-listed with HIST 5461.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4501 - World History for Educators

Summer 2010 Registration **HIST 4501**

Introduces world history for candidates for teaching positions. Discussion of themes, problems of research and interpretation, and relevant instructional methods. Prereq: Upper division standing. Cross-listed with HIST 5501.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4503 - Topics in History of Science

Summer 2010 Registration **HIST 4503**

Themes vary from year to year. Possible topics: Darwinism, Nature of Memory, Time and Space, Origins. Cross-listed with HIST 5503.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4504 - Animals in U.S. History

Summer 2010 Registration **HIST 4504**

Human-animal relationships offer powerful and unexpected perspectives on the American past. An eclectic range of readings and viewings, written assignments and contemplative experiences will contextualize contemporary practices, beliefs, and ethics -- vegetarianism, hunting, pet-keeping, and many others -- in historical context. Cross-listed with HIST 5504. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Physics

PHYS 3082 - Energy and the Environment

Summer 2010 Registration **PHYS 3082**

For students of various backgrounds who wish to increase their understanding of the environmental and technical issues of supplying the energy demands of our society. Alternative energy sources and conservation are explored as solutions to promote sustainable society. Prereq: One college-level science course and MATH 1110 or equivalent. Cross-listed with ENVS 3082. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 4850 - Physics for Design and Innovation I

Summer 2010 Registration **PHYS 4850**

A service-learning project using fundamental physical principles to design a prototype scientific instrument, technical device, or technical process for a real-world client. Includes instruction on project management, intellectual property, and market analysis. Cross-listed with PHYS 5850. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 4852 - Physics for Design and Innovation II

Summer 2010 Registration **PHYS 4852**

A capstone project using fundamental physical principles to prototype a scientific instrument, technical device or technical process. The focus is on the student's own product idea. Includes online guided readings on the wider context of product development. Students should consult with instructor on necessary physics and mathematics preparation for the project. Prereq: PHYS 4850. Cross-listed with PHYS 5852. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Note: PHYS 4850 is prerequisite for PHYS 4852

PHYS 5850 - Physics for Design and Innovation I

Summer 2010 Registration **PHYS 5850**

A service-learning project using fundamental physical principles to design a prototype scientific instrument, technical device, or technical process for a real-world client. Includes instruction on project management, intellectual property, and market analysis. Cross-listed with PHYS 4850. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 5852 - Physics for Design and Innovation II

Summer 2010 Registration **PHYS 5852**

A capstone project using fundamental physical principles to prototype a scientific instrument, technical device or technical process. The focus is on the student's own product idea. Includes online guided readings on the wider context of product development. Students should consult with instructor on necessary physics and mathematics preparation for the project. Prereq: PHYS 4850 or 5850. Cross-listed with PHYS 4852. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

Note: PHYS 5850 is prerequisite for PHYS 5852

Philosophy

PHIL 4250 - Environmental Ethics

Summer 2010 Registration **PHIL 4250**

While human industry/technology creates enormous material prosperity, it can result in devastating environmental damage. This course analyzes the moral values, consequences and duties implied in relationships between human beings, animals and ecological systems, while seeking out new and ethical approaches. Cross-listed with PHIL 5250, HUMN 5250 and SSCI 5250. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 5250 - Environmental Ethics

Summer 2010 Registration **PHIL 5250**

While human industry/technology creates enormous material prosperity, it can result in devastating environmental damage. This course analyzes the moral values, consequences and duties implied in relationships between human beings, animals and ecological systems, while seeking out new and ethical approaches. Cross-listed with

PHIL 4250, HUMN 5250 and SSCI 5250. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

Political Science

PSCI 3034 - Race, Gender, Law and Public Policy

Summer 2010 Registration P SC 3034

Historical overview of race and gender relations in the U.S. and an examination of the treatment of issues of race and gender in the judicial system and public policy. Cross-listed with WGST 3034. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 3035 - Political Movements: Race and Gender

Summer 2010 Registration P SC 3035

Examines the emergence, growth, and decline of social movements for race and gender equality. Discussion of political issues of race and gender in the 1990s. Cross-listed with WGST 3035. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 3042 - Introduction to International Relations

Summer 2010 Registration P SC 3042

Basic background and theories of international relations with focus on the interaction between nation states, international organizations, regimes and transnational movements. Themes examined include foreign policy conduct, international security and political economy, human rights and environmental management. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 3914 - The Urban Citizen

Summer 2010 Registration P SC 3914

Course emphasis is community, the individual, and the good life. Experiential learning and classroom discussions about capacities of urban citizens. Focus is on social, political, and economic resources that individuals command, issues of equality and inequality, and possibilities of constructive change. Prereq: A willingness to spend a semester working and studying together as a team in both the classroom and the community. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4009 - Politics of the Budgetary Process

Summer 2010 Registration **P SC 4009**

Develops each student's understanding of budgeting and financial management in the public and nonprofit sectors. An overview of public sector and nonprofit fiscal management is provided, along with thorough exploration of the political influences that affect financial decision-making. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4014 - Media and Politics

Summer 2010 Registration **P SC 4014**

Explores the impact of the news media on the American political system, including public policy and citizen participation, and addresses trends in news coverage and media ownership, and their impact on public opinion. Prereq: PSCI 1001 and 1101 or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4025 - Local Governance and Globalization

Summer 2010 Registration **P SC 4025**

Introduces international political economy, consequences of globalization for localities, interplay between wealth and power among nations, multinational corporations, NGOs and the UN, and impact of their actions on local governments. Topics include development, aid, trade, outsourcing, eco-sustainability and global equity. Prereq: Graduate standing or permission of instructor. Cross-listed with PSCI 5025. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4085 - Comparative Public Policy

Summer 2010 Registration **P SC 4085**

Comparison of public policy making in such areas as health care, environment, family assistance, and employment in the United States and at least two other countries.

Prereq: Graduate standing or permission of instructor. Cross-listed with PSCI 5085. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4144 - Indigenous Political Systems

Summer 2010 Registration **P SC 4144**

Surveys political theory and practice in indigenous societies in the Americas. Examines the impact of indigenous political thought on Euro-American politics, especially the U.S. Constitution, and explores the contemporary impact of indigenous people on current

politics. Cross-listed with ETST 4144. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4206 - Social Movements, NGOs and Global Politics

Summer 2010 Registration P SC 4206

Examines global social movements and NGOs as new political actors within world politics; how international relations' theoretical perspectives have addressed these actors; and the forms of interaction between these actors and institutions of global governance. Cross-listed with PSCI 5206. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4207 - Theories of Social and Political Change

Summer 2010 Registration P SC 4207

Conservative, radical, and incremental approaches to change. Role of psychological and sociological factors in political change. Comparative perspectives on change. Self-perpetuation processes of power systems and their vulnerabilities. Requisites of system maintenance and system change. Selected case studies. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4215 - Women's Rights, Human Rights: Global Perspectives

Summer 2010 Registration P SC 4215

Explores the global feminist movement's campaign to "engender" human rights. Examination of women's human-rights issues and the critique of this campaign as representing cultural imperialism. Prereq: Six hours of political science or instructor permission. Cross-listed with WGST 4215. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4217 - Human Rights in Theory and Practice

Summer 2010 Registration P SC 4217

Explores the ideas of human rights and the practical efforts to actualize rights in society. Students study the theories of rights and the evolution of rights in history, as well as work with a service organization. Cross-listed with PSCI 5217. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4226 - The United Nations in World Affairs

Summer 2010 Registration P SC 4226

Current operation and future potential of the United Nations as a complex actor in world affairs, both expressing conflicting interests of its participants and promoting universal goals, including world peace, human rights, and environmental protection. **Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4248 - Gender, Globalization and Development

Summer 2010 Registration P SC 4248

Analyzes the effects of globalization on the gendered processes of international development and strategies to empower women to achieve gender justice across race, class and national divisions. Cross-listed with PSCI 5245 and WGST 4248. **Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4324 - Politics, Public Policy and Leadership

Summer 2010 Registration P SC 4324

Role of politics in public and nonprofit sectors. Theories of administration and policy-making, emphasizing the role of leadership in public outcomes. Hands-on approach to case studies and use of students' policy experiences in practical application of theories. Cross-listed with PSCI 5324. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4326 - Advanced International Political Economy: Globalization

Summer 2010 Registration P SC 4326

Engages the current debate about globalization. Conceptualizes globalization and evaluates the pros and cons of global trade and finance for developed and developing countries. Develops a model for a sustainable and just global economy. Prereq: PSCI 4126. Cross-listed with PSCI 5326. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4354 - Environmental Politics

Summer 2010 Registration P SC 4354

Political, legal, and economic forces in environmental law and policy. Special emphasis on air and water pollution and on threats to public and agricultural land. Environmental groups and their opponents. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4365 - Global Ecological Crises

Summer 2010 Registration P SC 4365

Overview of global ecological problems such as climate change, transboundary pollutions, and loss of bio-diversity in an attempt to understand the political, economic, and cultural forces behind these problems and the status of legal and policy initiatives to

address them. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4374 - Public Priorities for the 21st Century

Summer 2010 Registration **P SC 4374**

Identification of and planning for social, political, and economic trends in American society likely to transform governmental, nonprofit, and private entities. Rigorous examination of and debate on competing priorities such as liberty, security, welfare, equality, diversity, growth and ecology. Cross-listed with PSCI 5374. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4545 - Immigration Politics

Summer 2010 Registration **P SC 4545**

Introduces students to central theories of migration and a survey of immigration law and policy in the 20th century. Highlights experiences of Mexican and Latin American immigrants and related topics, including: U.S.-Mexican foreign relations, bilingual education, undocumented immigration and globalization. Cross-listed with PSCI 5545. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4555 - International Women's Resistance

Summer 2010 Registration **P SC 4555**

Examines local and international struggles of women to build peace and justice by resisting systems of inequality such as colonialism, racism, patriarchy, globalization, and religious intolerance. Cross-listed with PSCI 5555, ETST 4555 and WGST 4555. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4645 - Comparative Political Leadership

Summer 2010 Registration **P SC 4645**

Comparative study of historical, socio-cultural, and psychological bases of political leadership. Leadership types in peasant societies, empires, and revolutionary movements. Dilemmas of democratic versus authoritarian leadership in modernizing and industrial states. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 6 Hours

Experiential learning course

Students choose a field study, internship, service learning or related travel study course.

Total: 3 Hours

Capstone

SUST 4960 - Capstone in Sustainability

Summer 2010 Registration **SUST 4960**

As the culmination of the Sustainability Minor, this course examines current research practices in sustainability and sustainability-related fields. Students work in teams to complete a sustainability/sustainability-related research paper and poster and present it to the campus community. Note: Topics variable depending on region under study, student interest, and faculty specialty. Prereq: SUST 3011. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 3 Hours

Total: 18 Hours

Theatre, Film and Television Minor

To declare a CAM minor, please see the College of Arts & Media's Office of Advising and Student Services in Arts Building, 177.

Students may transfer up to 6 semester hours of non-UC Denver courses toward a minor. All other courses must be taken at UC Denver. Each course must be completed with a C/2.0 or better. Students pursuing a BA or BFA in the Department of Theatre, Film and Video Production may not declare a minor in theatre, film and television. Consult a CAM advisor for further details.

Program Requirements

TFVP 1050 - Video Production/Post-Production I

Summer 2010 Registration **TFVP 1050**

Students gain a knowledge of single camera video techniques and are introduced to non-linear digital editing. Course work is hands-on and collaborative, with several projects shot and edited. Learning centers on storytelling, including pacing and aesthetics. Prereq: TFVP majors and minors only, or permission of instructor. **Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

TFVP 1100 - Introduction to Theatre, Film, and Television

Summer 2010 Registration **TFVP 1100**

An introduction to dramatic and cinematic texts, styles and productions; students will research and analyze a play and develop it into a film script. They will present their understanding by storyboards and multi-media presentations, exams and written work. Prereq: TFVP majors and minors only, or permission of instructor. **Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

_____ - Theatre, Film and Video Production Electives (12 semester hours)
Chosen in consultation with department advisor

Select two courses from the following (in consultation with department advisor):

FILM 3070 - History of Silent Film Production

Summer 2010 Registration **FILM 3070**

Examines history of cinema from its 19th century origins until the introduction of sound. Studies important trends in the silent era, including the beginnings of film comedy, early documentary, origins of Hollywood narrative, avant-garde cinema, German Expressionism and Soviet Cinema. Note: TFVP majors and minors only, or permission of instructor. Prereq: TFVP 1100. **Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

FILM 3080 - History of Sound Film Production

Summer 2010 Registration **FILM 3080**

Students learn various film genres from early sound period, through the present. Traces the development of the various Hollywood genres- and examines representative Hollywood films and major developments of American films from the post-studio period and filmmakers in other cultures. Note: TFVP majors and minors only, or permission instructor. Prereq: TFVP 1100. **Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 3610 - Performance: Theory/History/Criticism I

Summer 2010 Registration **THTR 3610**

Part one of two semester course sequence exploring questions of dramatic theory and dramaturgy in context of the development of Western Theater before 1850 and an analysis of historical modes of production, dramatic text and artistic creation in relation to contemporary theatrical practice. Prereq: THTR 1100 or FILM 1100 or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 4610 - Performance: Theory/History/Criticism II

Summer 2010 Registration **THTR 4610**

Part two of course sequence exploring questions of dramatic theory and dramaturgy in context of development of Western Theater after 1850 and an analysis of historical modes of production, dramatic text and artistic creation in relation to contemporary theatrical practice. Note: TFVP majors and minors only, or permission of instructor. Prereq: TFVP 1100. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 24 Hours

Urban and Regional Planning Minor

The undergraduate planning minor in the Department of Geography and Environmental Sciences provides nongeography undergraduate students the opportunity to pursue studies in the professional field of planning. Geography majors can pursue the urban studies option, so this minor would not be available to these majors.

Geography and urban and regional planning share a common concern for the spatial configuration of the places that we inhabit and enjoy. In recognition of this close association, there is currently an articulation agreement between the Department of Geography and Environmental Sciences and the College of Architecture and Planning that provides students with a mechanism for acceleration through the master of urban and regional planning (MURP) degree program, if accepted into that graduate program. Those students completing the requirements for an undergraduate planning minor may also be eligible to pursue an accelerated MURP degree.

To meet the requirements for this minor, students must complete three core requirements and two electives, totaling 15 semester hours. Although the three core courses may be taken in any order, it is advisable to begin with GEOG 1602, since this

course familiarize students with many key concepts used in other classes. All core courses are offered on a yearly basis.

Program Requirements

Required Core

GEOG 1602 - Introduction to Urban Studies

Summer 2010 Registration **GEOG 1602**

Surveys the process of urbanization, emphasizing the development of American cities and using Denver as an example. Topics covered include the evolution of metropolitan form and land use patterns, cultural landscape formation, city planning and architectural design, and urban social and policy issues. **Semester Hours:** 3to 3**GT Pathways**

Category Key: GT-SS2

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4640 - Urban Geography: Denver and the U.S.

Summer 2010 Registration **GEOG 4640**

Uses a combined lecture/seminar format to explore research themes in urban geography. Topics covered include both historical and contemporary processes of urban development and transformation. Particular emphasis is placed on the U.S. and Colorado's Front Range. Cross-listed with GEOG 5640. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4840 - Independent Study: GEOG

Summer 2010 Registration **GEOG 4840**

Independent research primarily for undergraduate majors. Prereq: Permission of department. **Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

(Take as topic: Urban Sustainability)

Total: 9 Hours

Electives

Choose two:

GEOG 4000 - Planning Methods I

Summer 2010 Registration **GEOG 4000**

Focuses on the application of statistical, quantitative, and mathematical techniques and computer applications for urban and regional planning and policy development. Major topics include types of data, sampling, basic probability distributions, hypothesis testing, regression and correlation, and an introduction to multivariate and cluster analysis.

Applications in planning and development are emphasized. Cross-listed with URPL 5510. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR

URPL 5510 - Planning Methods I

Summer 2010 Registration **URP 5510**

Focuses on application of methodological techniques commonly used in planning practice. Course covers data collection, management, analysis, communication and presentation. Major topics include primary/secondary data analysis, database construction, descriptive and inferential statistics, sampling, probability distributions, hypothesis testing, and correlation. Cross-listed with GEOG 4000. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4060 - Remote Sensing I: Introduction to Environmental Remote Sensing

Summer 2010 Registration **GEOG 4060**

An in-depth treatment of the use of aerial photographs and other forms of imagery for the analysis of urban-industrial patterns, vegetation, agriculture, landforms, and geologic structure. Prereq: GEOG 3080 or permission of instructor. Cross-listed with GEOG 5060, GEOL 4060, GEOL 5060. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

GEOG 5060 - Remote Sensing I: Introduction to Environmental Remote Sensing

Summer 2010 Registration **GEOG 5060**

An in-depth treatment of the use of aerial photographs and other forms of imagery for the analysis of urban-industrial patterns, vegetation, agriculture, landforms, and geologic structure. Prereq: GEOG 3080 or permission of instructor. Cross-listed with GEOG 4060, GEOL 4060, 5060. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4080 - Introduction to GIS

Summer 2010 Registration **GEOG 4080**

Introduces various aspects of geographic information systems (GIS), including justification, definition of hardware/software, database design, and data conversion. GIS is a computer-based mapping system providing a graphical interface to locational and relational attribute data on facilities and land. Includes hands-on use of a geographic information system workstation. Prereq: GEOG 3080 or permission of instructor. Cross-listed with GEOG 5080. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

GEOG 5080 - Introduction to GIS

Summer 2010 Registration **GEOG 5080**

Introduces various aspects of geographic information systems (GIS), including justification, definition of hardware/software, database design, and data conversion. GIS is a computer-based mapping system providing a graphical interface to locational and relational attribute data on facilities and land. Includes hands-on use of a geographic information system workstation. Cross-listed with GEOG 4080. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4085 - GIS Applications for the Urban Environment

Summer 2010 Registration **GEOG 4085**

Takes a more detailed look at basic concepts presented in the introductory GIS course, concentrating on how GIS is used to solve real-world geographic problems. Various GIS applications within both the natural and social sciences are highlighted. The selection of specific topics is flexible, based on the interests of enrolled students. Prereq: GEOG 4080 or GEOG 5080 or permission of instructor. Cross-listed with GEOG 5085. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

GEOG 5085 - GIS Applications for the Urban Environment

Summer 2010 Registration **GEOG 5085**

Takes a more detailed look at basic concepts presented in the introductory GIS course, concentrating on how GIS is used to solve real-world geographic problems. Various GIS applications within both the natural and social sciences are highlighted. The selection of specific topics is flexible, based on the interests of enrolled students. Prereq: GEOG 4080 or GEOG 5080 or permission of instructor. Cross-listed with GEOG 4085.

4085.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4090 - Environmental Modeling with Geographic Information Systems

Summer 2010 Registration **GEOG 4090**

Expands the basic knowledge of GIS to spatial models. Establishes a comprehensive framework that can be used to address a wide range of applications in natural and built environments. Prereq: GEOG 4080 or GEOG 5080 or permission of instructor. Cross-listed with GEOG 5090.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

GEOG 5090 - Environmental Modeling with Geographic Information Systems

Summer 2010 Registration **GEOG 5090**

Expands the basic knowledge of GIS to spatial models. Establishes a comprehensive framework that can be used to address a wide range of applications in natural and built environments. Prereq: GEOG 4080 or GEOG 5080 or permission of instructor. Cross-listed with GEOG 4090.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4095 - Deploying GIS Functionality on the Web

Summer 2010 Registration **GEOG 4095**

Covers the core principles and technologies that allow the deployment of geographic information system (GIS) functionality over the World Wide Web. Hands-on exercises make use of the latest commercial software as well as open source technologies. Prereq: GEOG 4080 or GEOG 5080, computer science background, or permission of instructor. Cross-listed with GEOG 5095.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

GEOG 5095 - Deploying GIS Functionality on the Web

Summer 2010 Registration **GEOG 5095**

Covers the core principles and technologies that allow the deployment of geographic information system (GIS) functionality over the World Wide Web. Hands-on exercises make use of the latest commercial software as well as open source technologies. Prereq: GEOG 4080 or GEOG 5080, computer science background, or permission of instructor. Cross-listed with GEOG 4095.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4230 - Hazard Mitigation and Vulnerability Assessment

Summer 2010 Registration **GEOG 4230**

Examines hazard mitigation and its planning and policy implications, emphasizing how vulnerability assessments play an integral role. Students explore how mitigation minimizes the impacts from hazards and use GIS to conduct a local study. Prereq: GEOG 2202 or permission of instructor. Cross-listed with GEOG 5230. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

GEOG 5230 - Hazard Mitigation and Vulnerability Assessment

Summer 2010 Registration **GEOG 5230**

Examines hazard mitigation and its planning and policy implications, emphasizing how vulnerability assessments play an integral role. Students explore how mitigation minimizes the impacts from hazards and use GIS to conduct a local study. Prereq: GEOG 2202 or permission of instructor. Cross-listed with GEOG 4230. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4235 - GIS Applications in the Health Sciences

Summer 2010 Registration **GEOG 4235**

Examines how GIS is used throughout the health care industry and public health. Covers environmental health, disease surveillance, and health services research. Students critically review current literature and gain hands-on experience with GIS software. Prereq: GEOG 4080 or GEOG 5080, public health background, or consent of instructor. Cross-listed with GEOG 5235, HBSC 7235. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

GEOG 5235 - GIS Applications in the Health Sciences

Summer 2010 Registration **GEOG 5235**

Examines how GIS is used throughout the health care industry and public health. Covers environmental health, disease surveillance, and health services research. Students critically review current literature and gain hands-on experience with GIS software. Prereq: GEOG 4080 or GEOG 5080, public health background, or consent of instructor.

Cross-listed with GEOG 4235, HBSC 7235. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4400 - Regional Economic Development

Summer 2010 Registration **GEOG 4400**

Examines the economies of metropolitan, rural, state, and national regions, placing each within the fabric of global relations that direct capital, manage productive activities, and govern prosperity's geography. Organized both sectorally and spatially, the course addresses key sectors of the emerging global economy, as well as the rationale of the "entrepreneurial" state at the public-private interface. Posits institutional approaches and professional roles in the management of regional economies. Seeks in theory a template of regional change, and both the means and purpose of policy intervention. Finds in strategic planning, an integration of developmental and environmental perspectives.

Prereq: URPL 5520 or permission of instructor. Cross-listed with URPL 6671. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4630 - Transportation Planning I: Transport Network Analysis

Summer 2010 Registration **GEOG 4630**

Examines several important aspects of the transport network: accessibility and connectivity of nodes and linkages and the volume and direction of the flow of a transport network. Descriptive, predictive, and planning methods and models discussed include graph theoretical measures, connectivity matrices, gravity model, abstract mode model, entropy-maximization, trip generation model and flow allocation models. Prereq: URPL 5510 or permission of instructor. Cross-listed with URPL 6673. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4990 - Special Topics

Summer 2010 Registration **GEOG 4990**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

URPL 5501 - Planning Issues and Processes

Summer 2010 Registration **URP 5501**

Provides an overview of planning history and theory. The philosophical, political, and economic roots of the various theories are discussed. Ideas are placed in the context of the planning profession's history and its present aims, interests, and ethics. **Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 6 Hours

Minor Total: 15 Hours

Entrance Requirements

All undergraduate students, except geography majors, are eligible for this minor.

Performance Requirements

Students must complete 15 semester hours in geography and/or planning. Because of the professional nature of this minor and the potential for fast-tracking in the MURP program, 12 semester hours of upper-division courses are required. Students must achieve a grade of C (2.0) or higher in required courses. All upper-division courses must be completed at the Downtown Campus and a minimum of 9 semester hours must be completed in CLAS (geography) to satisfy residency requirements.

Women's and Gender Studies Minor

The women's and gender studies minor gives students the opportunity to explore gender issues in the humanities and social sciences. To minor in WGST, a student must complete 18 semester hours in WGST courses with a grade of C or better. At least 12 semester hours for the WGST minor must be taken with UC Denver faculty, and all courses for the minor must be approved by a WGST advisor.

Requirements for the Minor

1. Required Course: WGST 1050 (3 semester hours)

This course provides an introduction to key concepts, themes and approaches to the interdisciplinary field of women's and gender studies. It helps students develop an overall framework for WGST in which to place their electives and internship.

WGST 1050 - Introduction to Women's and Gender Studies

Summer 2010 Registration **WGST 1050**

This course provides an introduction to key concepts, themes and approaches to the

interdisciplinary field of women's and gender studies. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

2. WGST-related courses at the 3000 level or above (12 semester hours)

These courses combine humanities and social science fields. Advisor approval is required for course selection. Students are strongly urged to take at least one course that focuses on women's and gender issues in international perspective. Courses which are eligible for WGST credit include (but are not limited to):

Humanities

ENGL 3450 - Twentieth Century Women Writers

Summer 2010 Registration **ENGL 3450**

Examines how women write about a specific theme, such as home, work, family, the "Other," as well as how women's writing may differ from men's. Theme and genre vary.

Prereq: Must have 30 semester hours or permission of the instructor. Cross-listed with WGST 3450. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 4510 - Whores and Saints: Medieval Women

Summer 2010 Registration **ENGL 4510**

Studies how women are presented in texts, as well as works by women. Investigates the roles open to women and societal attitudes toward women, who were considered seductresses, saints, scholars and warriors in the middle ages. Prereq: Nine hours of literature courses or instructor permission. Cross-listed with ENGL 5510, RLST 4730 and RLST 5730, WGST 4510. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FREN 4510 - French Women Writers

Summer 2010 Registration **FR 4510**

Designed to explore writings by French and Francophone women from the Middle Ages to the present. Addresses the question of what it means to be a woman and want to write. The selections include a wide variety of genres: autobiographical writings, stories, poems, manifestos, letters, political and historical documents. Prereq: FREN 3112 or 3122 plus one other 3000-level French course or permission of instructor. Cross-listed with FREN 5510 and WGST 4511. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 3343 - Women in U.S. History

Summer 2010 Registration HIST 3343

An analysis of women's place in society, in the work place, and in the political arena over the last 300 years. Cross-listed with WGST 3343. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4230 - Women in the West

Summer 2010 Registration HIST 4230

Focuses on ways in which women, from the mid-19th century through the mid-20th century, of different races, classes, and ethnic background, have interacted and been active participants in the development of the Western states. Cross-listed with HIST 5230 and WGST 4230. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4303 - Sex and Gender in Modern Britain

Summer 2010 Registration HIST 4303

Examines modern British history by focusing on sex and gender as central aspects in people's lives. Considers the ways gender shapes the realms of politics, economics, society and culture in Britain from the 18th century to the present. Cross-listed with HIST 5303 and WGST 4303. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4307 - History of Sexuality

Summer 2010 Registration HIST 4307

Explores the relationships between gender and norms, sexual practice, and ideas about sexuality in Europe and the United States. Examines how sex and sexuality have changed over time and how those changes relate to social, cultural, political and economic history. Cross-listed with HIST 5307 and WGST 4307. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4345 - Gender, Science, and Medicine: 1600 to the Present

Summer 2010 Registration HIST 4345

Examines the ways science and medicine have both shaped and been shaped by ideas about gender. Pays particular attention to the relationship between scientific/medical ideas about the sexes and the social organization of gender. Cross-listed with HIST 5345. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 3500 - Ideology and Culture: Racism and Sexism

Summer 2010 Registration **PHIL 3500**

Surveys the nature and role of racism and sexism. Topics may include ideology theory, naturalism, the equal protection clause, recent scientific discussion, sociolegal history, and social constructionism. Cross-listed with WGST 3500. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 4933 - Philosophy of Eros

Summer 2010 Registration **PHIL 4933**

Why is philosophy an erotic activity and what are the implications of this insight? We will explore these issues, first, by reading Plato's erotic dialogues: Lysis, Symposium and Phaedrus. Then we will focus on Freud's influential (and controversial) appropriation of Plato's thought in the writings that span his career, from *The Interpretation of Dreams* (1900) to *Civilization and its Discontents* (1930) and beyond. Finally, we will survey post-Freudian theories of eros, such as Michel Foucault's *History of Sexuality*, as well as the more recent contributions of thinkers such as Jonathan Lear, Thomas Nagel, Martha Nussbaum and Slavoj Zizek. Cross-listed with WGST 4933, PHIL 5933, SSCI 5933, and HUMN 5933. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

RLST 4420 - Goddess Traditions

Summer 2010 Registration **RLST 4420**

Explores the many forms which goddesses have assumed through history, including the Neolithic Great Mother and her heiresses in the ancient Mediterranean cultures, such as: Isis, Ishtar, Demeter, Hecate, Aphrodite, Artemis, Athena and others, and their parallels in India. Goddess traditions have encompassed a full spectrum from virgins to Great Mothers to dark underworld goddesses of death and destruction. Cross-listed with RLST 5420 and WGST 4420. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

SPAN 4540 - Race, Class, and Gender in Spanish Golden Age Literature

Summer 2010 Registration **SPAN 4540**

Explores works of various genres in relation to their social and political contexts in 16th and 17th century Spain, emphasizing the cultural attitudes toward race, class, and gender that inform them. Prereq: SPAN 3252 and at least one additional literature course. Cross-listed with SPAN 5540 and WGST 4540. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

WGST 4306 - Survey of Feminist Thought

Summer 2010 Registration **WGST 4306**

Examines changes and continuities in feminist thought from the 18th century to the present, using historical and literary materials. Explores the ways that women's characteristics, experiences, and capabilities have been understood and challenged. Cross-listed with ENGL 4306, 5306, HIST 4306, 5306, WGST 5306. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

ENGL 4306 - Survey of Feminist Thought

Summer 2010 Registration **ENGL 4306**

Examines changes and continuities in feminist thought from the 18th century to the present, using historical and literary materials. Explores the ways that women's characteristics, experiences, and capabilities have been understood and challenged. Cross-listed with ENGL 5306, HIST 4306, 5306, WGST 4306, 5306. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

HIST 4306 - Survey of Feminist Thought

Summer 2010 Registration **HIST 4306**

Examines changes and continuities in feminist thought from the 18th century to the present, using historical and literary materials. Explores the ways that women's characteristics, experiences, and capabilities have been understood and challenged. Cross-listed with ENGL 4306, 5306, HIST 5306, WGST 4306, 5306. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Social Sciences

ANTH 4200 - Gender in Cross-Cultural Perspective

Summer 2010 Registration **ANTH 4200**

A comparative analysis of gender-based status and social roles of women and men, with women's status and roles emphasized due to their near-universal construction as the "Other" sex. Examines in cross- and sub-cultural context the relations among women's status and their subsistence and reproductive activities; and the division of labor by sex, ideology and political economy. Prereq: ANTH 2102 or equivalent. Cross-listed with ANTH 5200. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 4260 - Human Reproductive Ecology

Summer 2010 Registration **ANTH 4260**

Considers the determinants of fertility variation within and among traditional human societies. Biocultural and ecological perspectives on pubertal timing, marriage patterns, birth seasonality, duration of birth intervals and reproductive senescence. Prereq: ANTH 1303 or equivalent. Cross-listed with ANTH 5260. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 4020 - Feminist Perspectives on Communication

Summer 2010 Registration **CMMU 4020**

Introduces the communication theories of major feminist theorists such as Mary Daly, Bell Hooks, and Sonia Johnson, with a focus on how their theories challenge and transform current understandings of communication. Cross-listed with COMM 5020. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 4045 - Female-Male Friendships

Summer 2010 Registration **CMMU 4045**

Explores friendships between women and men across the life cycle and the role of communication in those friendships. Topics include how such friendships impact self-concepts, advantages of female-male friendships, and barriers to female-male friendships. Cross-listed with COMM 5045. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 4265 - Gender and Communication

Summer 2010 Registration **CMMU 4265**

Explores the relationship between gender and communication, including how language treats women and men differently and verbal and nonverbal differences in women's and men's communication. Cross-listed with COMM 5265. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 4268 - Communication and Diversity in U.S. History

Summer 2010 Registration **CMMU 4268**

Explores issues of diversity and community in the construction of U.S. culture. Emphasis on legal and historical texts that codify or challenge majoritarian notions of difference and systems of social control. Cross-listed with COMM 5268. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 4275 - Family Communication

Summer 2010 Registration **COMM 4275**

Explores family communication processes in traditional and nontraditional families through examination of theories and research on the family. Topics include conflict, family secrets, decision decision-making, and practical guidelines for improved communication in families. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 3100 - Economics of Race and Gender

Summer 2010 Registration **ECON 3100**

Overview of the determinants of wages, employment and education in the labor market. Emphasizes the investigation of the evidence and theories of differentials that appear to be associated solely with race and sex, and public policies associated with discrimination and poverty. Prereq: ECON 2022. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 3400 - Economics of Sex and Drugs

Summer 2010 Registration **ECON 3400**

Examines the political and policy issues surrounding controversial topics in human behavior. Economic models and reasoning are applied to examine issues such as juvenile substance use and abuse, and teen pregnancy. Prereq: ECON 2022. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HBSC 3010 - Evolution of Human Sexuality

Summer 2010 Registration **HBSC 3010**

Surveys the biological and social evolution of human sexuality from an interdisciplinary perspective. Encourages critical thinking about human sexual behavior and challenges assumptions about sexuality. Students explore what happens when sexual behaviors that have evolved over the millennia mix with the cultural, political, and economic influences imposed by contemporary civilization. Prereq: Introductory courses in anthropology, biology, psychology, sociology or political science. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 3034 - Race, Gender, Law and Public Policy

Summer 2010 Registration **P SCI 3034**

Historical overview of race and gender relations in the U.S. and an examination of the

treatment of issues of race and gender in the judicial system and public policy. Cross-listed with WGST 3034.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 3035 - Political Movements: Race and Gender

Summer 2010 Registration P SC 3035

Examines the emergence, growth, and decline of social movements for race and gender equality. Discussion of political issues of race and gender in the 1990s. Cross-listed with WGST 3035.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4215 - Women's Rights, Human Rights: Global Perspectives

Summer 2010 Registration P SC 4215

Explores the global feminist movement's campaign to "engender" human rights. Examination of women's human-rights issues and the critique of this campaign as representing cultural imperialism. Prereq: Six hours of political science or instructor permission. Cross-listed with WGST 4215.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4248 - Gender, Globalization and Development

Summer 2010 Registration P SC 4248

Analyzes the effects of globalization on the gendered processes of international development and strategies to empower women to achieve gender justice across race, class and national divisions. Cross-listed with PSCI 5245 and WGST 4248.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4555 - International Women's Resistance

Summer 2010 Registration P SC 4555

Examines local and international struggles of women to build peace and justice by resisting systems of inequality such as colonialism, racism, patriarchy, globalization, and religious intolerance. Cross-listed with PSCI 5555, ETST 4555 and WGST 4555.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4564 - Gender and Politics

Summer 2010 Registration P SC 4564

Analysis of the political experience of women and of strategies for change. Emphasis on

the U.S. Cross-listed with WGST 4564. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4827 - Women and the Law

Summer 2010 Registration **P SC 4827**

Examines the role of the courts in the development of public policy toward women; how the legal system affects the economic power, family roles, safety and political participation of women. Cross-listed with ETST 4827 and WGST 4827. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 3235 - Human Sexuality

Summer 2010 Registration **PSY 3235**

Examines the physiological, psychological, and social psychological bases of human sexuality. Research on the range of sexual behaviors, individual sexual response, sexual development, sexual dysfunction, and variants of sexual orientation. Prereq: PSYC 1000, 1005 and 2090, or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 3405 - Family Psychology

Summer 2010 Registration **PSY 3405**

Overview of theory and research pertaining to marital and family structure, functioning and dynamics. Prereq: PSYC 1005. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 3611 - Psychology of Women

Summer 2010 Registration **PSY 3611**

Reviews psychological theories and research of women's social, cultural, emotional and behavioral experience. Examines the sociocultural context of women's experience and explores women's socialization, developmental issues, cognitive abilities and achievement motivation, personality variables, stereotypes, psychological disorders, victimization, intimacy and sexuality. Prereq: PSYC 1000, 1005 and 2090 or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 3612 - Domestic Abuse

Summer 2010 Registration **PSY 3612**

Examines the nature and extent of domestic violence. Personal characteristics and dynamics that contribute to spouse abuse are reviewed. Theories and research in the general field of family violence, victims' and perpetrators' treatment, and child abuse are discussed. Prereq: PSYC 1000, 1005 and 2090 or permission of instructor. **Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SOCY 3010 - Sociology of Human Sexuality

Summer 2010 Registration **SOC 3010**

Increases the understanding of differences in views of sexuality, specifically the link between sex and reproduction and its role as the motivation for gender roles and sex acts. Explores the history of sexuality, cross-cultural studies and primate modeling.

Cross-listed with WGST 3010. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SOCY 3080 - Sex and Gender

Summer 2010 Registration **SOC 3080**

Causes and consequences of sex role differentiation at the individual, group and societal levels. Current issues related to changing norms and values concerning gender in modern society are examined. Cross-listed with WGST 3080. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SOCY 3700 - Sociology of the Family

Summer 2010 Registration **SOC 3700**

The family as a social institution. Historical development and contemporary cross-cultural analysis, with emphasis on the contemporary American family. Cross-listed with WGST 3700. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SOCY 4120 - Popular Culture and the American Family

Summer 2010 Registration **SOC 4120**

A course in family sociology in which the ways American family is portrayed in the mass media and popular culture are studied. Even though the historical evolution of this reciprocal relationship is not ignored, the focus is on today's relevant issues. Cross-listed with SOCY 5120. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

See the WGST Web site for this semester's course offerings.

3. WGST Community Internship (3 semester hours)

An internship working in the community around issues related to women and gender. Working with a WGST advisor and the UC Denver Experiential Learning Center (ELC), students will choose an internship related to their interests in WGST. Through the ELC, students sign up for their internship under WGST 3939. Students will be required to complete a critical writing component comprising an ongoing log about the internship experience and an 8-10 page final paper discussing the interrelationships between the practical internship experience and the theoretical/scholarly insights of women's and gender studies. Students may also choose to use WGST 2900, Smart Girl Leadership Training, in lieu of their internship and must follow the requirements of that course and practicum. Students must have taken WGST 1050 before enrolling for their internship.

WGST 3939 - Cooperative Education

Summer 2010 Registration **WGST 3939**

Designed experiences involving application of specific, relevant concepts and skills in supervised employment situations. Junior standing and 2.75 GPA. **Semester Hours:** 1 to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

WGST 2900 - Smart Girl Leadership Training and Practicum

Summer 2010 Registration **WGST 2900**

Provides leadership and mentoring training, and a practicum in which UCD students mentor teenagers in their community or school settings. Following completion of the training, students work as near-peer mentors and coaches with groups of teenage girls in the Denver community and apply the skills learned in their training. **Semester Hours:** 3 to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 18 Hours

Writing Minor

The writing minor allows students to complement their area of major study with systematic experience in writing.

Students minoring in writing must complete a total of 15 hours (excluding ENGL 1010, 1020, 2030). None of the required 15 hours may be taken pass/fail. Only courses

completed with a grade of C (2.0) or better may be counted toward the minor. A minimum of 9 upper-division hours of work in the minor must be taken with Downtown Campus English faculty.

Students are encouraged to take ENGL 1020 and ENGL 2030 before beginning the minor. (ENGL 2154 and ENGL 2030 can be taken concurrently.)

Courses

Required Courses

ENGL 2070 - Grammar, Rhetoric and Style

Summer 2010 Registration **ENGL 2070**

Teaches the basics of English grammar in order to develop a rhetorical and stylistic confidence in reading and writing, using an approach that is more descriptive than prescriptive. Teaches students how to evaluate the grammatical choices of established writers and how to develop flexibility in the grammatical choices they make in their own writing. Prereq: ENGL 1020 or equivalent. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 4180 - Argumentation and Logic

Summer 2010 Registration **ENGL 4180**

Explores the history of logic and its role in argumentation, studies various types of logical structures, and analyzes current uses of argumentation, with attention to writing arguments on current public issues. Prereq: ENGL 1020, 2030 and 2070. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 4190 - Special Topics in Rhetoric and Writing

Summer 2010 Registration **ENGL 4190**

Focuses on particular issues in rhetoric and writing as they pertain to reading and writing, including language and gender, language and culture, and language of political action. Prereq: Must have 30 semester hours or permission of the instructor. Cross-listed with ENGL 5190. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 9 Hours

Distributed Course

Choose one course from the following:

ENGL 2154 - Introduction to Creative Writing

Summer 2010 Registration **ENGL 2154**

Reading, discussing, writing short fiction and poetry in a workshop setting. Prereq: ENGL 1020. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

ENGL 3154 - Technical Writing

Summer 2010 Registration **ENGL 3154**

Introduces the study and writing of technical documents. Emphasizes the processes, style, structure, and forms of technical writing. Attention is paid to audience analysis, organization, clarity and precision. Prereq: ENGL 1020. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

ENGL 3170 - Business Writing

Summer 2010 Registration **ENGL 3170**

Focuses on the strategies and techniques of business writing, with emphasis on reader, message and form. Prereq: ENGL 1020. ENGL 2030 highly recommended. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 3 Hours

Elective

One 3000-/4000-level writing course.

Total: 3 Hours

Minor Total: 15 Hours

Undergraduate Experiences

First-Year Seminars

The Office of Undergraduate Experiences at UC Denver offers an optional program of first-year seminars (FYS) designed to assist students to successfully make the transition from high school to college, improve student retention and boost new student confidence. The FYS courses integrate rigorous academic content with academic skills such as library usage, campus resources, information literacy, time management, communication skills and career counseling.

Class size is capped at 24 students to facilitate interaction between student and instructor and to allow the instructor to serve as a mentor in the student's first semester of college. FYS classes engage students in active learning beyond the traditional classroom, laboratory or studio classes. In the FYS courses, students learn about themselves and their abilities. The experiences obtained from the FYS program aim to promote academic exploration and interdisciplinary learning, civic engagement, cultural awareness, leadership, problem solving and other professional skills.

WHY PARTICIPATE?

- higher first semester grades
- higher student satisfaction facilitated by small class size and a faculty mentor
- better utilization of campus resources paid for through student fees
- early exploration of career paths and a suitable major
- more likely to stay in college

Students are encouraged to use the FYS course to explore areas either within or outside their major. Students should work with their academic advisor during orientation to select an appropriate FYS course. All of the courses are 3 semester hours and count in the required core curriculum. Requirements vary slightly, but students should expect weekly writing and readings, participation in events outside the classroom including one service-learning activity and a final project.

Please visit our Web site for the current course offerings.

University Honors and Leadership Program

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Web site: www.ucdenver.edu/uhl

University Honors and Leadership (UHL) is a program of excellence designed for outstanding students who have demonstrated superior achievement in academic performance and/or outstanding leadership qualities. The program is founded on the premise that the integration of rigorous programs of academic excellence and leadership education provides the ideal environment in which to develop the gifts of the next generation of leaders in academia, business, policymaking and service to communities local, national and global.

The UHL program is unique in integrating academic honors and leadership education within a highly selective learning community of outstanding students and faculty. The UHL program allows students to complement their major field of study with a traditional honors experience in the academic honors track or program of leadership education in the leadership studies track. Students move through the UHL program in cohorts that simultaneously promote community, teamwork and individual initiative. All of the UHL courses are multidisciplinary, reflecting our view that the ability to effectively analyze the challenges faced in all sectors of society can be enhanced by the integration of appropriate pieces drawn from a broad base of perspectives and problem-solving skills. The UHL program complements this with an emphasis on the development of exceptional oral and written communication skills, projects that steep the students in sophisticated research methods and the opportunity to work in teams to solve practical problems in the community.

The Academic Program

UHL is a multidisciplinary cohort program consisting of 27 semester hours of course work to be completed over four years. The UHL courses will substitute for most of the UC Denver general core curriculum requirements.

UHL students are given the opportunity to pursue a traditional honors experience through the academic honors track of the UHL program or to focus on leadership education through the UHL leadership studies track. UHL students have a common first-year experience, taking a core of course work common to both tracks. The second and third years of the UHL program offer programs designed specifically for the academic honors and leadership studies tracks. The UHL students come together for a two-semester capstone research seminar in the fourth year.

UHL Core

The UHL Core is a body of courses the completion of which is required of all UHL students. The UHL core includes:

- UNHL 1100 Introduction to University Honors and Leadership

- UNHL 2755 UNHL Seminar
- ENGL 2030 -UHL: Core Composition II
- UNHL 4991: UHL Senior Research Seminar I (2 semester hours) (*currently under development*)
- UNHL 4992: UHL Senior Research Seminar II (2 semester hours) (*currently under development*)

Waiver of English 2030 requirement for UHL Students

All UHL students who have not previously received credit for English 2030 or its equivalent are required to complete a UHL section of English 2030. UHL students who have previously received credit for English 2030 or the equivalent will not receive additional UC Denver credit for English 2030 and so are not required to take the UHL section of this course. Students who believe that they are exempt from the English 2030 requirement should meet with the UHL Advisor to confirm this.

Credit Hour and Distribution Requirements for UHL Certification

UHL students are required to complete 27 student semester hours of UHL courses, including two (2) one-semester-hour UHL seminars, in order to graduate with UHL certification. Students who have previously received credit for English 2030 or the equivalent must complete 24 hours of UHL courses. In addition, students are required to structure their UHL curricula so that they satisfy the UC Denver core curriculum requirements within their UHL programs of study. Students should meet regularly with the UHL advisor in order to ensure that their UHL course work satisfies the necessary requirements for UHL certification and UC Denver graduation.

Academic Honors Track Requirements

The academic honors track offers a unique program for outstanding students entering UC Denver. The academic honors track provides a rigorous academic experience to complement the student's major, provides an environment for lifelong learning and promotes self-discovery. Students will be exposed to complicated problems, competing perspectives and differing approaches to important topics. Undergraduate research will be emphasized in the academic honors track to prepare students for graduate school or any postbaccalaureate professional program.

The second and third year of the academic honors program will develop students' core knowledge areas through the integration of humanities, arts, science, behavioral and social science, international perspectives and cultural diversity by way of multidisciplinary courses where students are exposed to complex multidimensional issues. Students continue to build and broaden their communication, analytical and

critical thinking skills. Students will learn to apply knowledge to new areas, expand their view of the world and develop sensitivity and appreciation of the arts, diversity and global society.

A typical course of study for an Academic Honors track student is:

Year 1:

UNHL 1100: Introduction to UHL (3 semester hours)

UNHL 2755: UHL Seminar (two semesters at 1 semester hour each)

English 2030-UHL: Core Composition II (3 semester hours)

Years 2 and 3:

Five UHL Academic Honors track electives (15 semester hours)

Year 4:

UNHL 4991: UHL Senior Research Seminar I (2 semester hours) (*currently under development*)

UNHL 4992: UHL Senior Research Seminar II (2 semester hours) (*currently under development*)

NOTE: Academic Honors track students may count one leadership studies track course toward their academic honors graduation requirements. Students who successfully complete the academic honors track will receive a university honors designation on their diploma and on their university transcript. The academic honors track complements, but does not replace, honors programs available in the student's major. Students should consult advisors in their major as well as the UHL advisor for advice on honors sections. Meeting with advisors is encouraged during the first semester at UC Denver.

Leadership Studies Track Requirements

The leadership studies track is designed to develop skills and experiences that will prepare students for the new systems and challenges of leadership in corporate, institutional and public life. Leadership studies tracks work together to enhance their leadership abilities to meet the challenges of a world characterized by the increasing globalization of leadership responsibilities and the rapid change in what leaders need to

learn and know. They confront complex issues, individually and in leadership teams, while taking responsibility for becoming lifelong learners.

Students develop their leadership potential through self-guided learning strategies, practical team projects, theory-based seminars, contact with outstanding leaders and individualized mentoring. The leadership studies track is designed to create a collaborative learning environment where students work in action-oriented teams on innovative solutions to practical issues.

A typical course of study for a leadership studies track student is:

Year 1:

UNHL 1100: Introduction to UHL (3 semester hours)

UNHL 2755: UHL Seminar (two semesters at 1 semester hour each)

English 2030-UHL: Core Composition II (3 semester hours)

Years 2 and 3:

Five UHL Leadership Studies track electives (15 semester hours)

Year 4:

UNHL 4991: UHL Senior Research Seminar I (2 semester hours)

UNHL 4992: UHL Senior Research Seminar II (2 semester hours)

NOTE: Leadership track students may count one academic honors track course toward their leadership studies graduation requirements. Students who successfully complete the leadership studies track will graduate with a minor in leadership studies.

UHL Graduation Requirements

To graduate with the appropriate UHL designation (university honors or a minor in leadership studies), students are required to satisfy the course and semester hour requirements specified above and must have a GPA of 3.50 or higher in their UHL courses. No grade below B- (2.70) in a UHL course will count toward the UHL graduation requirements.

Admission

Admission to the UHL program is competitive. In addition to meeting published requirements for admission to UC Denver, students must have a high school GPA, class ranking and SAT/ACT scores commensurate with an honors educational experience. For example, we would expect that applicants would rank in the top 10 percent of their high school class and/or have scored in the 90th percentile or above on the SAT/ACT.

Students who wish to be considered for admission to the UHL program must submit the following application materials:

- A completed UHL application form
- A written essay
- 3 letters of recommendation
- High school transcripts and transcripts for all college-level work completed to date
- SAT and/or ACT scores

We require a personal interview with all students who are selected as finalists for admission.

Applicants for admission to the UHL program should show evidence of ability and desire to:

- Take responsibility for their own learning, for self-discovery and for personal and intellectual growth.
- Learn about and understand diverse, competing perspectives, viewpoints and values
- Profit from varied modes of learning
- Become responsible and contributing members of the UHL program, of the university and of society

Application information can be found on the UHL Web site at: www.ucdenver.edu/UHL.

Transfer Student Admissions

The UHL program may admit a limited number of transfer students into the UHL program, contingent on the availability of slots in the UHL cohorts. Students may transfer into the UHL program for the second semester of their freshmen year or the first semester of their sophomore year.

Students wishing to apply for admission to the UHL program after the first semester of the freshman year must follow the standard UHL application procedures. In addition, prospective transfer students should include with their application materials copies of transcripts for all college-level work completed to date.

Applicants for transfer admission into the UHL program will be evaluated by the UHL admissions committee on the same basis as traditional UHL admissions candidates, and transfer admissions are subject to the availability of slots in the UHL cohort.

Transfer students are required to complete 27 semester hours of UHL courses, including the UHL core, in order to graduate with UHL certification. The requirement is 24 semester hours for students who have already received credit for English 2030 or its equivalent.

Graduate Degree Programs

Accounting MS

Program Director: Michael Roberts

Telephone: 303-315-8460

E-mail: Michael.Roberts@ucdenver.edu

Faculty

Professors:

Bruce Neumann, PhD, University of Illinois

Associate Professors:

Gary Colbert, PhD, University of Oregon

Carol Dee, PhD, Louisiana State University

L. Ann Martin, PhD, University of Minnesota

Michael Roberts, PhD, Georgia State University

Assistant Professors:

George F. Klersey, PhD, University of Southern California

Mary Malina, PhD, University of Colorado Boulder

Robert Nieschwietz, PhD, Arizona State University

Senior Instructors:

Elizabeth Connor, MS, Colorado State University

Robert Hockenbury, MS, University of Houston

Instructors:

Cindy Fischer, MA, University of Colorado Boulder
Emily Vera, MS, University of Colorado Denver

The master of science in accounting offers three specializations plus a flexible program which allows students to design individualized courses of study. The program provides students the opportunity to acquire a thorough understanding of financial and managerial accounting, auditing and taxation in preparation for successful careers in public or private accounting, as well as government or nonprofit accounting.

Students completing the MS in accounting will complete:

- 6 semester hours of required accounting course work
- 12 semester hours of elective accounting course work*
- 9 semester hours of a secondary business area
- 3 semester hours of a free accounting elective.

*The elective course work can be selected from graduate accounting courses or by selecting one of the three specializations offered within the program. Students who select the accounting and information systems audit and control (AISAAC) specialization have completely different requirements which are listed under that specialization.

A. Background Accounting Courses*

The MS in accounting also requires completion of the following undergraduate accounting prerequisites.

Must be completed with a grade of B- or higher plus a cumulative GPA of 3.0. Students with grades below a B may be subject to probation.

Required Courses:

ACCT 2200 - Financial Accounting and Financial Statement Analysis

Summer 2010 Registration **ACCT 2200**

The financial accounting process, the role of the profession and the analysis of financial statements. Principal focus on interpretation of financial statements, with emphasis on asset and liability valuation problems and the determination of net income. Prereq: MATH 1070 and sophomore standing. A grade of 'C' or better is required in this course to proceed to ACCT 2220. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ACCT 2220 - Managerial Accounting and Professional Issues

Summer 2010 Registration **ACCT 2220**

Introduces managerial accounting. Shows managers how to use accounting information to make decisions. Principal focus on cost behavior analysis, budgeting and product costing. Prereq: ACCT 2200 with a grade of 'C' or better and sophomore standing.

Strictly enforced. **Semester Hours:** 3to 3 **When Offered:** *FASPRSUM*

Registration is changing. Visit our website for details ucdenver.edu/registration.

ACCT 3054 - Accounting Systems and Data Processing

Summer 2010 Registration **ACCT 3054**

The design and analysis of accounting information systems, with special emphasis on computers and computer programming, and the role of accounting in the role of accounting in the management process. Must earn a grade of 'C' or better to qualify for graduation. Prereq: Completion of ACCT 2220 and ISMG 2050 with a grade of 'C' or better (Strictly enforced). **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ACCT 3220 - Intermediate Financial Accounting I

Summer 2010 Registration **ACCT 3220**

An intensive analysis of generally accepted accounting principles, accounting theory and preparation of annual financial statements for public corporations. Must complete course with a 'C' to qualify in graduation requirements. Prereq: Completion of ACCT 2220 with a grade of 'C' or better. Strictly enforced. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ACCT 3230 - Intermediate Financial Accounting II

Summer 2010 Registration **ACCT 3230**

Selected topics not covered in ACCT 3220. Must complete course with a grade of 'C' to qualify in graduation requirements. Prereq: ACCT 3220, completed with a grade of a 'C' or better. Strictly enforced. **Semester Hours:** 3to 3 **When Offered:** *FALL SPR*

Registration is changing. Visit our website for details ucdenver.edu/registration.

ACCT 3320 - Intermediate Cost Accounting

Summer 2010 Registration **ACCT 3320**

Cost analysis for purposes of control and decision making. Analysis of cost behavior, role of accounting in planning and control, and managerial uses of cost accounting data. Includes use of computer assisted decision models. Must receive a 'C' grade to qualify in

graduation requirements. Prereq: ACCT 2220, and DSCI 2010 completed with a grade of 'C' or better. Strictly enforced. **Semester Hours:** 3to 3**When Offered:** FASPRSUM
Registration is changing. Visit our website for details ucdenver.edu/registration.

ACCT 4620 - Auditing

Summer 2010 Registration **ACCT 4620**

Generally accepted auditing standards and the philosophy supporting them; auditing techniques available to the independent public accountant. Pertinent publications of the AICPS reviewed. Note: Students cannot receive credit for both ACCT 4620 and ACCT 6020. Prereq: ACCT 3230 must be completed with a grade of a 'C' or better. Strictly enforced. Cross-listed with ACCT 6020. **Semester Hours:** 3to 3**When Offered:** FALL SPR

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 15-21 Hours

*Waived for students with appropriate background. BUSN 6550, Analyzing and Interpreting Accounting Information, may be substituted for ACCT 2200 and ACCT 2220. International course work waivers are by petition only.

Accounting courses may be taken by nondegree or non-matriculated students.

B. Common Body of Knowledge (CBK)

Based on prior course work, students may be required to take up to three background courses. The following are suggested:

BUSN 6540 - Legal and Ethical Environment of Business

Summer 2010 Registration **BUSN 6540**

Students develop a working knowledge of legal and ethical parameters for business decision making. The course addresses the legal system and mechanisms for resolving disputes. Topics include constitutional law, torts, product liability, contracts, property law, consumer protection, intellectual property, business entities and employment law. It stresses the influence of legal issues on organizational decision making. Note: Students can substitute ENTP 6822 but credit cannot be received for both. Health Administration students must take BUSN 6541. **Semester Hours:** 3to 3**When Offered:** FASPRSUM
Registration is changing. Visit our website for details ucdenver.edu/registration.

BUSN 6620 - Applied Economics for Managers

Summer 2010 Registration **BUSN 6620**

After taking this course, students should be able to apply economic principles to make

optimal decisions given firm cost, demand and market circumstances. Also, they should be able to analyze the firms interactions with its competitive market environment. Students will learn basic aspects of federal macroeconomic policy designed to achieve stable prices and economic growth. Also, they will learn to understand the measurement of output (GDP), employment and prices; the conduct of monetary and fiscal policy; and the balance of trade. Prereq: BUSN 6530 or FNCE 6290 and BUSN 6550, both may be taken concurrently. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

BUSN 6640 - Financial Management

Summer 2010 Registration **BUSN 6640**

This course is concerned with the business firm's decisions to make investments and to finance its operations. Students learn to use the tools and theories underlying business valuation, cost of capital, capital budgeting and capital structure. Students will learn to evaluate a firm's financial position through the examination of its financial statements and to prepare pro forma statements for the firm. Prereq: BUSN 6530 or FNCE 6290, BUSN 6620 (both may be taken concurrently) and BUSN 6550 completed prior and strictly enforced. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

C. MS Accounting Core

Required Courses (all students)

(6 semester hours)

ACCT 6250 - Seminar: Financial Accounting

Summer 2010 Registration **ACCT 6250**

Nature and origin of accounting theory and the development of postulates, principles and practices. Methodology appropriate to development and evaluation of accounting theory, with special emphasis on accepted research standards and procedures. Prereq: ACCT 3230 and ACCT 4620 or ACCT 6020 or concurrent registration in ACCT 4620 or ACCT 6020. **Semester Hours:** 3to 3 **When Offered:** FALL SPR
Registration is changing. Visit our website for details ucdenver.edu/registration.

ACCT 6260 - Seminar: Managerial Accounting

Summer 2010 Registration **ACCT 6260**

Focuses on the conceptual foundations of managerial accounting. Behavioral and quantitative approaches regarding information for decision making, planning, control, performance evaluation and other issues are investigated. Prereq: ACCT 3320 or ACCT

6070 (or equivalent). **Semester Hours:** 3to 3**When Offered:** *FALL SPR*
Registration is changing. Visit our website for details ucdenver.edu/registration.

Accounting Electives

(12 semester hours)

To design an individualized course of study, choose four accounting courses with three of those accounting courses numbered 6260 or higher.

Or, you may select one of the three following specializations to meet this elective requirement.

D. Accounting Specializations

If you select one of the three following specializations, you will complete the required courses, complete four of the choices within your selection of specialization, complete the secondary area and complete a free elective.

Auditing and Forensic Accounting Specialization

Complete the required courses and choose four of the following courses:

ACCT 6280 - Professional Judgment and Decision Making in Accounting

Summer 2010 Registration **ACCT 6280**

Accounting is a process of providing economic information useful for decision making. This course provides (1) an opportunity to develop professional judgment skills, and (2) tools to make better decisions through an active, case-oriented learning method. Cases involve representative problems professional accountants face in financial reporting, audit, tax, business services, and practice management, including ethical conflicts and technical decisions. Participants learn to apply a structured decision model, incorporating critical, creative, evaluative and reflective judgment processes and learn how to recognize and avoid common decision errors and biases. Prereq: ACCT 4620 (or equivalent) or permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ACCT 6340 - Financial Statement Analysis

Summer 2010 Registration **ACCT 6340**

Financial statements are used as an information source on which to base investment,

lending potential or even employment. Designed to develop skills in using, understanding, analyzing, and interpreting financial statements and to make students aware of the value and limitations of financial statement information. Note: Should take in the third semester of the graduate program. Prereq: BUSN 6550 or equivalent.**Semester Hours:** 3to 3**When Offered:** FALL
Registration is changing. Visit our website for details ucdenver.edu/registration.

ACCT 6350 - Current Issues in Professional Accounting

Summer 2010 Registration **ACCT 6350**

An in-depth analysis of current issues in the accounting profession, including ethics development, and validity of standards and regulations. Prereq: ACCT 3230, ACCT 4620, ACCT 6020 or permission of instructor.**Semester Hours:** 3to 3**When Offered:** FALL

Registration is changing. Visit our website for details ucdenver.edu/registration.

ACCT 6380 - Forensic Accounting

Summer 2010 Registration **ACCT 6380**

An examination of investigative auditing, fraud auditing, litigation support, and economic quantification of damages.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ACCT 6470 - Internal Auditing

Summer 2010 Registration **ACCT 6470**

Intro course for business students and CIA candidates. Topics include: IA fundamentals; IA standards; internal controls; managing the IA department; IA working papers, procedures and evidences; fraud detection and prevention; ethics; evaluation of the IA function, and Sarbanes-Oxley Act of 2002. Prereq: BUSN 6550 or equivalent.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ACCT 6510 - Accounting and Information Systems Processes and Controls

Summer 2010 Registration **ACCT 6510**

The course is designed to develop knowledge and skills used to understand and evaluate corporating accounting processes and systems. Focuses on financial and information system internal controls and the flow of corporate information through an accounting system. A financial system objective and risk assessment approach is used to present concepts and techniques for evaluating the adequacy of system processes and controls. Prereq: ACCT 3054 or ISMG 3000 or equivalent professional experience. Cross-listed with ACCT 4780, ISMG 4780 and 6510.**Semester Hours:** 3to 3**When**

Offered: *FALL*

Registration is changing. Visit our website for details ucdenver.edu/registration.

ACCT 6620 - Advanced Auditing

Summer 2010 Registration **ACCT 6620**

Development of auditing as a profession, including evolution of standards and audit reports. Historical and contemporary literature in the field reviewed. Prereq: ACCT 4620 or ACCT 6020 or equivalent. **Semester Hours:** 3to 3**When Offered:** *FALL SPR*

Registration is changing. Visit our website for details ucdenver.edu/registration.

Financial Accounting Specialization

Complete the required courses and choose four of the following courses:

ACCT 6024 - Advanced Financial Accounting

Summer 2010 Registration **ACCT 6024**

Advanced financial accounting concepts and practice with emphasis on accounting for partnerships, business combinations and consolidations. Prereq: ACCT 3230 or equivalent. Cross-listed with ACCT 4240. **Semester Hours:** 3to 3**When Offered:** *FALL SPR*

Registration is changing. Visit our website for details ucdenver.edu/registration.

ACCT 6080 - Accounting for Government and Nonprofit Organizations

Summer 2010 Registration **ACCT 6080**

Nonprofit Organizations. Planning and control of government and nonprofit organizations. Includes program budgets, responsibility accounting and fund accounting. Prereq: ACCT 3220 or BUSN 6550 or permission of instructor. Cross-listed with ACCT 4800. **Semester Hours:** 3to 3**When Offered:** *SPRING*

Registration is changing. Visit our website for details ucdenver.edu/registration.

ACCT 6280 - Professional Judgment and Decision Making in Accounting

Summer 2010 Registration **ACCT 6280**

Accounting is a process of providing economic information useful for decision making. This course provides (1) an opportunity to develop professional judgment skills, and (2) tools to make better decisions through an active, case-oriented learning method. Cases involve representative problems professional accountants face in financial reporting, audit, tax, business services, and practice management, including ethical conflicts and technical decisions. Participants learn to apply a structured decision model, incorporating critical, creative, evaluative and reflective judgment processes and learn how to recognize and avoid common decision errors and biases. Prereq: ACCT 4620 (or

equivalent) or permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ACCT 6340 - Financial Statement Analysis

Summer 2010 Registration **ACCT 6340**

Financial statements are used as an information source on which to base investment, lending potential or even employment. Designed to develop skills in using, understanding, analyzing, and interpreting financial statements and to make students aware of the value and limitations of financial statement information. Note: Should take in the third semester of the graduate program. Prereq: BUSN 6550 or equivalent. **Semester Hours:** 3to 3 **When Offered:** *FALL*
Registration is changing. Visit our website for details ucdenver.edu/registration.

ACCT 6350 - Current Issues in Professional Accounting

Summer 2010 Registration **ACCT 6350**

An in-depth analysis of current issues in the accounting profession, including ethics development, and validity of standards and regulations. Prereq: ACCT 3230, ACCT 4620, ACCT 6020 or permission of instructor. **Semester Hours:** 3to 3 **When Offered:** *FALL*
Registration is changing. Visit our website for details ucdenver.edu/registration.

ACCT 6370 - International Accounting

Summer 2010 Registration **ACCT 6370**

Designed to expose students to the international aspects of accounting and financial management. Includes discussion of some of the different financial accounting practices across countries; financial statement analysis in a global context, international auditing practices and procedures, international tax implications and the implications of operating within the regulations of the Foreign Corrupt Practices Act, the European Union, North American Free Trade Agreement and General Agreement on Tariffs and Trade. Prereq: BUSN 6550 or equivalent. Note: Students cannot receive credit for both ACCT 6370 and INTB 6370. IFRS's are reviewed and compared with the requirements of US GAAP. Cross-listed with INTB 6370 and ACCT 4370. **Semester Hours:** 3to 3 **When Offered:** *SPRING*

Registration is changing. Visit our website for details ucdenver.edu/registration.

Three of the courses must be selected with course numbers above ACCT 6260.

Taxation Specialization

Complete the required courses and choose four of the following courses:

ACCT 6140 - Tax Planning for Managers

Summer 2010 Registration **ACCT 6140**

A Federal tax survey course with an emphasis on tax planning for the graduate student who wants to understand the impact of taxation on individual and business transactions. Course materials emphasize the application of individual, partnership and corporate tax principles to the decision making process. Prereq: BUSN 6550 or equivalent. Note:

Students cannot receive credit for both ACCT 4410 and 6140. Cross-listed with ACCT 4410. **Semester Hours:** 3to 3**When Offered:** FALL SPR

Registration is changing. Visit our website for details ucdenver.edu/registration.

ACCT 6410 - Advanced Tax For Individuals

Summer 2010 Registration **ACCT 6410**

An advanced federal individual income tax course stressing the methodology used in tax research and in tax planning. Includes use of specialized tax software to address compliance and planning issues by solving complex case-type real-life situations.

Prereq: ACCT 4410 or 6140 (or equivalent). **Semester Hours:** 3to 3**When Offered:** SPRING

Registration is changing. Visit our website for details ucdenver.edu/registration.

ACCT 6420 - Advanced Tax for Businesses

Summer 2010 Registration **ACCT 6420**

An advanced federal tax course stressing research and tax planning issues of corporate and partnership entities. Includes use of specialized tax software to address compliance and planning issues by solving complex case-type, real-life situations. Prereq: ACCT

4410 or 6140 (or equivalent). **Semester Hours:** 3to 3**When Offered:** FALL

Registration is changing. Visit our website for details ucdenver.edu/registration.

ACCT 6430 - International Taxation

Summer 2010 Registration **ACCT 6430**

International taxation focuses on the U.S. taxation of international transactions, including a review of the taxation systems in several countries. Includes different forms of doing business in several countries (e.g. in the U.S., would include sole proprietorship, partnerships, limited liability companies and corporations), the ease of operating each form of business, identifying how business owners are protected from the business liabilities and risks and the different, if any, tax treatments afforded each form of business. Other topics include a review of tax rates, consumption regimes (e.g. value -

added taxes), the taxation of U.S. expatriates, the tax consequences of repatriating profits to the U.S., the application of any tax treaties with the U.S. and related tax matters. **Semester Hours:** 3to 3 **When Offered:** *SUMMER*
Registration is changing. Visit our website for details ucdenver.edu/registration.

ACCT 6450 - Research Problems in Income Tax Accounting

Summer 2010 Registration **ACCT 6450**

Study of the methodology used in tax research and tax planning, together with a study of some aspects of tax administration and tax practice and some aspects of the current law and proposals for its revision. Note: This class is rarely offered. Prereq: ACCT 4410 or ACCT 6410 or permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ACCT 6460 - Advance Topics in Taxation

Summer 2010 Registration **ACCT 6460**

Course will focus on advanced topics in tax planning for closely held businesses. Format: Lectures by expert tax professionals and questions/discussion on various topics with emphasis on current issues and trends. Prereq: ACCT 6140. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

Three of the courses must be selected with course numbers above ACCT 6260.

E. Secondary Area

(9 semester hours)

Accounting is increasingly diverse and linked to many business decisions. Accountants may eventually work as systems designers, chief financial officers, cost analysts, budget officers or chief executive officers. Students will be better prepared for their careers if they develop competencies in a related field, which may be chosen from a single discipline such as finance, information systems, entrepreneurship, health administration, marketing or management. *The accounting faculty strongly encourage students to gain additional expertise in finance and/or information systems.*

Alternatively, a self-designed secondary area might best achieve a student's individual objectives (must be approved by the program director). A self-designed secondary field must have a common theme or objective if it crosses several disciplines. For example, a secondary area in information systems might include an accounting technology course, a data base management course and a finance technology course. On the other hand, a finance secondary area might include two finance courses and a cost management (accounting) course or a strategic management course. When a BUSN course is a

prerequisite for a secondary area, it can be included in the secondary area by petition only. Consult a schedule planner for information about current course offerings and a current catalog for course descriptions.

F. Free Accounting Elective

(3 semester hours)

Select one graduate accounting course numbered above ACCT 6000.

G. Total: 30 Hours

Accounting and Information Systems Audit and Control (AISAAC) Specialization

Recently, new regulatory environments have required companies to provide better documentation of their accounting and IT systems to improve the management and disclosure of their business processes for better financial and regulatory controls. Accounting and IT professionals have significant roles in audit and control activities, since they control the systems that monitor and report on finance, planning and operations. The courses within this specialization cover business-process management and financial controls; the emerging trends and practices in privacy and security; the strategies for integrating governance and compliance; and the IT organization's financial and business intelligence services. These courses will focus on how to leverage the existing IT infrastructure to establish quality in financial and internal audit processes and address the regulatory issues associated with reporting, consolidation and document/content management more effectively and completely.

As you will notice the complete 30 semester hour requirements for this specialization are listed below.

Accounting Core

(9 semester hours)

ACCT 6250 - Seminar: Financial Accounting

Summer 2010 Registration **ACCT 6250**

Nature and origin of accounting theory and the development of postulates, principles and practices. Methodology appropriate to development and evaluation of accounting theory, with special emphasis on accepted research standards and procedures. Prereq: ACCT 3230 and ACCT 4620 or ACCT 6020 or concurrent registration in ACCT 4620 or

ACCT 6020. **Semester Hours:** 3to 3**When Offered:** *FALL SPR*

Registration is changing. Visit our website for details ucdenver.edu/registration.

ACCT 6260 - Seminar: Managerial Accounting

Summer 2010 Registration **ACCT 6260**

Focuses on the conceptual foundations of managerial accounting. Behavioral and quantitative approaches regarding information for decision making, planning, control, performance evaluation and other issues are investigated. Prereq: ACCT 3320 or ACCT 6070 (or equivalent). **Semester Hours:** 3to 3**When Offered:** *FALL SPR*

Registration is changing. Visit our website for details ucdenver.edu/registration.

ACCT 6620 - Advanced Auditing

Summer 2010 Registration **ACCT 6620**

Development of auditing as a profession, including evolution of standards and audit reports. Historical and contemporary literature in the field reviewed. Prereq: ACCT 4620 or ACCT 6020 or equivalent. **Semester Hours:** 3to 3**When Offered:** *FALL SPR*

Registration is changing. Visit our website for details ucdenver.edu/registration.

AISAAC Common Courses

(12 semester hours)

Choose four of the following courses:

ACCT 6020 - Auditing

Summer 2010 Registration **ACCT 6020**

Generally accepted auditing techniques and the philosophy supporting them; auditing techniques available to the independent public accountant. Pertinent publications of the AICPA reviewed. Prereq: ACCT 3230 with a grade of 'C' or better and ACCT 3054, strictly enforced. Cross-listed with ACCT 4620. **Semester Hours:** 3to 3**When Offered:** *FALL SPR*

Registration is changing. Visit our website for details ucdenver.edu/registration.

ACCT 6510 - Accounting and Information Systems Processes and Controls

Summer 2010 Registration **ACCT 6510**

The course is designed to develop knowledge and skills used to understand and evaluate corporating accounting processes and systems. Focuses on financial and information system internal controls and the flow of corporate information through an

accounting system. A financial system objective and risk assessment approach is used to present concepts and techniques for evaluating the adequacy of system processes and controls. Prereq: ACCT 3054 or ISMG 3000 or equivalent professional experience. Cross-listed with ACCT 4780, ISMG 4780 and 6510. **Semester Hours: 3to 3****When**

Offered: *FALL*

Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 6510 - Accounting and Information Systems Processes and Controls

Summer 2010 Registration **ISMG 6510**

Designed to develop knowledge and skills used to understand and evaluate corporate accounting processes and systems. Focuses on financial and information system internal controls and the flow of corporate information through an accounting system. A financial system objective and risk assessment approach issued to present concepts and techniques for evaluating the adequacy of system processes and controls. Cross-listed with ACCT 6510, 4780 and ISMG 4780. **Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 6040 - Business Process Management

Summer 2010 Registration **ISMG 6040**

Designing effective information systems for business requires an awareness of the organization(s) business processes and how to manage and streamline them. The objectives of the course are for students to understand the importance of business processes; the main types of business processes; and the evolution of business process management; business process outsourcing; business process re-engineering; business process redesign; technology enabled business processes; and automated workflow. An important activity is graphically mapping business processes, which are transformed into an application or set of applications. The organization needs to manage the electronic workflow to monitor that the work gets done and allow changes to the workflow. Case studies of organizations are studied for most topics to enhance understanding. The group projects let students apply their knowledge of the course to a specific organization. By the end of this course students should have an appreciation of the important process-centric issues in business systems design. **Semester Hours: 3to 3****When Offered:** *SPRING*

Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 6420 - Global Enterprise Systems

Summer 2010 Registration **ISMG 6420**

Examines the evolution of global enterprise systems - from internally focused enterprise resource planning (ERP) client or server systems to externally focused eBusiness.

Studies the types of issues managers need to consider in implementing cross-functional integrated enterprise systems. Examines the general nature of global enterprise

computing, re-engineering principles and the technical foundations of client or server systems and enterprise information architectures. Students learn about the global enterprise systems marketplace. Topics include the tools and methodology, modules, processes and industry initiatives. Finally, the course looks into the future and predicts enterprise system trends. The objective of the course is to make students aware of the potential and limitations of global enterprise systems. The objective will be reached through case studies, lectures, guest speakers and a group project. Prereq: ISMG 6180 or BUSN 6610 (6810). **Semester Hours:** 3to 3**When Offered:** FALL
Registration is changing. Visit our website for details ucdenver.edu/registration.

Choose three of the following courses:

(9 semester hours)

ACCT 6340 - Financial Statement Analysis

Summer 2010 Registration **ACCT 6340**

Financial statements are used as an information source on which to base investment, lending potential or even employment. Designed to develop skills in using, understanding, analyzing, and interpreting financial statements and to make students aware of the value and limitations of financial statement information. Note: Should take in the third semester of the graduate program. Prereq: BUSN 6550 or equivalent. **Semester Hours:** 3to 3**When Offered:** FALL
Registration is changing. Visit our website for details ucdenver.edu/registration.

ACCT 6800 - Special Topics

Summer 2010 Registration **ACCT 6800**

Research methods and results, special topics and professional developments in accounting. Consult the current 'Schedule Planner' for semester offerings as new special topics courses are frequently added. Prereq: Varies according to topics and instructor requirements. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 6080 - Database Management Systems

Summer 2010 Registration **ISMG 6080**

The success of today's business often hinges on the ability to utilize critical information to make the right decisions quickly and efficiently. Transforming mountains of data into critical information to improve decision making is a skill every business decision maker must possess. This focus course covers the database design topics with a focus on enabling business decision making. Detailed topics include collecting, capturing,

querying and manipulating data (using SQL and QBE) for simple to medium complex business applications. Commercial database products (e.g. ORACLE and ACCESS) are utilized to demonstrate the design of database applications in management, marketing, finance, accounting, and other business areas. Students will be able to design and implement simple to medium complex database applications after successful completion of this course. **Semester Hours:** 3to 3**When Offered:** FALL

Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 6180 - Information Systems Management and Strategy

Summer 2010 Registration **ISMG 6180**

The effective use of information technology requires the alignment of competitive strategies, business processes, and IT applications. In this course, we take a top management perspective to the development of policies and plans that maximize the contribution of IT to organizational goals. We begin by examining the systems that support the operational, administrative, and strategic needs of organizations. We then investigate the approaches used to manage the IT function, taking into account legacy and emerging technologies. The vital role of the CIO and project champions are explored. Note: Students cannot receive credit for both ISMG 6180 and BUSN 6610.

Cross-listed with BUSN 6610. **Semester Hours:** 3to 3**When Offered:** FASPRSUM

Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 6430 - Information Systems Security and Privacy

Summer 2010 Registration **ISMG 6430**

Designed to develop knowledge and skills for security of information and information systems within organizations. Focuses on concepts and methods associated with planning, designing, implementing, managing, and auditing security at all levels and on all systems platforms, including enterprise systems. This course presents techniques for assessing risk associated with accidental and intentional breaches of security as well as disaster recovery planning. Prereq: ISMG 6180 or BUSN 6610 (6810). **Semester Hours:**

3to 3**When Offered:** SPRING

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total 30 hours

Administrative Leadership and Policy Studies EdS

Administrative Leadership and Policy Studies

Requirements for Principal Licensure, the MA and EdS degrees, and Executive Leadership Administrator Licensure Program

Office: Lawrence Street Center, 701

Telephone: 303-315-6300

Fax: 303-315-6311

E-mail: education@ucdenver.edu

Web site: www.ucdenver.edu/education/alps

Principal Licensure

Master of Arts Degree

Education Specialist Degree

Executive Leadership Administrator Licensure Program

Faculty

For information about faculty in this area, visit www.ucdenver.edu/education/alps.

The primary responsibility of the administrative leadership and policy studies (ALPS) faculty is to prepare leaders for public education in Colorado and the nation. Currently, the principal license is required for people seeking building-level administrative positions in Colorado.

Principal Licensure Program

ALPS offers course work that leads to the initial license for principal. Having earned an initial license, those who have obtained a master's degree and who go on to complete a district sponsored induction program may then be awarded a professional license by the Colorado Department of Education.

ALPS's 32 semester-hour principal licensure program is project-based, requiring students to present evidence of meeting both state and national standards through performance based assessments. A 400-hour clinical-practice experience is integrated throughout the four-semester program.

Students develop a portfolio during the principal licensure program. Portfolios not finalized by the end of the fourth semester must be completed within the two subsequent semesters (not including summer).

Note: Those already holding a principal license and master's degree should see the Executive Leadership Program (below) for pursuing administrator licensure.

Denver Metro-Area Cohorts

Denver metro-area cohorts are delivered in **four 8-semester-hour courses** over four consecutive semesters. Cohorts start at one or more locations each semester and involve a combination of regular in-person meetings (up to 15 times per semester) and online work.

EDUC 5751 - Principal/Administrator Licensing I Semester Hours: 5 to 9

EDUC 5752 - Principal Administrator Licensing II. Semester Hours: 5 to 9

EDUC 5753 - Principal/Administrator Licensing III. Semester Hours: 5 to 9

EDUC 5754 - Principal or Administrator Licensing IV. Semester Hours: 5 to 9

Total: 32 Hours

Distance-Learning Cohorts

Distance-learning cohorts start each summer in June with a weeklong boot camp in Denver, meet over several intensive weekends during the subsequent fall and spring semesters and end with a weekend the following summer. Online work is completed in between the in-person sessions. Distance-learning cohorts are delivered in **three 9-semester-hour courses and one 5-semester-hour course:**

EDUC 5751 - Principal/Administrator Licensing I. Semester Hours: 5 to 9

EDUC 5752 - Principal Administrator Licensing II. Semester Hours: 5 to 9

EDUC 5753 - Principal/Administrator Licensing III. Semester Hours: 5 to 9

EDUC 5754 - Principal or Administrator Licensing IV. Semester Hours: 5 to 9

Total: 32 Hours

MA Program

The MA is designed for those who do not already hold a graduate degree. Usually master's students will complete 9 semester hours beyond the 32 required in the licensure program, for a total of 41 semester hours of course work after the bachelor's degree.

For the MA degree, students must select at least one course in each of the following three areas:

Section A: Educational Research

RSEM 5100 - Basic Statistics Semester Hours: 3

RSEM 5200 - Introduction to Research Methods Semester Hours: 3

RSEM 5300 - Introduction to Measurement Semester Hours: 3

Section B: Educational Foundations/Multicultural Education

FNDS 5050 - Critical Issues in American Education. Semester Hours: 3

FNDS 5500 - Contemporary Philosophies of Education. Semester Hours: 3

FNDS 5410 - History and Philosophy of Modern Education. Semester Hours: 3

LALC 5140 - Multicultural Education Semester Hours: 3

LALC 5150 - Culture of the Classroom Semester Hours: 3

LALC 5160 - Historical and Legal Foundations of Bilingual Education Semester Hours: 3

Section C: Educational Psychology/Special Education

EDUC 5400 - Special Education Seminar for Principals. Semester Hours: 3

EPSY 5100 - Advanced Child Growth and Development. Semester Hours: 3

EPSY 5110 - Human Learning. Semester Hours: 3

EPSY 5140 - Advanced Adolescent Growth and Development. Semester Hours: 3

EPSY 5160 - Behavior Disorders in Exceptional Children. Semester Hours: 3

EPSY 5200 - Social Psychology of Learning. Semester Hours: 3

SPED 5140 - Advanced Assessment in Special Education. Semester Hours: 3

SPED 5180 - Curriculum Planning for Students with Special Needs. Semester Hours: 3

SPED 5400 - Advanced Seminar in Special Education. Semester Hours: 3

SPED 5600 - Special Education for School Professionals. Semester Hours: 3

Candidates must also successfully complete a comprehensive exam paper, reflecting on how the three MA classes will help them in the role of principal or administrator.

EdS Program

The EdS degree program affords the opportunity for advanced graduate study and is available to those who already hold a master's degree. Generally for the specialist degree students will complete 9 semester hours that constitute an area of focus, in addition to the 32 required in the licensure program. Candidates must also successfully complete a comprehensive exam paper, reflecting on how the three EdS classes will help them in the role of principal or administrator.

Administrator Licensure - Executive Leadership Program

Designed for the professional educator who, already holding a principal license and master's degree, wishes to obtain an initial administrator license in Colorado and prepare for a career as a superintendent or other district leader. This one-year, 12-semester-hour certificate program combines weekend meetings with online work and hands-on clinical practice—usually completed in participants' home districts. Learn more at www.ucdenver.edu/education/elp.

Additional Program Information

Individuals interested in any of these programs are encouraged to contact ALPS faculty. Conferences prior to application are encouraged and welcomed. Following admission, students are expected to maintain frequent contact with assigned advisors to plan, develop and complete their programs of study.

Administrative Leadership and Policy Studies MA

Administrative Leadership and Policy Studies

Requirements for Principal Licensure, the MA and EdS degrees, and Executive Leadership Administrator Licensure Program

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Additional Program Information

Individuals interested in any of these programs are encouraged to contact ALPS faculty. Conferences prior to application are encouraged and welcomed. Following admission, students are expected to maintain frequent contact with assigned advisors to plan, develop and complete their programs of study.

Anthropology, MA

► Graduate School Rules apply to this program.

Plans of Study

MA students may pursue the thesis or non-thesis option.

- **Thesis Option:** A thesis is characterized by three factors: 1) it is based in a research question or problem; 2) it involves original research; 3) there is a fully developed research proposal. A thesis can also encompass a range of format alternatives to the traditional thesis (e.g. article submitted for publication to a peer-reviewed journal, or a video production, internship or museum exhibit, each generally accompanied by a companion paper developing a theoretical or problem-oriented question). The thesis option requires 30 semester hours, including 4-6 hours of thesis.
- **Non-Thesis Option:** This track is defined by additional course work in lieu of a thesis. The non-thesis option requires 36 semester hours of course work.

Thesis Option

The thesis is a major requirement for those in the MA in anthropology thesis track. The thesis should demonstrate the student's ability to apply knowledge and skills gained from the anthropology department's curriculum. A desirable goal for an excellent thesis would be a work of sufficient rigor and quality that it could be considered for publication. Original data collection ("fieldwork") is recommended but not required for the thesis. Analysis of secondary data—whether quantitative, qualitative, visual or other formats—is perfectly acceptable as long as the research is informed by a clearly articulated research question and under-girded by a research proposal.

The traditional thesis is a single document that often incorporates a literature review, definition of a problem, discussion of methods to address the problem, the subsequent research activity and results. However, the student may design a thesis with different emphases, in consultation with their advisor. For example, the goal may instead be a more compact paper submitted to a peer-reviewed journal. Other thesis plans may combine some research activity such as a video production, museum exhibit or an internship, with an accompanying paper. Students pursuing the thesis option must develop a topic and research proposal that specifies their plans in the semester after their completion of 18 credit hours.

The thesis must be defended before a committee of three faculty, at least two of whom need to be on the Department of Anthropology faculty (which includes senior instructors and research faculty). The structure of the thesis is largely determined by the University of Colorado Denver Graduate School Rules ; i.e., a thesis must conform to the rules.

1. For the thesis, students must prepare a full research proposal which must be approved by their thesis chair before beginning their research. This proposal must be completed by the semester after the student has completed 18 credit hours. Sections of the proposal should include, at a minimum:
 - a. Introduction and statement of the problem: Should include a one sentence statement of the problem on the first page, and a discussion of its significance (i.e., why is it important that this topic be researched).

- b. Literature review covering theoretical and topical material.
- c. Research design and methods including a data analysis plan.

Note: Wenner-Gren and National Science Foundation both provide good models and templates for the research proposal. Those in the medical anthropology track might want to consider following the NIH model, depending the nature of their research questions and career goals.

- 2. All students proposing to work with humans or data on modern humans must apply for and receive approval from the Human Subjects Research Committee before they begin their research. *Note:* most of the material for the application will be drawn from the research proposal.
- 3. The draft thesis must be reviewed and approved as “defensible” by the student’s thesis committee faculty chair before a thesis defense date can be set. Defensible means the chair has reviewed the draft and suggested changes have been made.
 - a. The draft sent to the student’s committee must be substantively complete: All references must be in the text and properly formatted in a references cited section; there should be no “track changes” comments in the text; the text should be formatted according to Graduate School requirements.
 - b. Given the complexity of faculty and student schedules, consultation on a defense date should be done as far in advance as possible.
 - c. There must be a minimum of three weeks between the agreed-upon date for the defense and distribution of the draft thesis defined as defensible by the student’s chair. If you would like feedback from your committee members before the defense, you should plan to distribute the thesis at least 4 weeks before the defense date.

Note: If you intend to graduate the same semester you defend your thesis, you must schedule, successfully defend, and complete all recommended changes in accordance with UC Denver Thesis and Dissertation Guidelines . This effectively translates to having the thesis completed and “defensible” before the middle of the semester.

Non-Thesis Option

The non-thesis option allows students to pursue their own educational goals through the selection of additional courses that fit their interests. We strongly encourage students who choose this option to consider an internship position arranged around an area of expertise or the development of a skill-set. The decision to pursue the non-thesis option should be made by the semester following the completion of 18 credit hours.

Additional Information

Students must maintain an overall GPA of 3.0 to remain in good standing and receive a grade of *B-* or better in a course to have it count toward graduation. The Graduate School on the Downtown Campus requires a minimum of two full years devoted to advanced study and allows up to five years to complete a master's degree, but students are strongly discouraged from spending more than four years. While it is possible to finish the MA in two years, most of our students work part-time, which limits the time they can dedicate to the program; most finish within three years. All students are required to pass a written comprehensive examination, taken after core course work has been completed.

Some students may benefit from adding a specific skills-based certificate program onto their graduate program. For example: archaeology students may wish to gain expertise in Geographic Information Systems through the GIS certificate offered through the Department of Geography and Environmental Sciences, while medical anthropology students may benefit through the certificate in public health offered through the School of Public Health or the environmental health certificate through the Master of Science in Environmental Sciences program. Graduate-level courses in certificate programs can often fulfill elective requirements in the anthropology program.

Two doctoral programs on the UC Denver campus that may be of particular interest to graduates of the anthropology graduate program are the National Science Foundation funded IGERT program on Sustainable Urban Infrastructure, and the PhD in Health and Behavioral Sciences offered through the Department of Health and Behavioral Sciences. Both are highly interdisciplinary and are natural extensions of a master's degree in anthropology.

Course Requirements

Your graduate anthropology education begins by taking ANTH 5810, Integrating Anthropology, plus two core courses that together encompass contemporary theory in anthropology. These are followed by three courses in research methods and techniques, including statistics. You are required to take the core series in two of the three subdisciplines. After completing this core, you will select from among the specialized elective courses in the research concentrations described in more detail below. You will work closely with an advisor in selecting the range of courses appropriate both to a problem orientation and to your career objectives.

Tier One: A Survey of Theoretical Perspectives in Contemporary Anthropology

Required in fall of first year

ANTH 5810 - Integrating Anthropology

Summer 2010 Registration **ANTH 5810**

Designed to build on specialized course work in the subdisciplines of anthropology, this course emphasizes the basic concepts that integrate and unite the discipline and give it unique perspective. These are the concepts of culture, adaptation and human evolution. In the last several weeks of the course, students consider the applicability of the anthropological perspective to specific human issues. Note: Centers on the critical examination and discussion of presentations made by department faculty and graduate students. Cross-listed with ANTH 4810. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Choose two:

ANTH 6103 - Current Theory in Ethnography

Summer 2010 Registration **ANTH 6103**

An in-depth inquiry into important theories in cultural anthropology through extensive primary source reading. Practice in formulating theory, critical thinking and theoretical writing are emphasized. Note: First course in a two-course required graduate sequence.

Prereq: Undergraduate course work in cultural anthropology. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 6307 - Contemporary Perspectives in Archaeology

Summer 2010 Registration **ANTH 6307**

Explores contemporary theoretical methodological perspectives in archaeology. Structured to proceed from a survey of the history of archaeological thought based on recent retrospectives, to an analysis of works reflecting current perspectives and directions. Topics include: archaeological interpretation, classical versus scientific archaeology, versus culture-history, functionalist and materialist paradigms, ethno-archaeological and text-based studies, neo-evolutionism, interactionist models, Marxist perspectives, processual theory. Prereq: Undergraduate course work in archaeology. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 6503 - Biological Anthropology Core: The Fossil Record

Summer 2010 Registration **ANTH 6503**

Examines the historical development and modern practice of biological anthropology, including the theoretical and methodological foundations of this field. Emphasis is placed on the evidence for human and non-human primate evolution and the processes that

influenced this evolution. Prereq: Graduate standing. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 9 Hours

Tier Two: Methods of the Discipline

All students must complete or demonstrate competence in subjects covered by the following:

ANTH 5053 - Quantitative Methods in Anthropology

Summer 2010 Registration **ANTH 5053**

Surveys the ways of deriving meaning from anthropological data by numerical means, including, but not confined to basic statistical procedure. Prereq: College-level algebra and graduate standing. Cross-listed with ANTH 4050. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

Choose two:

ANTH 6063 - Qualitative Research Design and Methods

Summer 2010 Registration **ANTH 6063**

Much of the data collected in the social sciences is interview and text-based. This course explores methods for collecting and analyzing these data and theoretical paradigms that underlie these methods. Cross-listed with HBSC 7051. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.
(same as HBSC 7051-3)

ANTH 6317 - Archaeological Research Design and Analysis

Summer 2010 Registration **ANTH 6317**

Examines the methods and techniques used in archaeology, including theory-building, hypothesis testing and middle range theory. Core materials emphasize the learning and critique of basic archaeological assumptions and the methods and theories used to scrutinize the collection and interpretation of data. Topics include chronometric applications and paleo-environmental reconstruction. Prereq: ANTH 6307 or equivalent. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 6513 - Biological Anthropology Core: Modern Human Variation

Summer 2010 Registration **ANTH 6513**

Considers the theory and methods used in investigations of biological variation in

contemporary human populations. This includes the biological and cultural sources responsible for creating and maintaining contemporary variation as well as their functional consequences. Methods of research design and how to write a grant and scientific articles are considered. Prereq: Graduate standing. **Semester Hours:** 3to 3 Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 9 Hours

** Students who wish to apply for a teaching assistantship in archaeology must have completed this course.*

† Students who wish to apply for a teaching assistantship in biological anthropology must have completed this course.

Tier Three: Research Concentrations (9-21 semester hours)

You will round out your program by selecting from the diverse range of courses offered in the department according to your particular interests in anthropology, your career goals and your plans for future graduate study. You may take courses in one or more concentrations. The courses listed are suggestions only; you must work closely with your advisor in constructing your particular program of study.

MEDICAL ANTHROPOLOGY

Medical anthropology is a subdiscipline of anthropology that includes the study of all aspects of health, illness and disease in human communities and populations. It draws on all of the perspectives that distinguish anthropology as a unique discipline: the analysis of human evolution and adaptation; cultural development, expressions and variability; and historical change and continuity. Medical anthropology takes as its subject a broad range of specific topics, including the study of health care systems, factors that affect the distribution and determinants of disease in populations, maternal and child health, nutrition and food habits, human development, political ecology, health policy and language and communication in health care contexts. Faculty in the department emphasize the applied dimensions of medical anthropology, preparing students for careers in public health, health care and health sciences research. Courses in the department are complemented by electives in other departments (sociology, biology, psychology, history, geography), programs on the Downtown Campus (health administration, public affairs, education) and programs at the Anschutz Medical Campus (schools of medicine, dental medicine, pharmacy and nursing).

Courses

ANTH 5014 - Global Health Studies I: The Biocultural Basis of Health

Summer 2010 Registration **ANTH 5014**

This course is concerned with the underlying biological and cultural determinants of health throughout the human life cycle in global and cross-cultural perspective. Note: The first of a two-course sequence in medical anthropology and global health studies; the second is ANTH 5024. Prereq: Upper division and/or graduate standing. Cross-listed with ANTH 4010, HBSC 4010 and HBSC 5010. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 5030 - Ethnobiology

Summer 2010 Registration **ANTH 5030**

Considers the relationship between human society and plants and animals in the natural world. Primary focus on the perception and cognitive organization of the environment and how that affects the definition and use of plants and animals as resources. Prereq: Introductory anthropology and/or biology and graduate standing. Cross-listed with ANTH 4030. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 5040 - Anthropology of Food and Nutrition

Summer 2010 Registration **ANTH 5040**

Examines the myriad relationships between food as a biological necessity and eating as a socially and culturally conditioned activity. Takes a biocultural perspective that considers not only the tremendous variety of foods we eat, but also the complex meanings and importance attached to food and eating. Prereq: Introductory course in anthropology and graduate standing. Cross-listed with ANTH 4040. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 5060 - Evolutionary Medicine

Summer 2010 Registration **ANTH 5060**

Applies evolutionary principles to an understanding of human health and illness. The view complements perspectives on health and disease emanating from biological and social sciences, but considers the health or disease process from the perspective of pathogen and host, current and previous environments, and various phases of the life cycle. Prereq: ANTH 1303. Cross-listed with ANTH 4060, HBSC 4060 and 5060. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 5090 - Political Economy of Drugs

Summer 2010 Registration **ANTH 5090**

Psychotropic drugs, both legal and illicit, are a predominant part of our everyday lives. This course examines their use and meaning within cultures, and the social, political and economic issues that surround their production, use and misuse. Prereq: introductory course in cultural anthropology. Cross-listed with ANTH 4090. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 5150 - Human Biocultural Adaptability

Summer 2010 Registration **ANTH 5150**

The chief concern of this course is the relationship between ourselves and our surroundings and the very immediate ways the environments in which we live affect US. The view is of ourselves as a part of, not apart from, these environments. Prereq: Background in cultural anthropology and graduate standing. Cross-listed with ANTH 4150. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 5260 - Human Reproductive Ecology

Summer 2010 Registration **ANTH 5260**

Considers the determinants of fertility variation within and among traditional human societies. Biocultural and ecological perspectives on pubertal timing, marriage patterns, birth seasonality, duration of birth intervals and reproductive senescence. Prereq: ANTH 1303 or equivalent. Cross-listed with ANTH 4260. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 5560 - Human Ecology

Summer 2010 Registration **ANTH 5560**

Studies demographic and ecological variables as they relate to human populations. Aspects of natural selection, overpopulation and environmental deterioration are considered. Prereq: Background in biological or physical anthropology and graduate standing. Cross-listed with ANTH 4560. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 6040 - Advanced Topics in Medical Anthropology

Summer 2010 Registration **ANTH 6040**

A flexible seminar format for dealing with topics of special interest in medical anthropology on an advanced graduate level. Topics to be considered vary from semester to semester. Examples include high altitude adaptation, anthropological perspectives on substance abuse, epidemiology, environmental and occupational

health, the health consequences of cultural change and cross-cultural psychiatry. Note: Topics vary from semester to semester. Prereq: Permission of instructor. **Semester Hours:** 1to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

HBSC 7310 - Environmental Epidemiology

Summer 2010 Registration **HBSC 7310**

Provides a basic understanding of the methods used to study the effects on human health of exposures to physical, chemical, or biological factors in the external environment. The course explains the use of epidemiologic methods through a problem solving approach to investigating environmental health case studies. Prereq: A basic statistics course and graduate standing or permission of instructor. Cross-listed with ENVS 6230. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Note: Students are also strongly encouraged to take elective courses in public health, epidemiology and biostatistics, which are available in the Department of Biometrics and Preventive Medicine on the Anschutz Medical Campus. See the Health Professions chapter of this catalog for further information.

ARCHAEOLOGY

The archaeological studies program concentrates on the study of past human societies using archaeological data collected in field and museum settings. While a quantitative and scientific approach is emphasized, the theoretical perspectives employed also draw heavily from political economy and cultural ecology. The department offers a variety of theoretical, methodological and area courses, which may be supplemented by others in the geography and environmental sciences and history departments. Internships are available in local museums and historic preservation offices in the Denver metropolitan area.

Courses

ANTH 5210 - Archaeology of the American Southwest

Summer 2010 Registration **ANTH 5210**

Considers the origins, characteristics and interrelationships of the major culture areas in the American Southwest, including the Anasazi, Hohokam, Mogollon, Sinagua and Northern Mexico. Prereq: Introduction to archaeology and graduate standing. Cross-listed with ANTH 4210. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 5320 - Archaeology of Mexico and Central America

Summer 2010 Registration **ANTH 5320**

Surveys the major prehistoric and protohistoric cultures and societies of that area of Mexico and Central America identified with the evolution of Meso-American civilization. Major topics include early human colonization of the Americas, the domestication of plants and animals, the emergence of regionally-based cultures and societies, trade and exchange and the evolution of urbanism and the state. Primary emphasis on such ancient cultures and societies as those of the Olmec, Zapotec, Maya, Teotihuacan, Toltec and Aztec. Prereq: Introduction to archaeology. Cross-listed with ANTH 4320. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 5330 - Lithic Analysis

Summer 2010 Registration **ANTH 5330**

Examines the theoretical basis and methodological tools used by archaeologists in the analysis of prehistoric stone tools. Topics of discussion include the mechanics of stone fracture, typologies, use wear analysis and core reduction techniques. Prereq: ANTH 1302. Cross-listed with ANTH 4330. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 5570 - Landscape Archaeology

Summer 2010 Registration **ANTH 5570**

Introduces spatial archaeology through intrasite analysis and regional studies. Methods treated include site location and quantitative spatial organization. Theoretical topics include definitions of community, ancient urbanism and the impact of subsistence and politics on relations to the landscape. Prereq: ANTH 1302 or equivalent. Cross-listed with ANTH 4570. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 5910 - Field Experience in Archaeology

Summer 2010 Registration **ANTH 5910**

Students participate in archaeological field research and data recovery and conduct laboratory analysis of materials recovered in the field. Emphasis is placed on excavation technique and accuracy of record keeping. Prereq: Background in archaeology and graduate standing. Cross-listed with ANTH 4910. **Semester Hours:** 3to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 5060 - Remote Sensing I: Introduction to Environmental Remote Sensing

Summer 2010 Registration **GEOG 5060**

An in-depth treatment of the use of aerial photographs and other forms of imagery for the analysis of urban-industrial patterns, vegetation, agriculture, landforms, and geologic structure. Prereq: GEOG 3080 or permission of instructor. Cross-listed with GEOG 4060, GEOL 4060, 5060. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 5080 - Introduction to GIS

Summer 2010 Registration **GEOG 5080**

Introduces various aspects of geographic information systems (GIS), including justification, definition of hardware/software, database design, and data conversion. GIS is a computer-based mapping system providing a graphical interface to locational and relational attribute data on facilities and land. Includes hands-on use of a geographic information system workstation. Cross-listed with GEOG 4080. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 5220 - Environmental Impact Assessment

Summer 2010 Registration **GEOG 5220**

The objective of this course is to provide the foundation for understanding the environmental impact assessment process, its legal context, and the criteria and methods for procedural and substantive compliance. Prereq: URPL 5530 or permission of instructor. Cross-listed with GEOG 4220, URPL 6651. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 5231 - History in Museums

Summer 2010 Registration **HIST 5231**

This core course for the museum studies area of public history introduces students to the theory and practice of museum operations. It covers the basics of museum administration, museum collection and preservation, and museum interpretation from both theoretical and practical points of view. Cross-listed with HIST 4231. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 5232 - Historic Preservation

Summer 2010 Registration **HIST 5232**

Introduces the history, methodology, and goals of historic preservation. Guest speakers, field trips, research projects, and book reports. Cross-listed with HIST 4232. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 5234 - Introduction to Public History

Summer 2010 Registration **HIST 5234**

An overview of history outside the academic setting. Students have the opportunity to learn about jobs through on-site visits and presentations made by people engaged in a wide variety of occupations in history other than teaching. Cross-listed with HIST

4234. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOLOGICAL ANTHROPOLOGY

The biological anthropology concentration is concerned with modern human biological diversity and the past evolutionary history that has led to such diversity. Students in this concentration develop a firm understanding of the evolutionary processes that lead to physical and behavioral variation in humans and nonhuman primates. The concentration also emphasizes the theoretical and quantitative methods used to explore and explain this variation. Students may take courses in diverse areas including evolutionary biology, genetics, ecology, ethnobiology, epidemiology, nutrition, medical anthropology, paleoanthropology, paleontology and primatology. Because biological anthropology is multidisciplinary in nature, students are encouraged to consider courses offered outside the department.

Courses

ANTH 5014 - Global Health Studies I: The Biocultural Basis of Health

Summer 2010 Registration **ANTH 5014**

This course is concerned with the underlying biological and cultural determinants of health throughout the human life cycle in global and cross-cultural perspective. Note: The first of a two-course sequence in medical anthropology and global health studies; the second is ANTH 5024. Prereq: Upper division and/or graduate standing. Cross-listed with ANTH 4010, HBSC 4010 and HBSC 5010. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 5030 - Ethnobiology

Summer 2010 Registration **ANTH 5030**

Considers the relationship between human society and plants and animals in the natural world. Primary focus on the perception and cognitive organization of the environment and how that affects the definition and use of plants and animals as resources. Prereq: Introductory anthropology and/or biology and graduate standing. Cross-listed with ANTH

4030.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 5040 - Anthropology of Food and Nutrition

Summer 2010 Registration **ANTH 5040**

Examines the myriad relationships between food as a biological necessity and eating as a socially and culturally conditioned activity. Takes a biocultural perspective that considers not only the tremendous variety of foods we eat, but also the complex meanings and importance attached to food and eating. Prereq: Introductory course in anthropology and graduate standing. Cross-listed with ANTH 4040.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 5060 - Evolutionary Medicine

Summer 2010 Registration **ANTH 5060**

Applies evolutionary principles to an understanding of human health and illness. The view complements perspectives on health and disease emanating from biological and social sciences, but considers the health or disease process from the perspective of pathogen and host, current and previous environments, and various phases of the life cycle. Prereq: ANTH 1303. Cross-listed with ANTH 4060, HBSC 4060 and 5060.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 5150 - Human Biocultural Adaptability

Summer 2010 Registration **ANTH 5150**

The chief concern of this course is the relationship between ourselves and our surroundings and the very immediate ways the environments in which we live affect US. The view is of ourselves as a part of, not apart from, these environments. Prereq: Background in cultural anthropology and graduate standing. Cross-listed with ANTH 4150.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 5500 - Advanced Issues in Human Evolution

Summer 2010 Registration **ANTH 5500**

This flexible course offers an advanced treatment of issues in human biological evolution. Topics may emphasize morphological evolution, behavioral evolution, the environment of human evolution, non-human primate comparative information. Cross-listed with ANTH 4500.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 5520 - Human Biological Variation

Summer 2010 Registration **ANTH 5520**

Human biological variation and adaptation, considered from an evolutionary perspective. How we measure and classify human variation often affects the conclusions we draw. This course considers the causes and maintenance of human variability and adaptability, including cultural and social factors in the genesis and maintenance of normal and abnormal traits. Prereq: Background in physical or biological anthropology and graduate standing. Cross-listed with ANTH 4520. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 5530 - Anthropological Genetics

Summer 2010 Registration **ANTH 5530**

An advanced survey of molecular and population genetics and their applications in anthropology. Topics vary, including but not limited to: genetic epidemiology, genetic distance studies, behavioral genetics, developmental genetics, sociobiology, and use of mitochondrial DNA to reconstruct population histories. Emphasis is on applications of new technology and methodology, as well as new genetic paradigms replacing classical models of genetic causation. Prereq: Undergraduate course work in biological anthropology or general genetics. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 5550 - Primate Comparative Anatomy

Summer 2010 Registration **ANTH 5550**

Examines human and non-human primate anatomical diversity. Students learn primate anatomy and the morphological differences among species. Explanations for the evolutionary origins of differences are reviewed, focusing on evolutionary theory, comparative methods and biomechanics. Prereq: ANTH 1303 or equivalent. Cross-listed with ANTH 4550. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 5560 - Human Ecology

Summer 2010 Registration **ANTH 5560**

Studies demographic and ecological variables as they relate to human populations. Aspects of natural selection, overpopulation and environmental deterioration are considered. Prereq: Background in biological or physical anthropology and graduate standing. Cross-listed with ANTH 4560. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 5580 - Neanderthals and the Origin of Modern Humans

Summer 2010 Registration **ANTH 5580**

Focuses on the human fossil record for the tax on Homo sapiens, including the earliest members of this group ("early" or "Archaic" Homo sapiens), the Neanderthals and so-called "Anatomically modern" Homosapiens. The goal of the course is to survey the major issues within the area of modern human origins, and to learn about the evolutionary relationships, lifeways and behaviors of these groups. Prereq: ANTH 1303 or equivalent. Cross-listed with ANTH 4580. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 5640 - Darwinian Approach to Human Behavior

Summer 2010 Registration **ANTH 5640**

The evolution of human behaviors from a Darwinian perspective, focusing on the natural selection of behaviors that maximize reproductive success. Includes topics such as male and female reproductive strategies, female mate choice, male violence and resource acquisition and control. Prereq: ANTH 1303. Cross-listed with ANTH 4640. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 5074 - Human Reproductive Biology

Summer 2010 Registration **BIOL 5074**

Comprehensive study of anatomy and physiology of human reproduction. Embryogenesis of male and female reproductive systems and detailed analysis of contraception, world population growth, population control and implications of population growth are also covered. Prereq: Graduate standing or permission of instructor. Cross-listed with BIOL 4074. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 5134 - Human Genetics

Summer 2010 Registration **BIOL 5134**

Advanced survey of the current status of the field. Emphasis on understanding, diagnosis and treatment of genetic disease and on the impact of molecular biology on human genetics. Prereq: Graduate standing or permission of instructor. Cross-listed with BIOL 4134. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 5494 - Population and Evolutionary Genetics

Summer 2010 Registration **BIOL 5494**

Introduces the genetic processes underlying evolutionary change in microbial, plant and animal populations. Topics include: sources of variation, Hardy-Weinberg equilibrium, population genetic structure, natural selection and other evolutionary forces, quantitative

genetics and molecular phylogenetics. Emphasis on experimental data. Prereq: Graduate standing or permission of instructor. Cross-listed with BIOL 4494. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HBSC 7031 - Human Ecology and Environmental Adaptation

Summer 2010 Registration **HBSC 7031**

Focuses on the interplay of biology, environment, culture, and behavior in the causes and exacerbation of disease. The course includes the following topics: health in environmental and evolutionary contexts; models of causation in biomedicine and other medical systems; individual, community, and population manifestations of health and disease; and biocultural interaction in disease process. Specific case studies drawn from contemporary health problems are used to illustrate in detail the nature of these processes. Prereq: Admission to the Health and Behavioral Sciences program. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HBSC 7310 - Environmental Epidemiology

Summer 2010 Registration **HBSC 7310**

Provides a basic understanding of the methods used to study the effects on human health of exposures to physical, chemical, or biological factors in the external environment. The course explains the use of epidemiologic methods through a problem solving approach to investigating environmental health case studies. Prereq: A basic statistics course and graduate standing or permission of instructor. Cross-listed with ENVS 6230. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SUSTAINABLE DEVELOPMENT AND POLITICAL ECOLOGY

This concentration provides a critical, multicultural and multidisciplinary perspective on issues of development and resource conservation, with a strong emphasis on the integration of theoretical knowledge with field-based training opportunities. Three major themes are addressed within this concentration:

1. the types of resource management systems present in the world and their relationship to particular ecosystems
2. the types of knowledge systems and ideas associated with this diverse array of resource management systems, environmental knowledge and theoretical perspectives included
3. the culture of institutions—ranging from small-scale NGOs to the World Bank—that design and implement conservation and development

A central goal of this emphasis is to provide students with the information, opportunities and resources required for pursuing a wide variety of career options in conservation and/or development. In addition to offering the following courses, the department encourages students to develop a specialized skill in conjunction with other departments and schools, including areas such as GIS mapping (geography), ecology (biology/anthropology), legal and policy issues (political science, School of Public Affairs), land use (geography, School of Public Affairs) and research/evaluation methodologies (anthropology).

Courses

ANTH 5030 - Ethnobiology

Summer 2010 Registration **ANTH 5030**

Considers the relationship between human society and plants and animals in the natural world. Primary focus on the perception and cognitive organization of the environment and how that affects the definition and use of plants and animals as resources. Prereq: Introductory anthropology and/or biology and graduate standing. Cross-listed with ANTH 4030. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 5070 - Culture of Development and Globalization

Summer 2010 Registration **ANTH 5070**

Anthropological critiques of development and globalization point out that they have occurred without regard for the diversity of human culture and human need. Beginning with this analysis, this course goes one step further by examining culture and values of development and how they affect the way development gets done. Prereq: Upper division standing and permission of instructor. Cross-listed with ANTH 4070. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 5170 - Culture and the Environment

Summer 2010 Registration **ANTH 5170**

Examines the historical origins of Western and non-Western ideas of the environment and the place of people within it. The imposition of Western ideas on non-Western groups regarding environmental policy is also examined, with special attention given to practices of conservation, development and transnational monetary policy. Prereq: ANTH 2102 or equivalent. Cross-listed with ANTH 4170. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 5220 - Community in Global Context

Summer 2010 Registration **ANTH 5220**

Presents the community study method from the perspective of anthropology and as a widely applicable research technique in planning, development and other areas of public affairs. Also includes analyses of case studies and student field research. Prereq: Background in cultural anthropology and graduate standing. Cross-listed with ANTH 4220. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 5450 - Development and Conservation: Contemporary Issues

Summer 2010 Registration **ANTH 5450**

Applies the theoretical paradigms of political ecology to contemporary issues of sustainable development. Case studies are chosen illustrating topics based on faculty expertise and student interaction. The first part of the course presents theoretical perspectives relevant to the chosen topic. In the second half, students participate in directed problem solving activities. Prereq: ANTH 4070, ANTH 4170 and graduate standing or permission of instructor. Cross-listed with ANTH 4450. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 5460 - Development and Conservation: Theory and Practice

Summer 2010 Registration **ANTH 5460**

Examines the praxis of anthropological knowledge of human ecosystem interaction and development of economic opportunities. Issues of biodiversity, resource conservation, sustainable development and globalization are studied. Prereq: ANTH 5450 or permission of instructor. Cross-listed with ANTH 4460. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Other courses in consultation with faculty advisor.

RESEARCH CONCENTRATIONS TOTAL: 9-21 HOURS

DEGREE TOTAL HOURS

Thesis Option: 30 Hours (including 4-6 hours of thesis)

Non-Thesis Option: 36 Hours

Applied Mathematics, MS

Program Requirements

Students must present 30 hours of course work and maintain a 3.0 GPA for the MS degree. At least 24 of these hours must consist of graduate-level (numbered 5000 or higher) mathematics courses. The remaining 6 hours must be either mathematics courses numbered 5000 or above or approved courses outside the department numbered 4000 or above. Up to 12 semester hours may be transferred from other institutions.

A student may devote from 4 to 6 hours (of the 30 required hours) to the writing of a thesis. Following completion of course work, all candidates must make a one-hour oral presentation before a committee consisting of three graduate faculty members.

Students must take either applied analysis or real analysis and applied linear algebra. Additionally, students must fulfill specific course work requirements for one of the following areas of specialization:

- discrete mathematics
- operations research
- applied statistics
- applied probability
- numerical analysis
- mathematics of science and engineering
- mathematical foundations of computer science
- computational biology

All master's degree students are encouraged to participate in the Math Clinic, a unique program in which students have an opportunity to work on real-world problems supplied by local businesses, research firms and government agencies.

For more detailed information about the applied mathematics MS, see the Math Graduate Handbook.

Architecture MArch

The MArch is the college's accredited professional degree for students intending to seek licensure as architects. It is a three-and-one-half-year plan of study on the Denver

Campus that has been fully accredited by the National Architectural Accrediting Board (NAAB).

Prerequisites

- Students must complete the prerequisites of college-level trigonometry and physics before enrolling in ARCH 5310, Introduction to Building Technology. Since this class should be taken in the first semester in order to stay on track for graduation, students are strongly encouraged to complete the trigonometry and physics requirements before beginning the MArch program.
- ARCH 5000, Math and Physics for Architects, is offered in the summer on a pass/fail basis. This class meets the prerequisite requirements. This class does not count toward the number of credits required for the MArch degree.
- A graphics workshop is recommended for students who do not have a background in architectural drawing and model building. This class is offered each year before the beginning of the fall semester.
- Students are also expected to have achieved a basic level of computer literacy and should be familiar with PC or Mac operating systems.

Program Requirements

Students with a bachelor's or master's degree unrelated to architecture must complete a seven- or eight-semester sequence of course work and accumulate a minimum of 114 semester hours of credit. Students who have completed the college's BEnvd or any other preprofessional architecture degree from any NAAB-accredited institution and students who have completed a non-NAAB-accredited professional architecture degree in another country, and who wish to obtain the NAAB-accredited degree from this college, will be evaluated individually for advanced standing. These students will work with the associate chair of the department to develop an individualized plan of study commensurate with their previous degrees and experience, and will have to complete at least 60 semester hours of credit in residence within the College of Architecture and Planning.

Course Sequence

The MArch program is divided into five major components:

- studio design studies, 45 semester hours
- cultural studies, 12 semester hours
- technology studies, 18 semester hours
- professional studies, 6 semester hours

- electives, 33 semester hours

A wide array of electives in these areas allows students to tailor their graduate studies to their own interests.

First Year

Fall

ARCH 5110 - Design Studio I

Summer 2010 Registration **ARCH 5110**

This first of four core design studios introduces the basic strategies and techniques of architectural design. Focuses on the languages of design, as well as on traditional and digital methods of visualizing architectural ideas and forms. Prereq: Must have completed the College's woodshop training program. Coreq: ARCH 5111. **Semester**

Hours: 6to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

ARCH 5111 - Introduction to Drawing

Summer 2010 Registration **ARCH 5111**

This course explores the development of graphic skills emphasizing drawing as a means to design. It includes investigation of drawing types and methods; diagramming of ideas and systems; informative, exploratory and developmental sketching. Coreq: ARCH

5110. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ARCH 5210 - Introduction to Architecture

Summer 2010 Registration **ARCH 5210**

Introduces important ways of looking at architecture and acquaints students with the various perspectives that they will later find in the rest of the curriculum. **Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ARCH 5310 - Introduction to Building Technology

Summer 2010 Registration **ARCH 5310**

Provides an overview of the structure, systems, assemblies and processes that make a building. Provides a broad view of building technology and an understanding of the interrelationship of all the parts, upon which subsequent technology courses are

based. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 15 Hours

Spring

ARCH 5120 - Design Studio II

Summer 2010 Registration **ARCH 5120**

The second of the four core design studios focuses on concepts of small-scale building design, sitting and climate. Through a number of design exercises, students learn how these factors help shape buildings. Prereq: ARCH 5110 and ARCH 5111. Coreq: ARCH 5121. **Semester Hours:** 4to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

ARCH 5121 - Design Seminar II

Summer 2010 Registration **ARCH 5121**

Supports fuller discussion of the key themes and concepts in ARCH 5120. Prereq: ARCH 5110 and 5111; Coreq: ARCH 5120. **Semester Hours:** 2to 2

Registration is changing. Visit our website for details ucdenver.edu/registration.

ARCH 5220 - History of Architecture I

Summer 2010 Registration **ARCH 5220**

Introduces world architecture and urbanism from prehistory to the Italian Renaissance. The course helps students understand the various cultural, technological, philosophical, and aesthetic ideas that helped shape buildings through history. Buildings and settlements on all continents and in all of the major world cultures are discussed. Prereq: ARCH 5210. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ARCH 5320 - Building Construction and Methods

Summer 2010 Registration **ARCH 5320**

Discusses the principles and processes of building construction and introduces the major constructional systems. Stresses the relationship between architectural concepts and building technology and helps students understand how to choose building systems and materials. Prereq: ARCH 5310. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

LDAR 6632 - Site Planning

Summer 2010 Registration **L A 6632**

Focuses on the site planning process, including research and data gathering, data analysis and synthesis, design analysis and its relationship to building program and concept, and design synthesis of site and preparation of site plan. Design through grading, representation, manipulation and calculation of road work, utilities, and other site features. Vertical and horizontal alignment, earthwork and cost computation, and integration with existing and proposed features or systems are covered. **Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Elective* (3 semester hours)

Total: 18 Hours

Second Year

Fall

ARCH 5130 - Design Studio III

Summer 2010 Registration **ARCH 5130**

The third of the four core studios focuses on concepts of program, architectural meaning and human behavior in buildings. Through a number of design exercises, students learn how these factors help shape buildings. Prereq: ARCH 5120 and ARCH 5121. Coreq: ARCH 5131. **Semester Hours:** 4to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

ARCH 5131 - Design Seminar III

Summer 2010 Registration **ARCH 5131**

Supports fuller discussion of the key themes and concepts in ARCH 5130. Prereq: ARCH 5120 and ARCH 5121. Coreq: ARCH 5130. **Semester Hours:** 2to 2

Registration is changing. Visit our website for details ucdenver.edu/registration.

ARCH 5230 - History of Architecture II

Summer 2010 Registration **ARCH 5230**

Examines world architecture and urbanism from the Italian Renaissance to the present. Helps students understand the various cultural, technological, philosophical and aesthetic ideas that helped shape buildings through history. Buildings and settlements on all continents and in all of the major world cultures are discussed. Prereq: ARCH

5220.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ARCH 5240 - Human Factors in Design

Summer 2010 Registration **ARCH 5240**

Focuses on the ethical, social, cultural and psychological principles, processes which people bring to the perception and design of the built environment. Its major topics include: ethical values; cultural patterns and values; privacy and community; social, cultural and personal ritual; the symbolic content of form and environment; and programming and post-occupancy evaluation.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ARCH 5330 - Environmental Control Systems I

Summer 2010 Registration **ARCH 5330**

The first course in the environmental control systems sequence introducing the concepts and methods of environmental control in residential buildings. Discusses the thermal behavior of buildings, climate as a determinant of building design, energy use in buildings, natural and mechanical means of environmental control, plumbing, electrical, communication systems, water supply and sanitation systems. Prereq: ARCH 5320.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Elective* (3 semester hours)

Total: 18 Hours

Spring

ARCH 5140 - Design Studio IV

Summer 2010 Registration **ARCH 5140**

The last of the four core design studios focuses on concepts of building technology, context and environmental sustainability. Through a number of design exercises, students learn how technology helps shape buildings. Prereq: ARCH 5130 and 5131. Coreq: ARCH 5141.**Semester Hours:** 4to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

ARCH 5141 - Design Seminar IV

Summer 2010 Registration **ARCH 5141**

Supports fuller discussion of the key themes and concepts in ARCH 5140. Prereq:

ARCH 5130 and 5131; Coreq: ARCH 5140. **Semester Hours:** 2to 2
Registration is changing. Visit our website for details ucdenver.edu/registration.

ARCH 5340 - Environmental Control Systems II

Summer 2010 Registration **ARCH 5340**

The second course in the environmental control systems sequence focusing on the environmental systems in commercial and other non-residential buildings. Discusses natural and artificial lighting, HVAC systems, acoustics, vertical transportation and fire protection. Prereq: ARCH 5330. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ARCH 5350 - Structures I

Summer 2010 Registration **ARCH 5350**

The first course in the structures sequence introduces the analysis and design of structural elements and focuses on the principles of static's and the strength of materials. Topics include stress determination, deflection and the behaviors of tension, compression and shear in various structural elements. Coreq: ARCH 5340. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Electives* (6 semester hours)

Total: 18 Hours

Summer

ARCH 6150 - Comprehensive Design Studio

Summer 2010 Registration **ARCH 6150**

A required studio focusing on an architectural project from schematic design through detailed development including structural, environmental systems, life safety, wall sections and building assemblies. A comprehensive program will inform the architectural project. Prereq: ARCH 5140 and ARCH 5141. Coreq: ARCH 6151. **Semester Hours:** 4to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

ARCH 6151 - Comprehensive Design Seminar

Summer 2010 Registration **ARCH 6151**

Supports fuller discussion of the key themes and concepts in ARCH 6150. Prereq: ARCH 5140 and ARCH 5141. Coreq: ARCH 6150. **Semester Hours:** 2to 2

Registration is changing. Visit our website for details ucdenver.edu/registration.

Electives* (6 semester hours)

Total: 12 Hours

Third Year

Fall

ARCH 5360 - Structures II

Summer 2010 Registration **ARCH 5360**

Focuses on the relationship between architectural concepts and the selection of structural systems. Addresses the qualitative and quantitative analysis of reinforced concrete, steel and wood structural systems and members. Prereq: ARCH 5350. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ARCH 5410 - Professional Practice

Summer 2010 Registration **ARCH 5410**

Introduces the essential elements of professional practice through topics such as internship, licensing, services, modes of practice, fees, marketing, documents, specification and production procedures. Examines traditional and emerging forms of practice. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ARCH 6170 - Advanced Design Studio

Summer 2010 Registration **ARCH 6170**

Students enter the advanced design studio after successfully completing the four core design studios and comprehensive studio (ARCH 6150). Students must take two advanced studios (unless they wish to undertake a thesis; see ARCH 6950). Topics vary according to faculty interests. Prereq: ARCH 6150 and ARCH 6151. Coreq: ARCH 6171. **Semester Hours:** 4to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

ARCH 6171 - Advanced Design Seminar

Summer 2010 Registration **ARCH 6171**

Supports fuller discussion of key themes and concepts in ARCH 6170. Students must take two advanced design seminars (unless they wish to undertake a thesis; see ARCH

6950). Prereq: ARCH 6150, ARCH 6151. Coreq: ARCH 6170. **Semester Hours:** 2to 2
Registration is changing. Visit our website for details ucdenver.edu/registration.
Electives* (9 semester hours) or

ARCH 6950 - Thesis Preparation

Summer 2010 Registration **ARCH 6950**

In place of the final advanced design studio, students may choose to develop a specialized thesis in some topic related to architecture. The thesis will normally take three semesters, starting with the three-credit hour ARCH 6490, Thesis Research Tools in the spring semester, this course in the fall semester and finishing with a six-credit thesis class in the third semester. A thesis may culminate in a design or in a written report. A thesis is expected to advance the field in some way by offering new insights into aspects of design, technology, history or professional principles. Prereq: ARCH 6490 and completion of at least one advanced design studio (ARCH 6170 or ARCH 6171). **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.
Electives (3 semester hours)

Total: 18 Hours

Spring

ARCH 6170 - Advanced Design Studio

Summer 2010 Registration **ARCH 6170**

Students enter the advanced design studio after successfully completing the four core design studios and comprehensive studio (ARCH 6150). Students must take two advanced studios (unless they wish to undertake a thesis; see ARCH 6950). Topics vary according to faculty interests. Prereq: ARCH 6150 and ARCH 6151. Coreq: ARCH 6171. **Semester Hours:** 4to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

ARCH 6171 - Advanced Design Seminar

Summer 2010 Registration **ARCH 6171**

Supports fuller discussion of key themes and concepts in ARCH 6170. Students must take two advanced design seminars (unless they wish to undertake a thesis; see ARCH 6950). Prereq: ARCH 6150, ARCH 6151. Coreq: ARCH 6170. **Semester Hours:** 2to 2
Registration is changing. Visit our website for details ucdenver.edu/registration.

Electives* (9 semester hours) or

ARCH 6951 - Architecture Thesis

Summer 2010 Registration **ARCH 6951**

Development of a master's thesis (see ARCH 6950 above). Prereq: completion of two advanced design studios ARCH 6150 and ARCH 6950. **Semester Hours:** 6 to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

Electives* (9 semester hours)

Total: 15 Hours

* Students must take 9 elective semester hours in cultural studies, 9 elective semester hours in professional studies (3 semester hours of which must emphasize the computer), 6 elective semester hours in technology studies and 9 elective semester hours in any architecturally related electives on campus.

Biology MS

Associate Chair for Graduate Studies: Timberley Roane

Office: North Classroom, 3411

Telephone: 303-556-6592

E-mail: timberley.roane@ucdenver.edu

Web site: clas.ucdenver.edu/biology/grad.html

Requirements for Admission

Applicants must hold a baccalaureate degree from an accredited college or university, awarded within the preceding nine years. Students whose biology degree was awarded 10 or more years prior to entrance to the UC Denver program will be expected to retake or show competence in the biology core courses. Successful applicants generally have earned an overall GPA of 3.0 or better. Most applicants have an undergraduate major in biology or a related field. Students entering the master's program in biology must have completed the equivalent of a minor in biology. Although a deficit of one course is allowed, this must be completed within the first semester of entering the master's program and will not apply toward the degree.

The general GRE is required of all applicants, with scores above the 50th percentile required on all parts. The online graduate application form is submitted online to UC Denver graduate admissions. The biology supplemental application form is also required and is submitted directly to the biology program (jacki.craig@ucdenver.edu).

Plan I (thesis option) applicants must indicate an area of concentration AND MUST HAVE THE PRIOR APPROVAL OF A FACULTY MEMBER IN BIOLOGY WHO WILL

SUPERVISE THEIR THESIS WORK. Prospective thesis students must have a tentative advisor listed on the application form. Plan I applications cannot be considered without this information.

Plan II (course work only) applicants must indicate an area of concentration in addition to the name of a faculty member in biology who has tentatively agreed to serve as your advisor. Applications cannot be considered without this information.

Application deadlines are February 1 for domestic U.S. students and January 15 for international students. Online applications submitted electronically after the deadline dates WILL NOT be considered for that term. Applicants will be given the opportunity to have these applications considered for the next term.

Before submitting an application it is highly recommended that you meet with the associate chair for graduate studies, Dr. Timberley Roane, to make sure this program meets your needs and that you meet the program requirements.

Degree Requirements

All course work taken within the Department of Integrative Biology and applied toward the degree must be 5000 level or above. There is no core of required courses. A course plan is developed by the student and major advisor and is approved by the student's graduate committee. In addition to regular meetings throughout the semester, all students must meet with their faculty advisor at the beginning of each academic year to determine course schedules and upcoming deadlines. A pre-registration agreement is signed by student and advisor, and then filed with the associate chair of graduate studies in biology to make sure you are satisfying your degree requirements, and that the courses you want to take will be applicable toward your degree.

With the advisor's and/or graduate committee's approval, a maximum of 6 semester hours of course work at the 4000 level taken outside the department may be applied toward the degree. At least 18 semester hours must be taken from faculty in the Department of Integrative Biology at UC Denver. Upon approval of the department, no more than 12 semester hours may be transferred into the program. Two types of degree plans are offered:

Plan I (with thesis)

Students must form a three-person advisory committee consisting of members of the graduate faculty, with at least two from the regular UC Denver faculty. Committee membership must be approved by your graduate advisor. The thesis option requires 30 semester hours, including a minimum of 4 and no more than 6 thesis hours. You may also count a maximum of 6 hours (total) of independent study and/or graduate level

internship. Graduate internship or independent study projects must consist primarily of research. In addition, two semesters of the following are required:

BIOL 6655 - Seminar

Summer 2010 Registration **BIOL 6655**

Prereq: Graduate standing or permission of instructor. Cross-listed with BIOL

4990. **Semester Hours:** 1 to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

Plan II (without thesis)

Requires 32 semester hours, including two semesters of:

BIOL 6655 - Seminar

Summer 2010 Registration **BIOL 6655**

Prereq: Graduate standing or permission of instructor. Cross-listed with BIOL

4990. **Semester Hours:** 1 to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

Comprehensive Examination

All students in the MS in biology program are required to complete a series of biology comprehensive exams. The purpose of the exams is to demonstrate mastery of chosen biological concepts in general biology, cell biology, ecology, genetics, and anatomy/physiology. The comprehensive exams include three written exams and an oral exam.

Financial Assistance

Financial aid for graduate students may be available from university and/or state fellowships, research assistantships sponsored by individual faculty members and teaching assistantships. The biology department hires teaching assistants for laboratories and recitations in a number of courses. Teaching is a valuable addition to your graduate training. Hiring decisions are made by the instructors teaching labs and recitations. Please contact them (early) if you are interested.

Contact the Office of Financial Aid for information about fellowships, or the associate chair for graduate studies (303-556-6592) for information about research and teaching assistantships.

Business Administration MBA

Program Director: Elizabeth Cooperman

Telephone: 303-315.8422.

E-mail: Elizabeth.Cooperman@ucdenver.edu

Faculty

Professors:

Marcelle Arak, PhD, Massachusetts Institute of Technology
Heidi Boerstler, PhD/JD, Yale University/University of Denver
Jean-Claude Bosch, PhD, University of Washington
Peter Bryant, PhD, Stanford University
Wayne Cascio, PhD, University of Rochester
Lawrence Cunningham, DBA, University of Tennessee
E. Woodrow Eckard, PhD, University of California-Los Angeles
Richard Foster, PhD, University of Chicago
James Gerlach, PhD, Purdue University
Jahangir Karimi, PhD, University of Arizona
Susan Keaveney, PhD, University of Colorado
Gary Kochenberger, PhD, University of Colorado
C. Marlena Fiol, PhD, University of Illinois-Urbana-Champaign
James Morris, PhD, University of California-Berkeley
Dennis Murray, PhD, University of Massachusetts-Amherst
Bruce Neumann, PhD, University of Illinois
Edward O'Connor, PhD, University of Akron
John Ruhnka, JD/LLM, Yale School of Law/Cambridge University
Dean Taylor, PhD, University of Chicago
Clifford Young, PhD, University of Utah

Associate Professors:

Ajeyo Banerjee, PhD, University of Massachusetts-Amherst
Kenneth Bettenhausen, PhD, University of Illinois-Urbana-Champaign
Kang Rae Cho, PhD, University of Washington
Gary Colbert, PhD, University of Oregon
Elizabeth Cooperman, PhD, University of Georgia
Murray Cote, PhD, Texas A & M University
Carol Dee, PhD, Louisiana State University
David Forlani, PhD, University of Minnesota

Blair Gifford, PhD, University of Chicago
Dawn Gregg, PhD, Arizona State University
Deborah Kellogg, PhD, University of Southern California
Sarah Koovor-Misra, PhD, University of Southern California
Vick Lane, PhD, University of Washington
Michael Mannino, PhD, University of Arizona
L. Ann Martin, PhD, University of Minnesota
Madhavan Parthasarathy, PhD, University of Nebraska
Michael Roberts, PhD, Georgia State University
Judy Scott, PhD, University of California-Irvine
Manuel Serapio, PhD, University of Illinois
Marlene Smith, PhD, University of Florida
Steven Walczak, PhD, University of Florida

Assistant Professors:

Vinit Desai, PhD, University of California at Berkeley
Stephanie Johnson, PhD, Rice University
George Kiersey, PhD, University of Southern California
Mary Malina, PhD, University of Colorado
Robert Nieschwietz, PhD, Arizona State University
Ronald Ramirez, PhD, University of California-Irvine
Zhiping Walter, PhD, University of Rochester

Senior Instructors:

John Byrd, PhD, University of Oregon
Elizabeth Connor, MS, Colorado State University
Chen Ji, MS, University of Colorado
Michael Harper, PhD, Rensselaer Polytechnic Institute
Robert Hockenbury, MS, University of Houston
Barbara Pelter, PhD, University of California-Davis
Mary Lee Stansifer, PhD, Northwestern University
Eric Thompson, MS, University of Colorado
John Turner, PhD, St. Louis University

Instructors:

Errol Biggs, PhD, Pennsylvania State University
John Daley, PhD, University of Washington
Cindy Fischer, MA, University of Colorado
Linda Fried, JD/LLM, University of Miami
Wendy Guild, PhD, Massachusetts Institute of Technology

Fredrick Hampel, MS, Kansas State University
Barry McConnell, MBA, University of Colorado
Peter Miller, MA, Farleigh Dickenson University
Jeffrey Nystrom, MS, University of Colorado
Ira Selkowitz, JD, University of Denver
Lori Seward, PhD, Virginia Tech
Mary Lee Stansifer, PhD, University of Florida
Cindy Sutfin, MS, University of Colorado
Emily Vera, MS, University of Colorado

The master of business administration (MBA) program provides a general background in management and administration. This background enables the student to have the breadth of exposure and depth of knowledge required for an advanced-level management career. The program is devoted to developing the concepts, analytical tools and communication skills required for competent and responsible administration of an enterprise viewed in its entirety, within its social, political and economic environment.

The professional MBA program allows the scheduling of classes with maximum flexibility so students can progress through the program at their own pace, by taking as little as one class per semester or as many as five classes per semester, at times that are convenient to their work schedule. The program can be completed in as little as 16 months or as long as five years plus one semester.

Online courses add additional flexibility. Students may complete all degree requirements online, or combine online and campus courses to broaden your choice of electives or to fit a business travel schedule or personal learning style. Choice of online electives is limited.

The MBA program is also available in different configurations: 11-month (full time, see relevant section), health administration and the executive MBA (see relevant section). All MBAs have the same curriculum requirements; they differ only in their focus, the flexibility of course scheduling and the time required to complete the program. The 11-month and executive MBAs are lockstep programs (no open electives, no specialized tracks), where all the students complete all program requirements together. No course transfers, waivers or substitutions are permitted.

Program Requirements

Core Requirements

BUSN 6520 - Managing Individuals and Teams

Summer 2010 Registration **BUSN 6520**

Students learn the strengths and weaknesses of their management style and how to

work effectively with individual differences. Students also learn how to form teams around purpose/task, diagnose problems and identify and implement solutions by utilizing leadership skills such as setting goals, processes and measures, interpersonal communication, motivation and conflict management. Students develop an understanding of the effect of the organizational and social context on the behavior of individuals and teams. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

BUSN 6530 - Data Analysis for Managers

Summer 2010 Registration **BUSN 6530**

Provides an overview of techniques for data analysis, including multiple regression, sampling theory and applications of probabilistic inference from sample data. The emphasis is upon the applications of these techniques to management problems. Students are required to analyze data sets, present their analyses in written or oral form and defend their conclusions. Note: Students cannot receive credit for both BUSN 6530 and FNCE 6290. **Semester Hours:** 3to 3 **When Offered:** FASPRSUM
Registration is changing. Visit our website for details ucdenver.edu/registration.

BUSN 6540 - Legal and Ethical Environment of Business

Summer 2010 Registration **BUSN 6540**

Students develop a working knowledge of legal and ethical parameters for business decision making. The course addresses the legal system and mechanisms for resolving disputes. Topics include constitutional law, torts, product liability, contracts, property law, consumer protection, intellectual property, business entities and employment law. It stresses the influence of legal issues on organizational decision making. Note: Students can substitute ENTP 6822 but credit cannot be received for both. Health Administration students must take BUSN 6541. **Semester Hours:** 3to 3 **When Offered:** FASPRSUM
Registration is changing. Visit our website for details ucdenver.edu/registration.

BUSN 6550 - Analyzing and Interpreting Accounting Information

Summer 2010 Registration **BUSN 6550**

Emphasizes the use of accounting statements and data in making business decisions. External financial accounting information and concepts are used for investment and credit decisions. Internal managerial accounting information and concepts are used for product costing, cost analysis and management control. **Semester Hours:** 3to 3 **When Offered:** FASPRSUM
Registration is changing. Visit our website for details ucdenver.edu/registration.

BUSN 6560 - Marketing Management

Summer 2010 Registration **BUSN 6560**

Focuses on the formulation and implementation of a marketing plan in the context of the firm's strengths, overall strategy and competitive environment. Emphasis is on understanding the marketing environment and on decision making skills regarding market selection, pricing, promotion, product configuration and management of distribution channels. **Semester Hours:** 3to 3**When Offered:** FASPRSUM
Registration is changing. Visit our website for details ucdenver.edu/registration.

BUSN 6610 - Information Systems Management and Strategy

Summer 2010 Registration **BUSN 6610**

Examines the strategic, technological, financial and organizational issues involved with the effective management of information technology. Topics include: (1) role and importance of IT in modern organizations (e.g., IT impact on competitiveness, alignment of corporate and IT strategies, IT infrastructures and IT-enabled organizational processes), (2) alternative methods to develop, acquire and implement information systems (e.g.) evaluation of IT investments, implementing and managing complex IT projects), (3) nature of IT management (e.g., the evolving roles of enterprise IT management, IT sourcing and contractual relationships) and (4) ethical and security issues associated with IT. Note: Students cannot receive credit if they have taken BUSN 6810 or ISMG 6180. Cross-listed with ISMG 6180. **Semester Hours:** 3to 3**When Offered:** FASPRSUM
Registration is changing. Visit our website for details ucdenver.edu/registration.

BUSN 6620 - Applied Economics for Managers

Summer 2010 Registration **BUSN 6620**

After taking this course, students should be able to apply economic principles to make optimal decisions given firm cost, demand and market circumstances. Also, they should be able to analyze the firms interactions with its competitive market environment. Students will learn basic aspects of federal macroeconomic policy designed to achieve stable prices and economic growth. Also, they will learn to understand the measurement of output (GDP), employment and prices; the conduct of monetary and fiscal policy; and the balance of trade. Prereq: BUSN 6530 or FNCE 6290 and BUSN 6550, both may be taken concurrently. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

BUSN 6630 - Management of Operations

Summer 2010 Registration **BUSN 6630**

This course is concerned with the production and delivery of goods and services. It provides an overview of a variety of key Operation Management issues including scheduling, capacity determination, facility location and layout, distribution and related topics. The use of model- assisted decision making is emphasized. **Semester Hours:** 3to

3When Offered: *FASPRSUM*

Registration is changing. Visit our website for details ucdenver.edu/registration.

BUSN 6640 - Financial Management

Summer 2010 Registration **BUSN 6640**

This course is concerned with the business firm's decisions to make investments and to finance its operations. Students learn to use the tools and theories underlying business valuation, cost of capital, capital budgeting and capital structure. Students will learn to evaluate a firm's financial position through the examination of its financial statements and to prepare pro forma statements for the firm. Prereq: BUSN 6530 or FNCE 6290, BUSN 6620 (both may be taken concurrently) and BUSN 6550 completed prior and strictly enforced. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

BUSN 6710 - Strategic Management

Summer 2010 Registration **BUSN 6710**

Concerned with the development of a general management perspective in establishing the strategic direction for an enterprise. Students gain an understanding of strategy formulation and implementation within the context of the global environment. Emphasis is on the integration of knowledge acquired in the previous functional area courses.

Note: This course is intended as a final semester Capstone course. Prereq: BUSN 6560 and BUSN 6640 - strictly enforced; BUSN 6630 strongly recommended and may be taken concurrently. **Semester Hours:** 3to 3**When Offered:** *FASPRSUM*

Registration is changing. Visit our website for details ucdenver.edu/registration.

Electives

International business elective (1) (3 semester hours)

Free electives (5) (15 semester hours)

Total: 48 Hours

Notes and Restrictions:

Core Substitution. Students with extensive and comparable course work in a particular core subject area may petition to substitute a higher-level graduate core course on the basis of prior undergraduate or graduate course work taken at a regionally accredited college or university for the corresponding core class. This does not waive the 48-hour requirement. If a core course is substituted, another graduate level course in the same

functional area must be used as a substitute so that the student completes a total of 48 semester hours.

International Elective. One 3-hour course with an international focus must be completed. Contact a graduate advisor or refer to a current MBA degree plan for a complete list of options.

Electives. The professional MBA curriculum allows for 15 semester hours of elective credit, which can be chosen from graduate-level courses offered by the Business School, except BUSN courses numbered below 6800. Additional graduate-level course work completed at the Downtown Campus outside the Business School may be applied to the MBA degree, but only with prior written approval of the MBA program director.

Note: Electives for the 11-month and executive MBA programs are preselected for all students.

MBA Specializations

Graduate students will have an opportunity to take specialized tracks within the professional MBA program by completing a prespecified program of elective courses. The following 15 tracks are available:

- Business-to-Business Marketing
- Business Intelligence
- Business-to-Consumer Marketing
- Business Strategy
- Change Management
- Corporate Financial Management
- Decision Sciences
- Enterprise Technology Management
- Entrepreneurship
- Finance
- Financial Analysis
- Human Resources Management
- Information Systems
- International Business
- Investment Management
- Managing for Sustainability
- Marketing
- Services Management
- Sports and Entertainment Management

For additional information about the professional MBA program, contact a graduate advisor at 303-315-8201.

Business Administration—11–Month MBA

Program Director: Gary Colbert

Administrative Director: Debbie Follenweider

E-mail: 11-monthMBA@ucdenver.edu

Telephone: 303-315.8800

Web site: www.busniess.ucdenver.edu/11month

The 11-month MBA is an accelerated full-time program that brings academically superior students together with select research and teaching faculty. The program enables students to focus their energies in a concentrated, total-immersion program of study earning a nationally accredited, 48-semester-hour MBA degree in just under a year.

The 11-month MBA consists of five eight-week terms, three courses per term, plus a two-week international business course abroad. In addition to a minimum of 18 hours of class time each week, the 11-month MBA students spend an average of 30 hours a week on homework. Students should expect a minimum time commitment of 48 hours per week to successfully complete this program.

Admission and Application Process

The admissions committee considers each candidate's entire record of achievement demonstrated through academic transcripts, GMAT scores, essays, letters of recommendation, personal interviews (optional at the candidate's discretion), work experience and extracurricular and community activities.

Previous Education

Applicants' complete academic records, including GPAs and previous course work are considered. Undergraduate degrees do not have to be in business, but they must be from regionally accredited colleges or universities.

Testing

The GMAT is a requirement for application to the 11-month MBA program and cannot be substituted with other standardized examinations. If you take the GMAT more than once, we will evaluate your application using the highest GMAT score. The GMAT score for

students admitted into the 11-month MBA program has averaged around 600. Students must score a minimum 500 to be considered for admission to the 11-month MBA program. The GMAT Web site is www.mba.com.

The 11-month MBA also requires a highly developed proficiency in written and oral English. International applicants whose first language is not English must take the TOEFL or IELTS exam and earn a minimum score of 575/232 TOEFL or 7 IELTS to be considered for admission to the 11-month MBA program. Information on taking the TOEFL or IELTS can be obtained by visiting www.ets.org and www.ielts.org.

Work Experience

Students in the 11-month MBA program have an average of six years of work experience. However, experience ranges from the recently graduated to more than 30 years in business. Professional experience strengthens the application, since it adds relevance and depth to the learning process and enables candidates to contribute to and benefit from the knowledge of fellow classmates in the accelerated time frame of the program.

Applications

The following are required for consideration of admission to the program.

- completed application for graduate admission, parts I and II, submitted by published deadlines and fee (domestic or international as appropriate)
- two (2) letters of recommendation from professional or academic acquaintances who are familiar with the applicant's academic/professional competence
- GMAT scores taken in the last five years sent directly to the graduate admissions office from the Educational Testing Service. When registering for the GMAT, use code MPB-OG-65
- two (2) official transcripts from each school, college or university previously attended past high school, sent directly to the graduate admissions office. A minimum baccalaureate degree is required
- include answers to the four essay questions demonstrating commitment to an accelerated MBA program
- a resumé outlining work experience
- for international students, a minimum official score of 575/232 TOEFL or 7 IELTS is required to apply

The priority date for domestic applications is June 15 (May 1 for international students). Applications (for domestic students) and current fee information are available at www.ucdenver.edu/business/11month.

All of the required admission materials should be sent to:

University of Colorado Denver
The Business School
Graduate Admissions
Campus Box 165, P.O. Box 173364
Denver, CO 80127-3364

For further information, brochures and application materials, contact the 11-month MBA program at 303-315-8800 or 11-monthMBA@ucdenver.edu.

The 11-month MBA uses a rolling admission system. The committee reviews applications when they are complete in all respects, including transcripts, GMAT scores and letters of recommendation. Candidates are encouraged to submit their application as early in the process as possible. Completed applications are reviewed until early August; applications received after June 15 will be reviewed on a space-available basis. International applicants should have their completed applications in by May 1, to leave them sufficient time for visa and travel arrangements if they are admitted.

A personal interview may also be required for admission to the 11-month MBA.

11-Month MBA Scholarships/Loans

General financial assistance is available for qualified students. Students should apply directly to the Downtown Campus Office of Financial Aid. Call 303-556-2886 for information and forms. In addition, 11-month MBA merit-based scholarships are available only to students in the 11-month MBA. Other Business School scholarships are also available to all MBA students.

Degree Requirements

Students in the 11-month MBA complete 10 MBA core courses, one international business course (conducted abroad) and five special topics courses. All courses require that students work in teams. Due to the program's cohort structure, individual elective options are not available to 11-month MBA students. **No courses may be waived, substituted or transferred into the program.** If a student finds it necessary to leave the accelerated program, credits already earned may be transferred to the professional MBA program on campus.

MBA Core Courses

BUSN 6520 - Managing Individuals and Teams

Summer 2010 Registration **BUSN 6520**

Students learn the strengths and weaknesses of their management style and how to work effectively with individual differences. Students also learn how to form teams around purpose/task, diagnose problems and identify and implement solutions by

utilizing leadership skills such as setting goals, processes and measures, interpersonal communication, motivation and conflict management. Students develop an understanding of the effect of the organizational and social context on the behavior of individuals and teams. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

BUSN 6530 - Data Analysis for Managers

Summer 2010 Registration **BUSN 6530**

Provides an overview of techniques for data analysis, including multiple regression, sampling theory and applications of probabilistic inference from sample data. The emphasis is upon the applications of these techniques to management problems. Students are required to analyze data sets, present their analyses in written or oral form and defend their conclusions. Note: Students cannot receive credit for both BUSN 6530 and FNCE 6290. **Semester Hours:** 3to 3 **When Offered:** FASPRSUM

Registration is changing. Visit our website for details ucdenver.edu/registration.

BUSN 6540 - Legal and Ethical Environment of Business

Summer 2010 Registration **BUSN 6540**

Students develop a working knowledge of legal and ethical parameters for business decision making. The course addresses the legal system and mechanisms for resolving disputes. Topics include constitutional law, torts, product liability, contracts, property law, consumer protection, intellectual property, business entities and employment law. It stresses the influence of legal issues on organizational decision making. Note: Students can substitute ENTP 6822 but credit cannot be received for both. Health Administration students must take BUSN 6541. **Semester Hours:** 3to 3 **When Offered:** FASPRSUM

Registration is changing. Visit our website for details ucdenver.edu/registration.

BUSN 6550 - Analyzing and Interpreting Accounting Information

Summer 2010 Registration **BUSN 6550**

Emphasizes the use of accounting statements and data in making business decisions. External financial accounting information and concepts are used for investment and credit decisions. Internal managerial accounting information and concepts are used for product costing, cost analysis and management control. **Semester Hours:** 3to 3 **When Offered:** FASPRSUM

Registration is changing. Visit our website for details ucdenver.edu/registration.

BUSN 6560 - Marketing Management

Summer 2010 Registration **BUSN 6560**

Focuses on the formulation and implementation of a marketing plan in the context of the firm's strengths, overall strategy and competitive environment. Emphasis is on understanding the marketing environment and on decision making skills regarding market selection, pricing, promotion, product configuration and management of distribution channels. **Semester Hours:** 3to 3**When Offered:** *FASPRSUM*
Registration is changing. Visit our website for details ucdenver.edu/registration.

BUSN 6610 - Information Systems Management and Strategy

Summer 2010 Registration **BUSN 6610**

Examines the strategic, technological, financial and organizational issues involved with the effective management of information technology. Topics include: (1) role and importance of IT in modern organizations (e.g., IT impact on competitiveness, alignment of corporate and IT strategies, IT infrastructures and IT-enabled organizational processes), (2) alternative methods to develop, acquire and implement information systems (e.g.) evaluation of IT investments, implementing and managing complex IT projects), (3) nature of IT management (e.g., the evolving roles of enterprise IT management, IT sourcing and contractual relationships) and (4) ethical and security issues associated with IT. Note: Students cannot receive credit if they have taken BUSN 6810 or ISMG 6180. Cross-listed with ISMG 6180. **Semester Hours:** 3to 3**When Offered:** *FASPRSUM*
Registration is changing. Visit our website for details ucdenver.edu/registration.

BUSN 6620 - Applied Economics for Managers

Summer 2010 Registration **BUSN 6620**

After taking this course, students should be able to apply economic principles to make optimal decisions given firm cost, demand and market circumstances. Also, they should be able to analyze the firms interactions with its competitive market environment. Students will learn basic aspects of federal macroeconomic policy designed to achieve stable prices and economic growth. Also, they will learn to understand the measurement of output (GDP), employment and prices; the conduct of monetary and fiscal policy; and the balance of trade. Prereq: BUSN 6530 or FNCE 6290 and BUSN 6550, both may be taken concurrently. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

BUSN 6630 - Management of Operations

Summer 2010 Registration **BUSN 6630**

This course is concerned with the production and delivery of goods and services. It provides an overview of a variety of key Operation Management issues including

scheduling, capacity determination, facility location and layout, distribution and related topics. The use of model- assisted decision making is emphasized. **Semester Hours:** 3to 3**When Offered:** FASPRSUM

Registration is changing. Visit our website for details ucdenver.edu/registration.

BUSN 6640 - Financial Management

Summer 2010 Registration **BUSN 6640**

This course is concerned with the business firm's decisions to make investments and to finance its operations. Students learn to use the tools and theories underlying business valuation, cost of capital, capital budgeting and capital structure. Students will learn to evaluate a firm's financial position through the examination of its financial statements and to prepare pro forma statements for the firm. Prereq: BUSN 6530 or FNCE 6290, BUSN 6620 (both may be taken concurrently) and BUSN 6550 completed prior and strictly enforced. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

BUSN 6710 - Strategic Management

Summer 2010 Registration **BUSN 6710**

Concerned with the development of a general management perspective in establishing the strategic direction for an enterprise. Students gain an understanding of strategy formulation and implementation within the context of the global environment. Emphasis is on the integration of knowledge acquired in the previous functional area courses.

Note: This course is intended as a final semester Capstone course. Prereq: BUSN 6560 and BUSN 6640 - strictly enforced; BUSN 6630 strongly recommended and may be taken concurrently. **Semester Hours:** 3to 3**When Offered:** FASPRSUM

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 30 Hours

International Course Abroad

The international course, which involves travel abroad, is completed as an all-day, two-week intensive course.

Special Topics Courses

The special topics courses, revised each year, are selected to create a broad understanding of the most current business issues. These requirements are subject to change.

Business Administration—Health Administration MBA

Program Director: Errol L. Biggs
Telephone: 303-315-8851
E-mail: errol.biggs@ucdenver.edu

Faculty

Professors:

Heidi Boerstler, PhD/JD, Yale University/University of Denver
Peter Bryant, PhD, Stanford University
C. Marlena Fiol, PhD, University of Illinois-Urbana-Champaign
Richard Foster, PhD, University of Chicago
Bruce Neumann, PhD, University of Illinois
Edward O'Connor, PhD, University of Akron

Associate Professors:

Deborah Kellogg, PhD, University of Southern California
Stephen Ross, MD, University of North Carolina

Instructors:

Errol Biggs, PhD, Pennsylvania State University

Admission Process

Requirements for Admission

Selection of students is a multistep process. When making application to the program for the MBA-HA, candidates should send their applications to:

Graduate Admissions
Graduate School of Business Administration
University of Colorado Denver
Campus Box 165, P.O. Box 173364
Denver, CO 80217-3364

Application Requirements

- complete the application for graduate admission, parts I and II, and submit by published deadlines
- send two (2) letters of recommendation from professional or academic acquaintances who are familiar with the applicant's academic/professional competence
- send required GMAT scores directly to the graduate office from the Educational Testing Service. When registering for the GMAT, use code MPB-OG-78. GRE scores will also be considered.
- pay the appropriate application fee
- send two (2) official transcripts directly from each school, college or university previously attended past high school. A minimum baccalaureate degree is required.
- include answers to the four essay questions
- document any experience in the field of health services administration (preferred but not required)
- complete a personal interview with the health administration committee

Admission to the MBA-HA degree program is on a competitive basis. Therefore, these admission criteria represent minimum entrance qualifications expected of all students.

For further information, brochures and application materials, contact the Business School's Graduate Program in Health Administration, University of Colorado Denver, 303-315-8200.

Health Administration Scholarships/Loans

Financial assistance is available for qualified students. Students should apply directly to the Downtown Campus Office of Financial Aid. Call 303-556-2886 for information and forms.

In addition, some funds are available only to students in the graduate program in health administration:

- Foster G. McGaw Scholarship
- UC Denver MS and MBA Health Administration Scholarship
- Colorado Health Administration Alumni Association Scholarship

Enrollment in the program also makes students eligible to apply for some nationally competitive scholarships from professional organizations.

Call 303-315.8200 for applications or visit www.business.ucdenver.edu.

Graduate Program in Health Administration

The graduate program in health administration is consistently ranked as a top program in the United States and attracts students with a variety of backgrounds and experience levels, which further enriches the classroom experience. The HA program is accredited

by the Commission on Accreditation of Healthcare Management Education. The program is the only such program in the Rocky Mountain region and was started in 1968. Full-time faculty with distinguished research records and a select group of practicing managers provide students with the latest thinking on the most important health issues.

Degree Requirements

The curriculum of the MBA with an emphasis in health administration is a synthesis of management concepts and techniques that are applicable to any economic organization, and tools that can be specifically applied to health services systems. The program emphasizes skills that strengthen basic analytic and decision-making processes used by top level managers in selecting broad strategies and by junior managers in administering subunits in health care organizations.

Students enrolled in the master of business administration with an emphasis in health administration must complete a minimum of 48 semester hours of graduate-level course work to receive their degree. The curriculum is based on a series of structured learning sequences. Most of the courses are available in the evening to enable working students to pursue the degree on a part-time basis. The specific course requirements are as follows (recommended sequence):

Year One

BUSN 6521 - Managing Individuals and Teams (Health Section)

Summer 2010 Registration **BUSN 6521**

Students learn the strengths and weaknesses of their management style and how to work effectively with individual differences. Students also learn how to form teams around purpose/task, diagnose problems and identify and implement solutions by utilizing leadership skills such as setting goals, processes and measures, interpersonal communication, motivation and conflict management. Students develop an understanding of the effect of the organizational and social context on the behavior of individuals and teams. The emphasis is on health care issues and is intended for health care students. **Semester Hours:** 3 to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

BUSN 6530 - Data Analysis for Managers

Summer 2010 Registration **BUSN 6530**

Provides an overview of techniques for data analysis, including multiple regression, sampling theory and applications of probabilistic inference from sample data. The emphasis is upon the applications of these techniques to management problems. Students are required to analyze data sets, present their analyses in written or oral form

and defend their conclusions. Note: Students cannot receive credit for both BUSN 6530 and FNCE 6290. **Semester Hours:** 3to 3**When Offered:** *FASPRSUM*
Registration is changing. Visit our website for details ucdenver.edu/registration.

BUSN 6550 - Analyzing and Interpreting Accounting Information

Summer 2010 Registration **BUSN 6550**

Emphasizes the use of accounting statements and data in making business decisions. External financial accounting information and concepts are used for investment and credit decisions. Internal managerial accounting information and concepts are used for product costing, cost analysis and management control. **Semester Hours:** 3to 3**When Offered:** *FASPRSUM*

Registration is changing. Visit our website for details ucdenver.edu/registration.

HLTH 6010 - Health Care Systems

Summer 2010 Registration **HLTH 6010**

Introduces the structure and function of the medical care delivery system. Includes basic concepts and measures of health, disease, quality, values, needs and utilization; issues in health care manpower, institutions and system organization; general issues in policy, reimbursement and regulation; broad community, and organizational considerations in medical care organizations. The student is introduced to the principles of epidemiology and environmental health and demonstrates the application of epidemiology concepts to planning for the healthcare service needs of a population. **Semester Hours:** 3to 3**When Offered:** *FALL*

Registration is changing. Visit our website for details ucdenver.edu/registration.

BUSN 6541 - Legal and Ethical Environment of Business (Health Section)

Summer 2010 Registration **BUSN 6541**

Students develop a working knowledge of legal and ethical parameters for business decision making. Addresses the legal system and mechanisms for resolving disputes. Topics include business entities, torts, contracts, employment relationships, litigation and alternative dispute resolution. It stresses the influence of legal issues on organization and decision making. The emphasis is on health care issues and is intended for health care students. **Semester Hours:** 3to 3**When Offered:** *SPRING*

Registration is changing. Visit our website for details ucdenver.edu/registration.

HLTH 6071 - Introduction To Health Information Technology

Summer 2010 Registration **HLTH 6071**

Examines what needs transforming in healthcare to improve value, safety, and appropriateness of care, and what the role of IT is in that transformation. IT also examines the challenges of cultural change and IT strategy in succeeding with clinical

information projects. Differences between installation, implementation, transition and actual transformation are suggested, and methods for managing subcultures in healthcare (IT, clinical, administrative) are reviewed. Cross-listed with ISMG 6071.

Semester Hours: 3to 3**When Offered:** *SPRING*

Registration is changing. Visit our website for details ucdenver.edu/registration.

BUSN 6621 - Applied Economics for Managers (Health Section)

Summer 2010 Registration **BUSN 6621**

After taking this course, students should be able to apply economic principles to make optimal decisions given firm cost, demand and market circumstances. Also, they should be able to analyze the firm's interactions with its competitive market environment.

Students should understand basic aspects of federal macroeconomics policy designed to achieve stable prices and economic growth. Also, they should understand basic aspects of government regulation of business. The emphasis is on healthcare issues and is intended for healthcare students. Prereq: BUSN 6530 and BUSN 6550, both may

be taken may concurrently. **Semester Hours:** 3to 3**When Offered:** *SPRING*

Registration is changing. Visit our website for details ucdenver.edu/registration.

HLTH_____ - Health Elective (3 semester hours)

Total: 24 Hours

Year Two

HLTH 6040 - Health Care Financial Management

Summer 2010 Registration **HLTH 6040**

Theory of insurance applied to healthcare, including benefits design and co-payments.

Existing and proposed competition in insurance markets, including rating methodologies and selection issues. Managed care and medical spending accounts as responses to problems with traditional insurance. Managerial accounting methods useful for analyzing contracts and managing profitability are presented. Prereq: BUSN 6550 and 6621 or

permission of instructor. **Semester Hours:** 3to 3**When Offered:** *FALL*

Registration is changing. Visit our website for details ucdenver.edu/registration.

BUSN 6640 - Financial Management

Summer 2010 Registration **BUSN 6640**

This course is concerned with the business firm's decisions to make investments and to finance its operations. Students learn to use the tools and theories underlying business valuation, cost of capital, capital budgeting and capital structure. Students will learn to evaluate a firm's financial position through the examination of its financial statements

and to prepare pro forma statements for the firm. Prereq: BUSN 6530 or FNCE 6290, BUSN 6620 (both may be taken concurrently) and BUSN 6550 completed prior and strictly enforced. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

BUSN 6560 - Marketing Management

Summer 2010 Registration **BUSN 6560**

Focuses on the formulation and implementation of a marketing plan in the context of the firm's strengths, overall strategy and competitive environment. Emphasis is on understanding the marketing environment and on decision making skills regarding market selection, pricing, promotion, product configuration and management of distribution channels. **Semester Hours:** 3to 3 **When Offered:** *FASPRSUM*
Registration is changing. Visit our website for details ucdenver.edu/registration.

HLTH_____ - International Elective (Health) (3 semester hours)

BUSN 6631 - Management of Operations (Health Section)

Summer 2010 Registration **BUSN 6631**

This course focuses on managing and evaluating the processes that produce and deliver health services. Particular emphasis is on quantitative techniques to support healthcare operations including Monte Carlo simulation, decision analysis, quality improvement methods, forecasting, capacity planning, project management and inventory and supply chain management. While this course is intended for healthcare students, it is open to all. **Semester Hours:** 3to 3 **When Offered:** *SPRING*
Registration is changing. Visit our website for details ucdenver.edu/registration.

DSCI 6440 - Quality and Process Improvement

Summer 2010 Registration **DSCI 6440**

Studies the identification, measurement and improvement of quality and the practical management issues related to implementing quality systems within organizations. Topics include historic and contemporary views of quality, statistical quality control tools including Six SigmaSM, work design and measurement and process flow and design. Note: Cannot receive credit for both DSCI 6440 and BUSN 6832. Prereq: BUSN 6530 or permission of instructor. Cross-listed with BUSN 6832. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

BUSN 6711 - Strategic Management (Health Section)

Summer 2010 Registration **BUSN 6711**

Concerned with the development of a general management perspective in establishing the strategic direction for a health delivery organization. Students gain an understanding of strategy formulation and implementation within the context of the managed care

environment. Emphasis is on the integration of knowledge acquired in the previous functional area courses. Note: This course is intended as a final semester course. Required of Health Administration majors; open to others. Prereq: BUSN 6560 and 6640 - strictly enforced; BUSN 6630 strongly recommended and may be taken concurrently. **Semester Hours:** 3 to 3 **When Offered:** *SPRING*
Registration is changing. Visit our website for details ucdenver.edu/registration.

HLTH 6911 - Health Field Studies

Summer 2010 Registration **HLTH 6911**

The objective of this course is to expose students to health care organizations with which they are not familiar. Each student is assigned to a health care organization and given a specific problem or project to complete. Prereq: HLTH 6010 or permission of instructor. **Semester Hours:** 3 to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HLTH ____ - Health Elective (3 semester hours)

Total: 27 Hours

Notes and Restrictions

Students admitted into the MBA with an emphasis in health administration must meet with a graduate advisor before they register for their first semester. Call 303-315-8200 to schedule an appointment.

Administrative Residency. An administrative residency is optional but recommended for students with limited health care experience. The program faculty provide assistance to students in securing the residency, as well as regular consultation during the residency period. The program has been very successful in placing graduates in administrative residencies.

Length of program. A maximum of five years and one semester is allowed to complete the health administration program.

Specialized Tracks in the MBA with an Emphasis in Health Administration

Each track carries its own specific course requirements. To provide a variety of perspectives and experiences within a specific area of health administration, each track includes courses that span various departments within the Business School, other schools at the Downtown Campus and other University of Colorado campuses.

- International Health Management and Policy Track
- Financial Management Track
- Health Information Technology Management Track

Chemistry MS

Requirements for Admission

Students must meet the Downtown Campus Graduate School admission requirements with specific chemistry requirements as follows:

- Undergraduate GPA of at least 3.0.
- Undergraduate major in chemistry essentially equivalent to the one offered at UC Denver (see the undergraduate requirements), including two semesters of organic, analytical and physical chemistry with laboratories and one semester of inorganic chemistry. No student will be admitted to the graduate program who is not within two classes of meeting the undergraduate requirements.
- GRE examination is recommended, as is the advanced chemistry GRE examination.
- International students have additional admission requirements concerning immigration status, proof of financial responsibility and acceptable TOEFL scores.
- Failure to meet the full admission standards may lead to provisional admission.

Prospective students are encouraged to contact the graduate program director or visit the chemistry department Web site for additional details concerning the chemistry program, admission procedures, financial assistance and faculty research interests.

General Program Requirements

At the heart of the graduate program is a set of four core graduate courses in the fields of analytical, inorganic, organic and physical chemistry. A student must qualify in order to register for any core graduate class, either by passing a qualifying examination in that field or by passing the equivalent undergraduate class in that area at UC Denver with a grade of *B* (3.0) or better. All entering students are required to qualify in all four core fields. The qualifying requirements must be completed during the first year in the graduate program. Individual core classes may have additional prerequisites.

Depending on the program option that she/he selects, a student will be required to pass either three (Plan I) or all four (Plan II) of the graduate core courses with no grade in a core course below *B-* (2.7).

The remaining course work for the degree will consist of regular graduate offerings in chemistry, a limited number of which may be substituted by approved classes in related fields. In particular, students interested in interdisciplinary areas, such as biochemistry or environmental chemistry, are encouraged to take cognate courses outside the chemistry department. The chemistry graduate program director must approve in advance any

graduate class taken outside the department that is to count toward the degree. All students are required to annually submit an updated program plan for approval and to have their progress evaluated by the graduate program director.

Specific Degree Requirements

There are two options for obtaining a master's degree from the Downtown Campus Department of Chemistry: Plan I, the thesis option, and Plan II, the course work emphasis option. All students must complete at least 3 semester hours of master's report (CHEM 6960). A student is allowed to participate in the thesis option only after the successful completion of the master's report with the proposed advisor, and upon the mutual agreement of both the student and advisor that the student is prepared to work on a master's thesis. Students who select the course work emphasis option may petition to have up to 3 additional semester hours of master's report research substitute for an equivalent number of course work hours.

Plan I. Thesis Option

Plan I is a research-oriented program involving a minimum of 30 semester hours with the following requirements:

- 21-23 semester hours of formal course work, including three of the four graduate core courses
- 4-6 semester hours of CHEM 6950, Master's Thesis research; successful completion of the thesis research includes the presentation of the results at a departmental seminar
- 3 semester hours of CHEM 6960, Master's Report research
- a grade of B- (2.7) or better in all courses completed: B- (2.7) or better in all core courses
- a cumulative GPA of 3.0 or better in all courses taken as a graduate student
- an acceptable formal thesis consistent with the guidelines of the Graduate School
- successful oral defense of the master's thesis before a committee of at least three graduate faculty members, two of whom must be tenure track faculty members in the chemistry department
- compliance with all Graduate School Rules
- all work must be completed within five years of completion of the first graduate class in the department

Plan I thesis research must be conducted under the direct supervision of a tenure-track faculty member of the Downtown Campus Department of Chemistry. Plan I students must take a minimum of 15 semester hours of formal course work in chemistry at the 5000 level or above. Students may petition the graduate program director in advance for

permission to take one or two courses at the graduate level outside of chemistry that would count toward the requirements for an MS in chemistry.

Plan II. Course Work Emphasis Option

Plan II is a course work-oriented program involving a minimum of 33 semester hours with the following requirements:

- 27-30 semester hours of formal course work, including all four graduate core courses
- at least 3 (but not more than 6) semester hours of CHEM 6960, Master's Report, research
- a grade of *B-* (2.7 or better in all courses completed; *B-* (2.7) or better in all core courses
- a cumulative GPA of 3.0 or better in all courses taken as a graduate student
- a final research report
- presentation of the research project in a final seminar
- successful defense of the project before a committee of at least three graduate faculty members, one of whom must be a tenure-track faculty member in the chemistry department
- compliance with all Graduate School Rules
- all work must be completed within five years of completion of the first graduate class in the department

A Plan II student may petition the graduate program director to substitute up to 3 semester hours of master's report (CHEM 6960) research, beyond the required minimum, for an equivalent number of semester hours of formal course work. Approval will be perfunctory for research performed with the support and under the direct supervision of a faculty member in the Department of Chemistry on the Downtown Campus. Plan II students must take a minimum of 24 semester hours of formal course work in chemistry at the 5000 level or above. Students may petition the graduate program director in advance for permission to take up to two courses at the graduate level outside of chemistry that would count toward the requirements for an MS in chemistry.

Return to the Department of Chemistry

Civil Engineering MS and MEng

Graduate

Degree Programs

The civil engineering graduate program is designed for both full-time and part-time students who want to advance their academic and professional skills in civil engineering and related areas. Many students are full time, while many also work full-time jobs and complete evening classes. Depending on a student's pace, the master's program takes 2-4 years to complete (on average). All graduate courses are offered in the afternoons, evenings or on Saturdays. Some courses, including all GIS classes, are offered online.

Specialty Areas:

Master of Science(MS)

- Environmental and Sustainability Engineering
- Geographic Information Systems (GIS)
- Geotechnical Engineering
- Hydrologic and Hydraulic Engineering
- Structural Engineering
- Transportation Engineering

Master of Engineering (MEng)

- Geographic Information Systems (GIS)
- Sustainable Infrastructure
- Transportation Systems

Degree Requirements

Two MS degree programs are available.

Plan I - Master's Thesis: This plan requires 24 credit hours of graduate-level course work and 6 semester hours of master's thesis credit.

Plan II - Master's Report: This plan requires 27 credit hours of graduate-level course work and 3 semester hours master's report credits.

Master of engineering students must follow Plan 2 above. Additionally, of those 30 semester hours, at least 15 hours must be completed with CE classes, including the master's report. The remaining hours may be completed in related disciplines that supplement the chosen area of study. Both the MS and MEng degrees require satisfactory completion of a written comprehensive exam and an oral defense of the master's thesis or master's report to a committee of at least three graduate faculty. Every graduate student must also satisfy the degree requirements of the Graduate School on the Downtown Campus, specified in the Information for Graduate Students

chapter of this catalog. Both the MS and the MEng degree programs must be completed within seven years of the date the student begins the degree program.

Courses for both the MS and MEng degree programs are selected by mutual agreement of the student and his/her faculty advisor after admission to the degree program. The advisor may also specify undergraduate courses that must be completed before starting graduate course work, but these will not count toward the semester hour requirements for the degree. The student's thesis or report topic must also be approved by the faculty advisor.

Requirements for Admission

GPA and GRE

Students with GPA's between 3.0 and 2.75 may be admitted provisionally, but are encouraged to submit official GRE scores to support their applications. Non-international applicants not wishing to take the GRE may gain admittance by registering as a nondegree student and completing three classes with a GPA of 3.25.

Transfer Credit:

Master's students may transfer up to 9 semester hours from another institution towards their master's degree, if approved by their advisor.

Program Prerequisites:

Prerequisite classes are in addition to the 30 semester hours needed to complete a master's degree, as they are necessary background information that is usually included in an engineering bachelor's program.

Students may complete prerequisite classes either before or after being admitted to a degree program. However, applicants with too many prerequisites may not gain admission. For applicants completing prerequisites after admission, all prerequisite courses must be completed before 12 of the 30 master's semester hours are complete.

Requests for applications for graduate study in civil engineering should be addressed to

UC Denver Department of Civil Engineering
Campus Box 113
P.O. Box 173364
Denver, CO 80217-3364.

Applicants who are not citizens or permanent residents of the United States must apply through the Office of International Admissions, Campus Box 185, P.O. Box 173364, Denver, CO 80217-3364. All applicants for admission must submit complete credentials as outlined in the instructions that accompany the application materials.

Communication MA

The master of arts in communication is a generalist degree designed to enhance students' intellectual and professional growth through the understanding and practice of effective communication.

Degree Requirements

Students have two options for completing the MA degree in communication: the professional track and the academic track.

Professional Track

The professional track requires the completion of 36 hours of graduate course work (5000 level or above). As explained below, students have the option of taking 6 hours of 4000-level courses. In this situation, a student will take 30 hours of graduate credit and 6 hours of 4000-level (undergraduate) course work. The requirements for course work are as follows:

Required Course

COMM 6013 - Introduction to Graduate Work in Communication

Summer 2010 Registration **CMMU 6013**

Designed to familiarize students with the philosophical, ideological, and methodological bases of study in communication. Note: Required of all graduate students in M.A.

program in communication. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

(recommended to be taken the first semester of graduate course work; offered only in the fall semester)

Methods Courses

Most methods courses are offered every other year. The second methods course may be taken outside of the communication department with the approval of the student's advisor.

Choose two:

COMM 5011 - Research Methods: Quantitative

Summer 2010 Registration **CMMU 5011**

Examines quantitative techniques used by researchers in communication, including laboratory research, field and survey research, content analysis, and interaction analysis. Objective of the course is to give students enough background to read critically in the social sciences. Prereq: Undergraduates with senior standing may enroll with permission of instructor. Cross-listed with COMM 4011. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 5022 - Critical Analysis of Communication

Summer 2010 Registration **CMMU 5022**

Surveys research methods used to analyze messages from rhetorical and critical perspectives. Prereq: Undergraduates with senior standing may enroll with permission of instructor. Cross-listed with COMM 4022. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 5221 - Research Methods: Qualitative

Summer 2010 Registration **CMMU 5221**

Applies qualitative research methods to human communication practices, including the processes of designing qualitative studies, collecting data, analyzing and interpreting data, and reporting results. Prereq: Undergraduates with senior standing may enroll with permission of instructor. Cross-listed with COMM 4221. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 6205 - Empirical Research Methods for Communication and Technical Communication

Summer 2010 Registration **CMMU 6205**

Provides exposure to empirical research methods involved in communication and technical communication research: surveys, experimental design, meta-analysis, case study, ethnography, textual analysis, and process tracing. Basic quantitative data analysis methods (correlation, chi-square, t-tests, and analysis of variance) are introduced. Prereq: COMM 5405 and 5505 or permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 9 Hours

Graduate Seminars

In addition to the above core requirements, students must take four graduate seminars from the Department of Communication. Graduate seminars are 5000- or 6000-level courses.

Total: 12 Hours

Electives

Students must complete five electives. A minimum of three of these electives must be at the 5000 or 6000 level; the remaining two may be at the 4000 level. At least three of the five electives must be communication courses; the remaining two electives may be taken from outside of the Department of Communication.

[Students whose bachelor's degrees are not in communication are required to take one additional course (CMMU 4031). This course does not count toward the semester hours required for the degree; it is taken in addition to those 36 hours.]

COMM 4031 - Perspectives on Communication

Summer 2010 Registration **CMMU 4031**

Overview of major theories and literature in the communication field that serve as the foundation for the study of communication. **Semester Hours:** 3 to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 15 Hours

Students must receive a grade of *B* or higher in all courses that are applied to the MA degree.

Track Total: 36 Hours

Academic Track

The academic track is distinguished from the professional track in that it requires the completion of a substantial academic writing project or projects. The academic track requires the completion of 36-37 hours of graduate course work. At least 30 of these hours must be at the 5000 or 6000 level; 6 hours (two courses) may be at the 4000 level. The requirements for course work are as follows:

COMM 6013 - Introduction to Graduate Work in Communication

Summer 2010 Registration **CMMU 6013**

Designed to familiarize students with the philosophical, ideological, and methodological bases of study in communication. Note: Required of all graduate students in M.A. program in communication. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

(recommended to be taken the first semester of graduate course work; offered only in the fall semester)

Methods Courses

Most methods courses are offered every other year.

Choose two:

COMM 5011 - Research Methods: Quantitative

Summer 2010 Registration **CMMU 5011**

Examines quantitative techniques used by researchers in communication, including laboratory research, field and survey research, content analysis, and interaction analysis. Objective of the course is to give students enough background to read critically in the social sciences. Prereq: Undergraduates with senior standing may enroll with permission of instructor. Cross-listed with COMM 4011. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 5022 - Critical Analysis of Communication

Summer 2010 Registration **CMMU 5022**

Surveys research methods used to analyze messages from rhetorical and critical perspectives. Prereq: Undergraduates with senior standing may enroll with permission of instructor. Cross-listed with COMM 4022. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 5221 - Research Methods: Qualitative

Summer 2010 Registration **CMMU 5221**

Applies qualitative research methods to human communication practices, including the processes of designing qualitative studies, collecting data, analyzing and interpreting data, and reporting results. Prereq: Undergraduates with senior standing may enroll with permission of instructor. Cross-listed with COMM 4221. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 6205 - Empirical Research Methods for Communication and Technical Communication

Summer 2010 Registration **CMMU 6205**

Provides exposure to empirical research methods involved in communication and technical communication research: surveys, experimental design, meta-analysis, case study, ethnography, textual analysis, and process tracing. Basic quantitative data analysis methods (correlation, chi-square, t-tests, and analysis of variance) are introduced. Prereq: COMM 5405 and 5505 or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 9 Hours

Graduate Seminars

In addition to the above core requirements, students must take four graduate seminars from the communication department. Graduate seminars are 5000- or 6000-level courses. The four courses must be approved by the student's advisor.

Total: 12 Hours

Electives

Students must complete five electives. A minimum of two of these electives must be at the 5000 or 6000 level; the remaining two may be at the 4000 level. At least two of the electives must be communication courses; the remaining two may be taken from outside of the communication department. If a thesis is presented, the thesis credits will substitute for one elective course requirement.

[Students whose bachelor's degrees are not in communication are required to take one additional course (CMMU 4031). This course does not count toward the semester hours required for the degree; it is taken in addition to those 36-37 hours.]

COMM 4031 - Perspectives on Communication

Summer 2010 Registration **CMMU 4031**

Overview of major theories and literature in the communication field that serve as the foundation for the study of communication. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 12-15 Hours

(12 hours for thesis students; 15 for non-thesis)

Thesis

Students either must present a major paper for publication (no additional course credit) or complete a thesis for 4 semester hours. Credit for a thesis may substitute for one elective course requirement.

Total: 4 Hours

Students must receive a grade of *B* or higher in all courses that are applied to the MA degree.

Track Total: 36-37 Hours

Options for Specialization

The communication department has developed two options for students who wish to create an area of focus or specialization within the MA degree—communication management and doctoral preparation. Students may choose to develop one of these options as they select their electives, or they may earn a general degree by selecting electives across the two areas of specialization. Either option may be pursued by students in the professional track; the doctoral preparation specialization is recommended for students in the academic track.

Communication Management

Communication management is an area of knowledge and skills concerned with the processes involved in managing communication—creating, accessing and delivering communication services within organizational contexts. The area of communication management provides opportunities for the development of communication skills and knowledge by professionals in public, corporate and not-for-profit organizations. Anyone who must manage communication resources for an organization—including account executives, multimedia professionals, human resource specialists and trainers—can advance their career through a specialty in communication management.

Doctoral Preparation

The specialty in doctoral preparation is for students who plan to pursue a PhD after completion of their MA degree. Individuals who earn a PhD typically engage in teaching and research as university professors, but the degree also may be pursued to increase marketability in the corporate world in areas such as consulting and training.

Computer Science MS

► Graduate School Rules apply to this program

General MS Degree Requirements

In addition to the basic requirements of the university, the Department of Computer Science and Engineering requires master's degree candidates to complete an approved program of study consisting of at least 30 semester hours of graduate-level computer science courses and a thesis or project while maintaining a GPA of at least 3.0. With prior approval of the graduate committee, a student may substitute up to 9 semester hours of graduate-level mathematics or other engineering courses. All courses must be taught by University of Colorado graduate faculty.

A student must submit an approved plan of study to the department during the first semester of his/her admission. An academic advisor will consult with each student to develop a plan of study.

Adequate Progress toward MS in Computer Science Degree

Students are expected to finish the MS degree program within five years. Candidates for the MS degree may not get credit for a course taken longer than five years before the date on which the degree is to be granted.

Students who do not enroll for any course work relevant to computer science in a given semester (summer semesters excluded) must supply the Department of Computer Science and Engineering with a written statement describing the reason for the inactivity. Students who are inactive for three consecutive semesters (summer semesters excluded) will be removed from the program, and must re-apply for admission.

Students may choose either Plan I (thesis) or Plan II (MS project).

Plan I—Thesis

Students choosing Plan I take 24 semester hours of graduate course work and conclude their program with 6 semester hours of thesis work. A minimum of three courses must be chosen from among five “core” courses and must be passed with a grade of B or better. Three additional courses must be chosen from among more than a dozen “breadth” courses. Plan I students must also write a thesis and defend it before a thesis

committee. The students in Plan I may take one independent study course for a maximum of 3 hours.

Plan II—MS Project

Students choosing Plan II take 27 semester hours of graduate course work and conclude their program with 3 semester hours of MS project work. A minimum of three courses must be chosen from among five “core” courses and must be passed with a grade of B or better. Three additional courses must be chosen from among more than a dozen “breadth” courses. Plan II students must also write an MS project report and defend it before an MS project committee. The students in Plan II may take one independent study course for a maximum of 3 semester hours.

Note: Students can take only graduate engineering (21 semester hours must be CS courses) and graduate mathematics courses. No more than 6 semester hours can be taken in the form of online courses.

Counseling Psychology and Counselor Education MA

- Degree
- Admission Requirements
- Matriculation Requirements

Program Leader: Marsha Wiggins

Office: Lawrence Street Center, 701

Telephone: 303-315-6300

Fax: 303-315-6311

E-mail: education@ucdenver.edu

Web site: www.ucdenver.edu/education/cpce

Faculty

Information about faculty in the counseling psychology and counselor education program is available online at www.ucdenver.edu/education.

Degree

The master of arts degree in counseling psychology and counselor education prepares professionals for community/mental health agencies, private practice and public schools. Students should obtain faculty advising regarding requirements.

Programs consist of 63 semester hours (66 for the multicultural/diversity strand). Core requirements that are common to all areas of study are followed by courses specific to each program. All programs require a practicum (150 clock hours) and an internship (600 clock hours). For most students, the master's degree is a three-year program with course work for two years followed by a year of practicum and internship. All beginning students enroll in CPCE 5010 - Counseling Theories. The clinical mental health counseling, school counseling and couple and family therapy programs are nationally accredited by CACREP, the Council for the Accreditation of Counseling and Related Educational Programs.

All students are expected to have online computer capability for communication and instructional purposes. For students in off-campus programs, some courses may be offered via computer technology.

Admission Requirements

Successful applicants to the counseling psychology and counselor education (CPCE) program will have obtained a minimum 2.75 undergraduate GPA and will score at least 900 on the verbal and quantitative sections of the GRE or at least 396 on the Miller Analogy Test. Also, applicants will submit a current resume, a statement of goals and four letters of recommendation (academic letters strongly advised). Applicants meeting these minimum standards will be invited to a half-day group interview that involves program orientation, small group interviews, a writing assignment and a group exercise.

Application materials are available by calling the Student Services Center at 303-315-6300 or coming to Lawrence Street Center, Suite 701. All materials must be submitted to the Student Services Center in one complete packet by the appropriate deadline: September 15 for spring semester; January 15 for summer and fall semesters.

Application materials include the following:

- part I of the application for admission
- tuition classification form
- \$50 application fee (make checks payable to the University of Colorado Denver)
- written statement
- four letters of recommendation - academic letters strongly advised (in sealed and signed envelopes)
- two official transcripts from each higher education institution attended (in original sealed envelope)
- official GRE or MAT scores sent directly to the University of Colorado Denver (if you do not already hold a graduate degree; see CPCE application checklist)
- oath and consent
- fingerprint card
- online written response

Matriculation Requirements

CPCE students must earn at least a B in skills-oriented courses (CPCE 5100, 5160, 6140, 7100, 5910, 5930) or must repeat these courses until they do so. In addition, all students must make a formal case presentation in CPCE 5930 (internship) to demonstrate their clinical knowledge. Students must also take a national comprehensive examination (after 30 semester hours). Students may opt to write a research-based thesis instead of taking the national written examination.

Program Areas

Students accepted into the CPCE program follow one of three programs offering counseling psychology and counselor education. The couple and family therapy program follows licensure requirements designated by the state of Colorado for licensure as a marriage and family therapist. The clinical mental health counseling program follows state licensure requirements for licensed professional counselor, and the school counseling program follows state department of education licensure requirements.

Program Areas

Counseling Psychology and Counselor Education Core

(required in all program areas)

CPCE 5010 - Counseling Theories

Summer 2010 Registration **CPCE 5010**

Focuses on counseling theories: Psychodynamic, Adlerian, Person-Centered, Existential, Behavioral, including DBT, Cognitive Behavioral, Gestalt, & Reality Therapy. Also includes an overview of the history of the counseling profession and the role and function of counselors in various settings. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CPCE 5100 - Techniques of Counseling

Summer 2010 Registration **CPCE 5100**

Students practice basic counseling skills, develop therapeutic intervention strategies, and improve the effectiveness of their communication by practicing listening and responding. Videotaped role-plays are utilized. Prereq: CPCE 5010. **Semester Hours:**

3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CPCE 5110 - Group Counseling

Summer 2010 Registration **CPCE 5110**

Learn group theory and dynamics. Practice facilitating a group. Learn about screening, group membership and styles, roles and behavior, termination of groups. Extensive practice in laboratory setting. Prereq: CPCE 5010 and CPCE 5100. **Semester Hours:**

3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CPCE 5150 - Family Therapy Theory

Summer 2010 Registration **CPCE 5150**

Introduces couple and family theories and intervention strategies. Emphasis on historical development of systems theory. Prereq: CPCE 5010. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CPCE 5330 - Counseling Issues and Ethics

Summer 2010 Registration **CPCE 5330**

An in-depth examination of ethical and legal issues in the field. Topics include working with individuals and family systems, licensure, professional associations, record keeping and statutory requirements. Prereq: CPCE 5010 and CPCE 5100. **Semester Hours:** 3to

3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CPCE 5400 - Career Development

Summer 2010 Registration **CPCE 5400**

Development of competencies in career development counseling. Theories of work systems, psychological dynamics, information systems, and decision making models are covered. Interacting with work or family systems and other subsystems is emphasized. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CPCE 5810 - Multicultural Counseling Issues for Individuals and Families

Summer 2010 Registration **CPCE 5810**

Students engage in an in-depth racism, White privilege and other "isms," and assumptions as applied to ethnic-racial populations. Students learn alternative approaches to counseling African Americans, Asian Americans, Latino(a)s, American

Indians, women, gays and lesbians. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CPCE 5910 - Practicum in CPCE

Summer 2010 Registration **CPCE 5910**

Supervised counseling practice in the counseling lab and appropriate settings (150 clock hours). Emphasis on individual and group counseling techniques and therapeutic intervention strategies. Prereq: all counseling course work must be completed. **Semester**

Hours: 6to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

CPCE 5930 - Internship in Counseling

Summer 2010 Registration **CPCE 5930**

Psychology and Counselor Education. Supervised internship of 600 clock hours. Intern performs activities of a regularly employed professional in an approved community site. Prereq: Satisfactory completion of CPCE 5910. **Semester Hours:** 1to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

EPSY 6200 - Human Development Over the Life Span

Summer 2010 Registration **EPSY 6200**

An inquiry into the experience and meaning of human development over the full span of life. Both analytical and reflective modes of exploration are utilized to approach the study of personhood and the courses and themes of life. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

RSEM 5200 - Introduction to Research Methods

Summer 2010 Registration **REM 5200**

Examines the purposes of research, the methods and designs of quantitative and qualitative research, and the processes involved in research studies. The methods of research examined include experimental designs, quasi-experimental designs, descriptive surveys, case studies, ethnographies and correlational designs. Designing a research study is a part of the course activities. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

RSEM 5300 - Introduction to Measurement

Summer 2010 Registration **REM 5300**

A first-level course that examines the nature and purpose of psychological measurement. Particular attention is paid to the concepts of reliability, validity, norms, interpretation of scores, response sets, fairness in testing, and norm-referenced vs.

criterion-referenced interpretation of scores. A variety of instruments that are used to measure human attributes and behaviors are studied. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 42 Hours

Additional Requirements for Program Area One: Clinical Mental Health Counseling (MA)

CPCE 5160 - Techniques in Family Therapy

Summer 2010 Registration **CPCE 5160**

Intervention strategies with families. Emphasis on application of techniques evolving from treatment models. Video-taped role plays are utilized. Prereq: CPCE

5150. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CPCE 5280 - Addictions Counseling

Summer 2010 Registration **CPCE 5280**

Includes treatment strategies for clinicians in addressing varieties of addictive behaviors including substance, abuse, eating disorders, gambling and sexual addiction. Cultural dimensions of addictions are also considered. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CPCE 5820 - Strategies of Agency Counseling

Summer 2010 Registration **CPCE 5820**

Students learn the role and function of the counselor in community agency settings.

Intervention strategies, consultation, administration of community mental health agencies. Prereq: CPCE 5010. **Semester Hours:** 3to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

CPCE 6250 - Mental Health Diagnosis

Summer 2010 Registration **CPCE 6250**

Students develop a professional level of understanding of the major disorders commonly subsumed under the term "psychopathology." Classification of disorders in the DSM IV is utilized. Treatment alternatives are discussed. Prereq: CPCE 5010 and CPCE 5100 or permission of instructor. Cross-listed with EPSY 6250. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CPCE 7100 - Advanced Theories and Techniques in Psychotherapy

Summer 2010 Registration **CPCE 7100**

Learn and practice advanced techniques for addressing adult and adolescent clinical problems. Examine efficacy research on specific counseling techniques as associated with particular approaches in counseling. Prereq: CPCE 5010, 5100, 5820 and 6250. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Two Electives (6 semester hours)

Total: 21 Hours

Additional Requirements for Multicultural/Diversity Strand in Clinical Mental Health Counseling

CPCE 5160 - Techniques in Family Therapy

Summer 2010 Registration **CPCE 5160**

Intervention strategies with families. Emphasis on application of techniques evolving from treatment models. Video-taped role plays are utilized. Prereq: CPCE 5150. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CPCE 5280 - Addictions Counseling

Summer 2010 Registration **CPCE 5280**

Includes treatment strategies for clinicians in addressing varieties of addictive behaviors including substance, abuse, eating disorders, gambling and sexual addiction. Cultural dimensions of addictions are also considered. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CPCE 5820 - Strategies of Agency Counseling

Summer 2010 Registration **CPCE 5820**

Students learn the role and function of the counselor in community agency settings. Intervention strategies, consultation, administration of community mental health agencies. Prereq: CPCE 5010. **Semester Hours:** 3to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

CPCE 5830 - Special Topics: 5830-5839

Summer 2010 Registration **CPCE 5830**

Specific topics vary from semester to semester. Intervention strategies with children,

issues in abuse, violence, incest, legal issues, adult counseling, grief, death and dying, private practice. **Semester Hours:** 1to 6
Registration is changing. Visit our website for details ucdenver.edu/registration.

CPCE 6250 - Mental Health Diagnosis

Summer 2010 Registration **CPCE 6250**

Students develop a professional level of understanding of the major disorders commonly subsumed under the term "psychopathology." Classification of disorders in the DSM IV is utilized. Treatment alternatives are discussed. Prereq: CPCE 5010 and CPCE 5100 or permission of instructor. Cross-listed with EPSY 6250. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CPCE 7100 - Advanced Theories and Techniques in Psychotherapy

Summer 2010 Registration **CPCE 7100**

Learn and practice advanced techniques for addressing adult and adolescent clinical problems. Examine efficacy research on specific counseling techniques as associated with particular approaches in counseling. Prereq: CPCE 5010, 5100, 5820 and 6250. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CPCE 6100 - Spiritual Dimensions of Counseling

Summer 2010 Registration **CPCE 6100**

A didactic and experiential course involving the following content areas: theories of spiritual development, a survey of religious traditions, assessment, ethical issues, self-of-the-therapist issues, and treatment interventions and strategies in working with clients' values. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CPCE 6810 - Advanced Multicultural Counseling

Summer 2010 Registration **CPCE 6810**

Offers essential preparation for competent multicultural counseling practice with racially diverse clients in an urban setting. Students learn, build and practice effective multicultural counseling skills. Explores the impact of race and ethnicity on individual behavior, interpersonal relationships and learn techniques for addressing these issues in counseling. Prereq: CPCE 5810. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 24 Hours

Additional Requirements for Program Area Two: Public School Counseling Certificate (MA)*

CPCE 5280 - Addictions Counseling

Summer 2010 Registration **CPCE 5280**

Includes treatment strategies for clinicians in addressing varieties of addictive behaviors including substance, abuse, eating disorders, gambling and sexual addiction. Cultural dimensions of addictions are also considered. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CPCE 5420 - Organizational Development

Summer 2010 Registration **CPCE 5420**

Organizational development and theory. The development and implementation of counseling programs in school settings, program development, implementation, consultation, and evaluation. Individual program evaluation projects required for course completion. Prereq: CPCE 5010 or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CPCE 5815 - Introduction to School Counseling

Summer 2010 Registration **CPCE 5815**

This course emphasizes the unique and varied role of the school counselor and school counseling programs in diverse public schools. The course focus will be on learning the various skills necessary to meet the needs of school age students and others in the school community. In addition, the course will cover The ASCA model of comprehensive developmental school counseling activities, and focus on practical resources for counseling students in diverse school settings. Prereq: CPCE 5010. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CPCE 5915 - Practicum in School Counseling

Summer 2010 Registration **CPCE 5915**

This class will provide school track students with 3 credits of fieldwork at a developmental level of their choice. The course will require students to work with a school counselor activities that the counselor is assigned under supervision. Students will develop skills in needs assessment, developing classroom guidance activities and running the activities; they will sit in on IEP conferences, help conduct college fairs, administer career assessment inventories and standardized assessments, learn to place students in appropriate classes, and provide responsive counseling services on an as needed basis. Prereq: CPCE 5010, CPCE 5110, CPCE 5400, CPCE 5420, CPCE 5810,

CPCE 5815, CPCE 6220. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CPCE 6140 - Counseling Children, Adolescents and Their Parents

Summer 2010 Registration **CPCE 6140**

A didactic and experiential course addressing child, adolescent, and parental/family issues. Counseling techniques, including play therapy, and parent education are taught and practiced. Assessment tools and specific strategies are used to increase positive family relationships. Prereq: CPCE 5010, CPCE 5100, CPCE 5150 and EPSY 6200. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CPCE 6220 - Youth Challenges and Resiliency

Summer 2010 Registration **CPCE 6220**

Provides the student with theory and practical exposure to contemporary youth at risk. Focuses on prevention and intervention with youth at risk from a counseling perspective. Prereq: CPCE 5010 and 5100. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CPCE 6250 - Mental Health Diagnosis

Summer 2010 Registration **CPCE 6250**

Students develop a professional level of understanding of the major disorders commonly subsumed under the term "psychopathology." Classification of disorders in the DSM IV is utilized. Treatment alternatives are discussed. Prereq: CPCE 5010 and CPCE 5100 or permission of instructor. Cross-listed with EPSY 6250. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 21 Hours

* Students without teaching experience must accumulate 10 hours of observation time in a school setting. Three hundred of the 600 hours of internship must be in a concentrated environment. Full time experience consisting of at least a four-hour block of time each day is required. Students may not do their concentrated experience in their teaching building. Three hundred (300) hours of concentrated experience are needed at both the middle and secondary level for a K–12 program. CPCE 5150, 6140 and 7100 are necessary for students to work with school-related family issues, individual counseling and children's counseling in practicum and internship. CPCE 5160 is necessary prior to couple and family therapy. Ten hours of laboratory experiences working with youth are required as part of this course.

Additional Requirements for Program Area Three: Couple and Family Therapy (MA)

CPCE 5160 - Techniques in Family Therapy

Summer 2010 Registration **CPCE 5160**

Intervention strategies with families. Emphasis on application of techniques evolving from treatment models. Video-taped role plays are utilized. Prereq: CPCE 5150. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CPCE 5170 - Issues In Family Studies

Summer 2010 Registration **CPCE 5170**

A systemic overview of current family configurations and issues families face in today's society, including gender, intimate partner violence, step-families, grief, loss, divorce, homelessness and others. The course includes life cycle approaches and normal family processes. Prereq: CPCE 5010 and CPCE 5150. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CPCE 5180 - Counseling Couples

Summer 2010 Registration **CPCE 5180**

A didactic and experiential course dealing with techniques of couples counseling. Emphasis is on assessment, diagnosis and treatment of couples' problems. Special topics include gay and lesbian couples, cross-cultural couples, remarried couples, cohabiting couples and the effectiveness of couple therapy. Prereq: CPCE 5010, 5100, 5150 and 5160. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CPCE 6000 - Introduction to Sex Therapy

Summer 2010 Registration **CPCE 6000**

Provides an overview of human sexuality over the life cycle, addressing social, psychological, and physiological aspects of human sexuality. Etiology of human sexuality diagnoses and treatment of problems related to human sexuality are addressed. Note: This course is a component in the couple and family program and required for MFT licensure. Prereq: CPCE 5010, CPCE 5100, CPCE 5150 and CPCE 5160 may be taken concurrently. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CPCE 6140 - Counseling Children, Adolescents and Their Parents

Summer 2010 Registration **CPCE 6140**

A didactic and experiential course addressing child, adolescent, and parental/family issues. Counseling techniques, including play therapy, and parent education are taught and practiced. Assessment tools and specific strategies are used to increase positive family relationships. Prereq: CPCE 5010, CPCE 5100, CPCE 5150 and EPSY 6200.

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CPCE 6160 - Advanced Assessment: Theory and Treatment in Family Systems

Summer 2010 Registration **CPCE 6160**

Emphasis is on family diagnosis or assessment and treatment and psychological processes. Major family therapy assessment methods and instruments are covered, as well as experiential application of advanced intervention strategies. Prereq: CPCE 5010, 5100, 5150, 5160 and RSEM 5300.

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CPCE 6250 - Mental Health Diagnosis

Summer 2010 Registration **CPCE 6250**

Students develop a professional level of understanding of the major disorders commonly subsumed under the term "psychopathology." Classification of disorders in the DSM IV is utilized. Treatment alternatives are discussed. Prereq: CPCE 5010 and CPCE 5100 or permission of instructor. Cross-listed with EPSY 6250.

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 21 Hours

Criminal Justice MCJ

Program Director: Mary Dodge, PhD

Faculty

Professors:

Mark Pogrebin, PhD, University of Iowa

Eric Poole, PhD, Washington State University

Associate Professors:

Mary Dodge, PhD, University of California, Irvine
Angela Gover, PhD, University of Maryland
Callie Rennison, PhD University of Houston
Paul Stretesky, PhD Florida State University

Assistant Professor:

Deanna Perez, PhD, University of Maryland

Associate Research Professor:

Jerry Williams, DPA, University of Colorado Denver

The master of criminal justice (MCJ) program is designed for students interested in comprehensive professional graduate education in the field of criminal justice. It is intended to develop in the student an in-depth understanding of the fields within criminal justice and of background material from supporting disciplines, which enables the student to adapt to many operational specializations.

As an academic and professional field of study, this program is dedicated to preparing men and women not only to administer the system as it presently exists—but also to evaluate, to analyze and to change—to become pioneers in accelerating the shaping of a rational and responsive criminal justice system.

To deal with this system effectively, research design capability must be developed along with the skills required for the ordering and analysis of empirical data. This course of study prepares the student to be an innovator in crime control and prevention through course work dealing with strategies and skills for promoting individual, organizational and social change.

MPA AND MCJ—General Information

Admission Requirements

1. A baccalaureate degree from a college or university of accredited standing, with a minimum GPA of 3.0. Two sets of official transcripts are required from all higher education institutions attended.
2. Three recommendations from qualified references. Recommendations may be from professors, employers and/or others acquainted with the prospective student's professional and/or academic work.
3. Applicants are required to take the GRE, the GMAT or the LSAT unless they meet the requirements for waiver. Standard graduate admission test scores are normally waived when the candidate already has a graduate degree in another

field from an accredited institution. Other applicants may have test scores waived if they have an undergraduate GPA of 3.0 or better *and* they have *significant* professional employment in management or policymaking positions for a minimum of 10 years or the equivalent.

4. A current resume highlighting professional accomplishments and community involvement.
5. International students whose first language is not English are required to take the TOEFL or IELTS. A score of 550 or higher on the paper-based exam or 213 or higher on the computer-based exam is required for the MPA or 525/197 for the MCJ.

All application material and test scores should be sent to SPA, University of Colorado Denver, Campus Box 142, P.O. Box 173364, Denver, CO 80217-3364.

SPA will process applications as they come in. Master-level applicants generally receive notification of their admission status three weeks after all materials have been received in the office. The preferred deadlines listed below allow students to receive best consideration for scholarships, financial aid and course selection. *Students who do not meet the preferred deadline may still submit application materials until approximately one month before the start of classes and will be considered on a space-available basis.*

<i>Semester</i>	<i>Preferred Application Deadline</i>	<i>Final Deadline*</i>
Fall	March 15	August 1
Spring	October 15	December 1
Summer	March 15	May 1

*Final deadline does not apply to international students who should contact the Office of International Admissions for deadline information.

Provisional Admission

Under special circumstances, a student may be admitted on provisional status for one semester. Students admitted on a provisional basis take two courses in their first semester. MPA students may select two of the following: PUAD 5001 , 5003 or 5004 . They may take no other courses during that semester. Based on their performance in these courses, a decision will be made concerning their admission into the program.

Nondegree Admissions

Students may register as nondegree students while developing their application packet. However, students are discouraged from taking many courses as a nondegree student if

they hope to pursue a degree. **Nine semester hours taken in the program as a nondegree student may be applied to the master's degree programs with approval of an advisor.** Nondegree student application forms are available in the Office of Admissions or online.

Transfer of Credit to SPA

Up to 9 semester hours of appropriate graduate work from an accredited college or university may transfer, if such credit was not applied to a completed degree.

Limitation of Course Load

The normal course load for a full-time student is 9 semester hours. A student who is employed full time may not carry more than 9 hours unless an excess load has been approved in advance by the faculty advisor.

Financial Assistance

Students in the master's degree programs are eligible for several types of financial assistance. Educational loans require application to the Office of Financial Aid on the Downtown Campus and completion of the FAFSA. A number of students secure internships or other part-time positions with local, state and federal agencies in the Denver metropolitan area. Scholarship assistance is available on a limited basis.

The school receives announcements for fellowships from various government organizations and actively seeks additional funding for student support in the form of internship positions and research assistantships.

Persons interested in applying for financial assistance should inquire in the SPA office. The deadline for current students is March 15 for the fall term. Prospective students seeking scholarship funds should have complete scholarship applications on file at the SPA office by the preferred application deadline for the semester they are requesting funds.

The Internship Program

An internship for the MPA and MCJ programs is required for students who have not had significant public, nonprofit or private-sector experience. The purpose of the internship is to continue the linkage between theory and practice that is the philosophical basis of SPA. The internships generally involve part-time work. A maximum of three semester hours will be awarded for internship service. Great care is taken by the SPA to ensure that the internship experience meets the intellectual needs of the student. Placements have included the Governor's Office, Colorado General Assembly, Denver Mayor's

Office, City of Denver, Denver Police Department, Boulder Crime Lab, Western Governor's Association, the National Conference of State Legislatures, the Colorado Department of Public Health and Environment and the Denver Center for the Performing Arts.

Time Limit for Master's Degree

Master's degree students must complete all course work and degree requirements within six years of registration in their first course.

Degree Requirements

1. Graduate Study

The program leading to the MCJ degree requires a minimum of 36 semester hours of appropriate graduate study with an average of B or better. No grade below C will be accepted for graduate credit. No more than 6 semester hours of independent study can be applied toward the degree.

2. Core Courses

The completion of the following core courses is required with a grade of B- or better:

CRJU 5000 - Law and Social Control

Summer 2010 Registration **C J 5000**

Provides an overview of the theory and application of criminal law in the context of social control. The course reviews various theoretical perspectives on law and society, focusing on the relationship between law and the structure and function of other social institutions. The course also examines aspects of the criminal law in action, assessing how legal definitions and sanctions are differentially interpreted and applied. Cross-listed with CRJU 7000. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 5100 - Administration of Criminal Justice

Summer 2010 Registration **C J 5100**

Analyzes the policies and practices of agencies involved in the criminal justice process, from the detection of crime and arrest of suspects through prosecution, adjudication, sentencing and imprisonment, to release. The patterns of decisions and practices are reviewed in the context of a systems approach. Cross-listed with CRJU 7100. **Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 5120 - Nature and Causes of Crime

Summer 2010 Registration **C J 5120**

Analyzes the social origins of criminal behavior and the impact of crime on society. Various categories of deviant, delinquent, and criminal behaviors are examined, and attempts to control such behavior are assessed. Connections between social institutions, social problems, and illegal activities, and the response of the public to the threat of crime are examined. Cross-listed with CRJU 7120. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 5321 - Research Methods

Summer 2010 Registration **C J 5321**

Provides an assessment of research strategies in criminal justice through an examination of applied research designs and analytical models. The logic and rationale of these various strategies are contrasted, and their relative merits are critiqued. Selected research problems in the criminal justice system are utilized to illustrate the application and interpretation of alternative strategies. Cross-listed with CRJU

7321. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 12 Hours

3. Course Work

Students must complete a minimum of 27 semester hours of course work in criminal justice.

4. Criminal Justice Experience

Students who have not had criminal justice experience are required to complete CRJU 6910 (field study). A minimum of 240 hours of supervised work is required to earn 3 hours of credit. All required core courses must be completed before taking CRJU 6910.

5. Advanced Seminar

All MCJ students, except those pursuing the thesis option, must complete the advanced seminar during the last semester of their degree program. All core classes must be

completed before taking the advanced seminar. Students admitted before spring 2009 may opt to take a written comprehensive exam in lieu of CRJU 5561.

CRJU 5561 - Advanced Seminar in Criminal Justice

Summer 2010 Registration **C J 5561**

In this seminar, students demonstrate their mastery of the knowledge and skills acquired in core courses, as applied to either their chosen program concentration or individualized program, by conducting a Program Integration Project. The PIP may be either an independent research project or client-oriented project. Students also make a juried oral presentation of the professional paper which reports project findings. This is the cumulative opportunity for students to apply concepts and theory to professional practice, and thus should be taken at or near the end of a student's program of study.

Prereq: CRJU 5000, CRJU 5100, CRJU 5120, CRJU 5321. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Students must receive the approval of both a faculty advisor and the director of the criminal justice program to complete a thesis for 3–6 semester hours in lieu of the advanced seminar.

Elective Courses

The courses listed below may be taken as electives for the MCJ degree:

CRJU 5200 - Wrongful Convictions

Summer 2010 Registration **C J 5200**

This seminar examines the dark figure of the criminal justice system; wrongful convictions of innocent people. This course explores the continuum of justice-system errors ranging from persons who are falsely accused (arrested, prosecuted, and tried) to those who are wrongly convicted and imprisoned, to death row inmates who are erroneously executed. Cross-listed with CRJU 7200. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 5210 - Prisoner Reentry

Summer 2010 Registration **C J 5210**

This seminar examines the harsh realities of prisoner reentry and offers solutions to prepare inmates for release, reduce recidivism, and restore them to adjustment once back in the community, while simultaneously meeting the demands of public safety.

Cross-listed with CRJU 7210. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 5220 - The American Jury System

Summer 2010 Registration **C J 5220**

This seminar examines historical and current issues in jury decision making and dynamics. The course explores issues such as jury size, eyewitness testimony, and jury reform. Court decisions are examined as a comprehensive understanding of jurors and their role. Cross-listed with CRJU 7220. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 5250 - Criminal Offenders

Summer 2010 Registration **C J 5250**

Crime can have a devastating effect on the lives of victims, families and communities with extraordinary costs to society as a whole. Documented evidence suggests that community safety is best achieved through promoting rehabilitation of offenders rather than relying solely on prisons and containment. This course introduces the core principles and tools of motivational interviewing as it is used currently with the offender population. Students learn how to utilize these skills working with specific offender populations and how to motivate these often resistive clients to change their thinking patterns and behaviors. Cross-listed with CRJU 7250. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 5260 - Crime and Literature

Summer 2010 Registration **C J 5260**

This seminar focuses on non-fiction literature as it relates to criminality and the Criminal Justice System. A substantial number of people in the United States form impressions and evaluate the effectiveness of the Criminal Justice System based on accounts presented within various types of nonfiction literature, either as social commentary or in biographical/autobiographical form. This course explores samples of these types of commentary, in order to more fully understand and appreciate their impact on shaping public opinion of the Criminal Justice System. Cross-listed with CRJU 7260. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 5325 - Qualitative Methods for Criminal Justice

Summer 2010 Registration **C J 5325**

Focuses on qualitative methods applicable to research in the field of criminal justice. The primary focus is on ethnographic approaches employing such fieldwork techniques as observation, participant observation, interviews, content analysis, life histories and case studies. Cross-listed with CRJU 7325. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 7325 - Qualitative Methods for Criminal Justice

Summer 2010 Registration **C J 7325**

Focuses on qualitative methods applicable to research in the field of criminal justice. The primary focus is on ethnographic approaches employing such fieldwork techniques as observation, participant observation, interviews, content analysis, life histories and case studies. Cross-listed with CRJU 5325. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 5410 - Victimology

Summer 2010 Registration **C J 5410**

This course examines victim-offender relationships, the interactions between victims and the criminal justice system and the connections between victims and other social groups and institutions among various populations. This course addresses the theory, history, research, legislation and policy implications related to the social construction of "The Victim." Cross-listed with CRJU 7410. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 5430 - Drugs, Alcohol and Crime

Summer 2010 Registration **C J 5430**

This course provides an interdisciplinary overview of theory, research and policy issues surrounding the relationship between drugs, alcohol and crime; and the criminal justice system response. The course explores the socially constructed nature of illegal substances and connections to U.S. drug policy. Cross-listed with CRJU 7430. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 5510 - Contemporary Issues in Law Enforcement

Summer 2010 Registration **C J 5510**

Examines current thinking and experience with respect to changing and reforming police programs and practices. The course focuses primarily on the American police experience, reviewing major innovations, exploring their rationale, and examining organizational impediments to their implementation. Cross-listed with CRJU 7510. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 7510 - Seminar: Contemporary Issues in Law Enforcement

Summer 2010 Registration **C J 7510**

Examines current thinking and experience with respect to changing and reforming police programs and practices. The course focuses primarily on the American police experience, reviewing major innovations, exploring their rationale, and examining organizational impediments to their implementation. Cross-listed with CRJU

5510.Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 5520 - Corrections

Summer 2010 Registration **C J 5520**

Provides a critical examination of the development and implementation of correctional systems in America. The course presents the origins of correctional efforts and the evolution of the prison; reviews punishment and rehabilitation rationales in the context of sentencing models; examines the social organization of the prison, including inmate subcultures and staff work strategies; and assesses the inmates' rights movement and the impact of judicial intervention in correctional settings. Cross-listed with CRJU

7520.Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 7520 - Seminar: Corrections

Summer 2010 Registration **C J 7520**

Provides a critical examination of the development and implementation of correctional systems in America. The course presents the origins of correctional efforts and the evolution of the prison; reviews punishment and rehabilitation rationales in the context of sentencing models; examines the social organization of the prison, including inmate subcultures and staff work strategies; and assesses the inmates' rights movement and the impact of judicial intervention in correctional settings. Cross-listed with CRJU

5520.Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 5530 - Community Corrections

Summer 2010 Registration **C J 5530**

Analyzes the theories and practices of probation and parole, responses of paroling authorities to public pressures and court controls, and their implications for rehabilitation. Efforts to bridge institutional settings and community life, as well as the feasibility and effectiveness of treating individuals under sentence in the community, are reviewed. Cross-listed with CRJU 7530.

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 7530 - Seminar: Community Corrections

Summer 2010 Registration **C J 7530**

Analyzes the theories and practices of probation and parole, responses of paroling authorities to public pressures and court controls, and their implications for rehabilitation. Efforts to bridge institutional settings and community life, as well as the feasibility and effectiveness of treating individuals under sentence in the community, are reviewed.

Cross-listed with CRJU 5530. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 5540 - Juvenile Justice Administration

Summer 2010 Registration C J 5540

Examines the policies and practices of agencies in processing youthful offenders through the juvenile court system, reviews trends in juvenile justice policymaking, and assesses changes in response to juvenile crime by both the juvenile justice and criminal justice systems. Cross-listed with CRJU 7540. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 7540 - Seminar: Juvenile Justice Administration

Summer 2010 Registration C J 7540

Examines the policies and practices of agencies in processing youthful offenders through the juvenile court system, reviews trends in juvenile justice policy making, and assesses changes in response to juvenile crime by both the juvenile justice and criminal justice systems. Cross-listed with CRJU 5540. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 5552 - Criminal Justice Ethics

Summer 2010 Registration C J 5552

Offers a normative framework within which to explore ways to increase sensitivity to the demands of ethical behavior among criminal justice personnel. The application of a normative perspective enhances the possibility that moral problems are better understood, more carefully analyzed, and rendered more tractable applied ethics forces a reflection not just on ethics, but also on the nature and operation of the criminal justice system itself. Cross-listed with CRJU 7552. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 7552 - Seminar: Criminal Justice Ethics

Summer 2010 Registration C J 7552

Offers a normative framework within which to explore ways to increase sensitivity to the demands of ethical behavior among criminal justice personnel. The application of a normative perspective enhances the possibility that moral problems are better understood, more carefully analyzed, and rendered more tractable. Applied ethics forces a reflection not just on ethics, but also on the nature and operation of the criminal justice system itself. Cross-listed with CRJU 5552. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 5553 - Women and Crime

Summer 2010 Registration C J 5553

Explores issues surrounding women as offenders, victims, and criminal justice professionals. Investigates explanations for the involvement of women in illegal activities. Analyzes the plight of battered women, rape victims, and other female victims. Examines the participation of women in law enforcement judicial processes, corrections and lawmaking. Cross-listed with CRJU 7553. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 7553 - Seminar: Women and Criminal Justice

Summer 2010 Registration C J 7553

Explores issues surrounding women as offenders, victims, and criminal justice professionals. Investigates explanations for the involvement of women in illegal activities. Analyzes the plight of battered women, rape victims, and other female victims. Examines the participation of women in law enforcement, judicial processes, corrections and lawmaking. Cross-listed with CRJU 5553. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 5554 - Criminal Justice Reform

Summer 2010 Registration C J 5554

Provides an overview of reform efforts in the criminal justice system. Selected theoretical approaches and policies are examined and assessed in light of their assumptions and programmatic applications. The rational and process underlying selected reform strategies are explored. The implications of the effects of reform in criminal justice policy making and decision making are analyzed. Cross-listed with CRJU 7554. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 7554 - Seminar: Criminal Justice Reform

Summer 2010 Registration C J 7554

Provides an overview of reform efforts in the criminal justice system. Selected theoretical approaches and policies are examined and assessed in light of their assumptions and programmatic applications. The rational and process underlying selected reform strategies are explored. The implications of the effects of reform in criminal justice policy making and decision making are analyzed. Cross-listed with CRJU 5554. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 5571 - The Social Organization of Crime

Summer 2010 Registration C J 5571

Explores the relationship of neighborhood social disorganization to the dynamics of crime from a social ecology perspective. The course examines the underlying social causes of phenomena such as criminal victimization, violent and property crime, neighborhood fear, neighborhood deterioration, and recidivism. The course examines social, structural, and ecological characteristics of neighborhoods and communities in affecting crime. Cross-listed with CRJU 7571. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 7571 - Advanced Seminar: The Social Organization of Crime

Summer 2010 Registration C J 7571

Explores the relationship of neighborhood social disorganization to the dynamics of crime from a social ecology perspective. The course examines the underlying social causes of phenomena such as criminal victimization, violent and property crime, neighborhood fear, neighborhood deterioration and recidivism. The course examines social, structural, and ecological characteristics of neighborhoods and communities in affecting crime. Cross-listed with CRJU 5571. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 5572 - Race, Crime and Justice

Summer 2010 Registration C J 5572

Examines the role of race in criminal justice processing. This course examines the research findings, interpretations, issues, and implications in assessing the impact of race in the administration of criminal justice. Explores the policy implications concerning the nature and extent of racial disparities in the criminal justice system and lays out a research agenda to more strategically address these issues within criminal justice policy making. Cross-listed with CRJU 7572. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 7572 - Advanced Seminar: Race, Crime and Justice

Summer 2010 Registration C J 7572

Examines the role of race in criminal justice processing. This course examines the research findings, interpretations, issues, and implications in assessing the impact of race in the administration of criminal justice. Explores the policy implications concerning the nature and extent of racial disparities in the criminal justice system and lays out a research agenda to more strategically address these issues within criminal justice policy making. Cross-listed with CRJU 5572. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 5574 - White Collar Crime

Summer 2010 Registration **C J 5574**

Employs both the social science and legal approaches to examine crime committed by corporations as well as by individuals in white collar occupations. The course covers how such crimes are socially defined, who commits them, who is victimized by them, which social contexts promote them, and how society and the criminal justice system respond to them. Cross-listed with CRJU 7574. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 7574 - Advanced Seminar: White Collar Crime

Summer 2010 Registration **C J 7574**

Employs both the social science and legal approaches to examine crime committed by corporations as well as by individuals in white collar occupations. The course covers how such crimes are socially defined, who commits them, who is victimized by them, which social contexts promote them, and how society and the criminal justice system respond to them. Cross-listed with CRJU 5574. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 5575 - The Mentally Disordered Offender

Summer 2010 Registration **C J 5575**

Examines the offender who may be mentally disordered. A survey is made of the various phases of the criminal justice system where psychiatrists are involved, e.g., diversion, fitness, insanity and sentencing. Dangerous sex offender legislation, "Not guilty by reason of insanity" and "Guilty but mentally ill" statutes, and issues concerning confidentiality, informed consent, and treatment are addressed. Cross-listed with CRJU 7575. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 7575 - Advanced Seminar: The Mentally Disordered Offender

Summer 2010 Registration **C J 7575**

Examines the offender who may be mentally disordered. A survey is made of the various phases of the criminal justice system where psychiatrists are involved, e.g., diversion, fitness, insanity and sentencing. Dangerous sex offender legislation, "Not guilty by reason of insanity" and "Guilty but mentally ill" statutes, and issues concerning confidentiality, informed consent, and treatment are addressed. Cross-listed with CRJU 5575. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MCJ Options

Concentration in Domestic Violence

A student may choose to complete a concentration in domestic violence as part of the MCJ degree. The concentration provides an interdisciplinary perspective on crime, the formulation of laws and codes, the criminal legal system and its intersection with women and violence. Students seeking a domestic violence concentration must complete 15 semester hours related to domestic violence, which are completed via intensive workshops that meet periodically throughout a two-year period.

PUAD 5910 - Women and Violence: A Sociological Perspective

Summer 2010 Registration **P AD 5910**

This course is a sociological, feminist analysis of violence against women and girls that addresses the intersection of sexism and other forms of oppression such as racism, classism and heterosexism within historical, cultural, social and institutional contexts. Topics covered focus on overt and covert forms of sexual coercion, harassment and assault, battering and stalking. Cross-listed with PUAD 7910, CRJU 5910 and 7910. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 5920 - Psychology of Violence Against Women

Summer 2010 Registration **P AD 5920**

This class addresses the contributions and the limitations of current empirical and clinical psychological literatures about domestic violence. Topics covered include: distinguishing among mental health professionals regarding work with DV clients; the psychological impacts of domestic violence; services useful for responding to the needs of women and children; and an introduction to the psychology and treatment of batterers. Cross-listed with PUAD 7920, CRJU 5920 and 7920. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 5930 - Battered Women and the Legal System

Summer 2010 Registration **P AD 5930**

This course provides a practical understanding of how the following relate to battered women and their children: (a) major developments in federal, state, tribal, administrative, statutory and case law; (b) the role and responses of law enforcement, judges, attorneys, victim assistance providers and other legal system agents; and (c) the role and process of victim advocacy. Cross-listed with PUAD 5930, CRJU 5930 and 7930. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 5940 - Domestic Violence Social Change and Advocacy

Summer 2010 Registration **P AD 5940**

This course provides students information on the theories and strategies behind contemporary social change movements and the skills necessary to organize and implement actions to influence public awareness and policy. The values of American society are complex and require advocates/activists to develop a heightened sense of self, community and an ethical framework while confronting sexism, racism and other forms of oppression. Cross-listed with PUAD 7940, CRJU 5940 and 7940. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Elective (1) (3 semester hours)

Total: 15 Hours

Online Option

SPA is launching an online option for the master of criminal justice degree in 2010.

Designed to serve students who are looking for a high-quality education, but who need an alternative to traditional classroom instruction, students may elect to do one or all of their courses online. This option allows students to complete the entire degree at a distance or to choose to come to campus for some courses while using an interactive online format for others. For both in-state and out-of-state online students, tuition is comparable to the rate charged to in-state students for courses that meet in the classroom.

Curriculum and Pedagogy MA

Office: Lawrence Street Center, 701

Telephone: 303-315-6300

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E-mail: education@ucdenver.edu

Web site: www.ucdenver.edu/education

Faculty

Information about faculty is available online at www.ucdenver.edu/education/c&p.

Areas of Study

Curriculum and Pedagogy
Master of Arts for Practicing Teachers
Science-Math-Social Studies

The curriculum and pedagogy (C&P) studies lead to an advanced master's degree in curriculum and instruction. All programs require 36 semester hours, including the C&P core or its equivalent. The core courses provide a sound basis in curriculum theory, teacher inquiry, appreciation of diversity and philosophical foundations. The various specializations allow teachers to focus in an area of interest.

Elementary teachers take the math and science concentration. Secondary teachers may choose mathematics, science or social studies.

Each of these programs is designed to prepare teachers to qualify for master certification from the National Board of Professional Teaching Standards, as well as prepare for licensure renewal with the Colorado Department of Education.

**Core (Required in Elementary Math and Science,
Secondary Science, Secondary Math and Secondary
Social Studies)**

ELED 6110 - Curriculum Development and School Improvement

Summer 2010 Registration **ELED 6110**

Places curriculum development in the historical, social, and political context of educational change, considering underlying concepts and assumptions, and examining the implications of implementation theory and practice for school restructuring and professional development. Prereq: Graduate student status. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

SECE 6110 - Curriculum in Urban Studies

Summer 2010 Registration **SECE 6110**

Places curriculum development in the historical, social, and political context of educational change. Considers underlying concepts and assumptions, examines the implications of implementation theory and practice for school restructuring, and professional development. Prereq: graduate student status. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FNDS 5050 - Critical Issues in American Education

Summer 2010 Registration **FNDS 5050**

Examines the social values and forces in American society which shape or influence the aims, philosophies, methods, content, and problems of the American educational

enterprise. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

RSEM 5XXX - One 5000-level course in research and evaluation methodology.

Semester Hours: 3

Total: 9 Hours

Elementary Math and Science

24 semester hours of electives, chosen with advisor's approval (24 semester hours)

Elementary emphasis required course

SECE 5500 - The Nature of Science

Summer 2010 Registration **SECE 5500**

This course is a critical exploration of science and scientific knowledge using an epistemological approach to ask (and possibly answer) questions about sociological issues in science and implications for science research, teaching and learning. Cross-listed with ENVS 5500. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 36 Hours

Science (Secondary)

SECE 5340 - Multicultural Science Education

Summer 2010 Registration **SECE 5340**

This course examines literature in science education related to multicultural issues, topics will be framed by an understanding of equity in diverse, urban classrooms and how it informs curriculum and instruction. Cross-listed with ENVS 5340. **Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SECE 5350 - Issues and Problems in Science Education

Summer 2010 Registration **SECE 5350**

Recent developments in theory, curriculum, methods, and materials in secondary

science, examined for their contribution to the objectives of science education. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SECE 5500 - The Nature of Science

Summer 2010 Registration **SECE 5500**

This course is a critical exploration of science and scientific knowledge using an epistemological approach to ask (and possibly answer) questions about sociological issues in science and implications for science research, teaching and learning. Cross-listed with ENVS 5500. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SECE 5650 - Environmental Education

Summer 2010 Registration **SECE 5650**

Theory and practice of conservation education, which include use of resource personnel and the study of curricular and instructional development. Field experiences are incorporated. Primarily oriented to elementary and junior high school. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

15 hours of electives in science or education chosen with advisor's approval

Total: 36 Hours

Mathematics (Secondary)

SECE 5400 - Curriculum in Secondary Mathematics

Summer 2010 Registration **SECE 5400**

Investigates curriculum in middle and high school mathematics, development, history and trends, and pertinent research. Participants construct and share curriculum relevant to their interest. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SECE 5410 - Advanced Methods and Strategies in Secondary Mathematics

Summer 2010 Registration **SECE 5410**

An in-depth investigation of specific methods and strategies suitable for teaching mathematics for middle and senior high schools. Participants model and share various strategies, including the expository, collaborative discovery, laboratory, and Socratic methods. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SECE 5401 - Assessment in Mathematics Education

Summer 2010 Registration **SECE 5401**

Curriculum-based assessment covering nature of assessment and its relation to evaluation and grading; teacher-made assessments; validity and authentic assessment; techniques for assessing learning of mathematical concepts, procedures, and problem solving. Emphasis on assessment practices of mathematics teachers. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Choose three:

ELED 5416 - Math-Science Connections: Outdoor

Summer 2010 Registration **ELED 5416**

(Primarily for pre-secondary teachers.) Explores science concepts through outdoor activities appropriate for middle-grade students. Topics include how the nature of science and mathematics informs pedagogy, national and state standards, earth science and paleontology, orienteering and map usage, water analysis, astronomy and entomology. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SECE 5417 - Structure of Rational Numbers

Summer 2010 Registration **SECE 5417**

Emphasizes the use of multiple solution strategies to examine the structure of rational numbers. The assigned problems allow elementary and secondary teachers to investigate the mathematical notions of equivalence, properties, unitization, partitioning, ratios and proportionality. Prereq: Teaching license or permission of instructor. Cross-listed with ELED 5417. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SECE 5418 - Mathematical Modeling

Summer 2010 Registration **SECE 5418**

Elementary and secondary teachers explore settings where mathematics is utilized in everyday activities. Teachers create mathematical models to describe events or situations in the world and use a variety of modeling strategies to solve problems. Prereq: Teacher licensure or permission of instructor. Cross-listed with ELED 5418. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SECE 5419 - Exploring the Structure of Geometry Using Technology

Summer 2010 Registration **SECE 5419**

Develops elementary and secondary teachers' conceptual understanding of geometric properties and theorems through investigations on dynamic computer software. The software enhances and extends teachers' ability to solve complex problems by manipulating abstract ideas on the computer. Prereq: teaching license or permission of instructor. Cross-listed with ELED 5419. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

SECE 5420 - Teaching Mathematics to Low Achievers

Summer 2010 Registration **SECE 5420**

Problems and characteristics of low achievers, motivation, attitudes, scaffolding with available materials, programs for low achievers, self-esteem, mathematics laboratory and activity approach to teaching mathematics. Appropriate for all grades. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

SECE 5440 - Topics in Mathematics Education

Summer 2010 Registration **SECE 5440**

An in-depth study of topics such as computers, testing, learning theory and mathematics laboratories. (May be repeated as topics vary.) **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.
12 hours of electives from the School of Education & Human Development or the mathematics department, chosen with an advisor's approval

Total: 36 Hours

Social Studies (Secondary)

Below is a sample plan, please refer to the School of Education & Human Development Web site for the advising plan at www.ucdenver.edu/education/c&p.

HIST 5464 - Problems and Methods in Teaching History and Social Studies I

Summer 2010 Registration **HIST 5464**

Introduces students to problems and methods in secondary education history and social studies teaching. This course focuses primarily on the teaching of history. Note: Open to students in the Initial Professional Teacher Education program or a relevant graduate program, and to practicing teachers. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 5465 - Problems and Methods in Teaching History and Social Studies II

Summer 2010 Registration **HIST 5465**

Introduces students to problems and methods in secondary education history and social studies teaching. This course focuses broadly on the teaching of all the social studies fields, including history, economics, government, and geography. Note: Open to students in the Initial Professional Teacher Education program or a relevant graduate program, and to practicing teachers. Prereq: HIST 5464. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 5466 - Teaching About Ethnicity, Race, and Prejudice

Summer 2010 Registration **HIST 5466**

Examines the history of ethnic identity and race relations in North America and applies that knowledge to teaching practices. Questions how teachers should approach the topics of race, ethnicity, and discrimination in our collective history and society. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 6951 - Masters Project: Advanced History Curriculum Development

Summer 2010 Registration **HIST 6951**

Students develop curricula for secondary-level history courses; must demonstrate thorough knowledge of subjects; understanding of historiographic and methodological problems; command of primary sources and their uses in teaching; and describe teaching strategies, methods, and assessments to be used in the curricula. Prereq: Permission of instructor. **Semester Hours:** 1to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

EPSY 5XXX - Educational Psychology Elective. **Semester Hours:** 3

INTE 5XXX - Instructional Technology elective. **Semester Hours:** 3

9 semester hours of electives, chosen with advisor's approval: history, sociology, economics, education courses strongly recommended.

Total: 36 Hours

Comprehensive Exam

C&P programs requires a master's comprehensive exam that consists of a project or a comprehensive portfolio for the program completion requirement. Details may be obtained from your faculty advisor and from the "C&P Handbook" available at www.ucdenver.edu/education/c&p.

Decision Sciences MS

Program Director: Marlene A. Smith

Telephone: 303-315-8421

E-mail: Marlene.Smith@ucdenver.edu

The MS in decision sciences focuses on modeling and applications which prepares you for a career as a decision science specialist in industry or government. Today, companies in every conceivable industry are reaping the benefits of using formal mathematical models to assist them in addressing complex business problems. Decision science graduates hold positions that bridge the gap between operations research/statistics specialists and management.

Learn to apply quantitative methods to real-world problems using modern methodologies adopted from statistics, operations research, and management science. Although the MS in decision sciences is founded in operations research methods, it focuses on applications of these methods in the workplace rather than the development of new operations research techniques. The managerial emphasis of our degree is accomplished through a comprehensive set of elective and required course work such as data analysis, operations management, forecasting, project management, simulation and supply chain management. A required practicum course provides students with the opportunity (under the direction of faculty) to solve a real, complex workplace problem for a local Denver organization.

Requirements for the MS degree in decision sciences are met by the following courses and options:

Prerequisite course work:

Accounting: completion of BUSN 6550 or two undergraduate accounting courses with a grade of B- or better along with useable knowledge of spreadsheets.

Required Courses

BUSN 6530 - Data Analysis for Managers

Summer 2010 Registration **BUSN 6530**

Provides an overview of techniques for data analysis, including multiple regression, sampling theory and applications of probabilistic inference from sample data. The emphasis is upon the applications of these techniques to management problems. Students are required to analyze data sets, present their analyses in written or oral form and defend their conclusions. Note: Students cannot receive credit for both BUSN 6530

and FNCE 6290. **Semester Hours:** 3to 3**When Offered:** FASPRSUM
Registration is changing. Visit our website for details ucdenver.edu/registration.

BUSN 6630 - Management of Operations

Summer 2010 Registration **BUSN 6630**

This course is concerned with the production and delivery of goods and services. It provides an overview of a variety of key Operation Management issues including scheduling, capacity determination, facility location and layout, distribution and related topics. The use of model- assisted decision making is emphasized. **Semester Hours:** 3to 3**When Offered:** FASPRSUM

Registration is changing. Visit our website for details ucdenver.edu/registration.

DSCI 6820 - Project Management

Summer 2010 Registration **DSCI 6820**

Introduces the knowledge and skills of Project Management (PM) in a business environment. Emphasis will be on the entire project life cycle, the project management process groups and the knowledge areas as presented in the Project Management Body of Knowledge (PMBOK) from the Project Management Institute (PMI). Managerial aspects, quantitative tools and traditional techniques of Project Management will be covered. Application to various industries will be included. Note: cannot receive credit for both DSCI 6820 and BUSN 6820. Cross-listed with BUSN 6820 and URPL 6686. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

DSCI 6230 - Business Forecasting

Summer 2010 Registration **DSCI 6230**

Modern businesses use forecasts in marketing, finance, accounting, human resources management and supply chain and production management decision-making. This course focuses on practical application of forecasting techniques, choosing and comparing appropriate methods and applying the results to the business application. Note: Can only receive credit for either DSCI 6230, BUSN 6824, or FNCE 6372. Prereq: BUSN 6530 or FNCE 6290. Cross-listed with BUSN 6824 and FNCE 6372. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

DSCI 6460 - Decision Analysis

Summer 2010 Registration **DSCI 6460**

Examines business decision making under conditions of risk and uncertainty using quantitative decision analysis methods such as utility theory, value of information, decisions with conflicting objectives and hierarchical structured models. Applications

include decisions commonly encountered in capital acquisitions, financial investments, quality control, project selection, strategic planning, production control and human resource management. Student computer-assisted projects are conducted. Note: Cannot receive credit for both DSCI 6460 and BUSN 6836. Cross-listed with BUSN 6836. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

DSCI 6910 - Decision Sciences Practicum

Summer 2010 Registration **DSCI 6910**

Students apply decision science methodologies to a real-life business problem in cooperation with a local Denver organization. Under the supervision of faculty, students engage in problem definition, analysis and solution. Results are presented in oral and written form to the sponsoring organization. Prereq: Permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

DSCI Electives (12 semester hours)

Total: 30 Hours

Notes and Restrictions

Decision sciences electives must include at least two DSCI courses numbered 6000 or higher. Remaining decision sciences electives may be any of the following courses: DSCI 6000 or higher; MKTG 6050, Marketing Research; or FNCE 6480, Financial Modeling.

Students are not required to take a comprehensive examination or complete a thesis in the major field.

Early Childhood Education MA

Early Childhood Education

Office: Lawrence Street Center, 701

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E-mail: education@ucdenver.edu

Web site: www.ucdenver.edu/education

Faculty

More information about faculty in this division is available online at www.ucdenver.edu/education.

Early Childhood Education Program

The early childhood education (ECE) program leads to a master's degree in early childhood education (early childhood accomplished teacher focus) and/or licensure in early childhood special education (early childhood special education specialist). The program prepares leaders who will enrich the life experience of young children (birth to 8) and their families through a variety of professional roles.

ECE Program students may select from three program options:

1. MA in early childhood education
2. ECSE specialist license (initial or added endorsement)
3. MA plus ECSE specialist license (initial or added endorsement)

The ECE program is interdisciplinary in focus, drawing on university resources and the clinical expertise of various community professionals. There is a strong emphasis on fieldwork and practicum experiences in both regular and special education concentrations. Field experiences are a part of each course and provide an opportunity for each student to gain knowledge, abilities and dispositions while interacting with children, families, program staff and community agencies. Practicum experiences are designed to allow students to apply knowledge and practice skills in a closely supervised environment.

The early childhood accomplished teacher focus and the early childhood special education focus share course content in:

- literacy development and disorders
- child growth and development, differences and disorders
- learning approaches with young children
- measurement and evaluation
- basic statistics/research methods
- multicultural education
- research and current issues
- early childhood curriculum and program development for inclusive classrooms
- working collaboratively with parents and families
- program administration/leadership

The early childhood special education program provides specialized preparation in:

- screening and assessment of young children
- intervention strategies with infants and preschoolers
- behavior management
- working as a member of the transdisciplinary team
- cognitive and socio-emotional development and disorders

- treatment of children who have neurological impairment and chronic illness
- challenging behaviors and autism

Program Requirements

Semester Hour Requirements

Master's degree in ECE: 40 semester hours

ECSE specialist license: 40 semester hours

Master's degree plus ECSE specialist license: 49 semester hours

Master's degree plus ECSE specialist added endorsement: 40 semester hours

ECSE specialist added endorsement: 25 semester hours

Fieldwork and Practicum Requirements

The master's degree in early childhood education includes a total of 425 hours of required fieldwork/practica. Approximately 200 hours of fieldwork are associated with course assignments; 225 hours of intense, culminating practica occur toward the end of the second year of study. Students completing the MA program take a written comprehensive exam (take home) during the final semester of their program (concurrently with courses at the end of the program sequence).

For the master's degree in early childhood education plus the ECSE specialist initial license, a total of 800 hours of fieldwork/practica is required. Approximately 290 hours of fieldwork are associated with course assignments; 510 hours of intense, culminating practica occur toward the end of the second year of study. Students seeking an added endorsement in ECSE specialist also complete 510 hours of practicum experiences.

Nine semester hours can be transferred for the master's degree; 15 semester hours can be transferred for the ECSE specialist license. These credits include courses taken through continuing education, from other institutions or as a nondegree student at the University of Colorado Denver before the term officially admitted.

Plans of Study

The following table delineates course work and program completion requirements for the MA degree and ECSE specialist license through various program options.

ECE Program Options Plans of Study	MA in ECE	ECSE Specialist License	MA in ECE and ECSE Specialist License	ECSE Specialist Endorsement for those holding Elementary or ECE License	MA in ECE and ECSE Specialist Endorsement for those holding Elementary or ECE License	ECSE Specialist Endorsement for those holding Special Education License	MA in ECE and ECSE Specialist Endorsement for those holding Special Education license
Course							
EPSY 5100 - Advanced Child Growth and Development	Required	Required	Required				
RSEM 5100 - Basic Statistics	Required		Required		Required		Required
ECED 5000 - The Early Childhood Profession	Required	Required	Required	Required	Required	Required	Required
ECED 6100 - Medical and Physiological Aspects of Developmental Disabilities	Required	Required	Required	Required	Required	Required	Required
ECED 5020 - Approaches to Young Children's Learning	Required	Required	Required		Required **	Required *	Required **

ECED 5070 - Cognitive, Social, Emotional Development and Disorders in Young Children or ECED 5202 - Stress, Violence, and Behavior Challenges in Young Children's Lives		Required	Required	Required	Required	Required *	Required *
ECED 5080 - Language and Literacy in Young Children	Required	Required	Required	Required	Required	Required *	Required*
ECED 5010 - Curriculum and Program Development in Early Childhood Education	Required	Required	Required	Required *	Required *	Required	Required
ECED 5060 - Working with Parents and Families	Required	Required	Required		Required **		Required **
ECED 5040 - Administrative Seminar	Required	Required	Required		Required **		Required **
ECED 5202 - Stress, Violence,	Required				Required **		Required **

and Behavior Challenges in Young Children's Lives							
ECED 6690 - Seminar: Research and Current Issues in Early Childhood Education	Required		Required		Required		Required
ECED 5140 - Measurement and Evaluation in Early Childhood Education	Required		Required		Required		Required
ECED 6010 - Literacy and Mathematics K-2	Required	Required	Required	Required*	Required*		
ECED 5200 - Screening and Assessment of Young Children		Required	Required	Required	Required	Required	Required
ECED 6200 - Early Intervention Strategies		Required	Required	Required	Required	Required	Required
ECED 6911 - Practicum in Early	Required						

Childhood Education							
ECED 6910 - Infant/Toddler Practicum in ECSE		Required	Required	Required	Required	Required	Required
ECED 6912 - Preschool in ECSE Preschool Practicum		Required	Required	Required	Required	Required	Required
ECED 6914 - Primary Practicum in ECSE		Required	Required	Required	Required	Required	Required
Total Semester Hours	40	40	49	25	40	25	40
Comprehensive Exam	Required		Required		Required		Required
PLACE Exam #27		Required	Required	Required	Required	Required	Required
				* choose one	* choose one	* choose two	* choose two
					** choose two		** choose two

Economics MA

► Graduate School Rules apply to this program

Requirements for Admission

- general requirements of the Graduate School (including a 3.0 undergraduate cumulative GPA)
- three letters of recommendation
- 15 semester hours of undergraduate economics (including theory and quantitative methods); variations to be discussed with graduate advisor
- acceptable GRE scores
- two official transcripts from all colleges attended
- international students must submit TOEFL scores

Degree Requirements

The MA degree requires the completion of 30 semester hours of course work, of which 21 hours are core requirements. Each student's plan will be worked out in conjunction with the graduate advisor.

Core Courses

All courses must be completed with a grade of B- or better.

ECON 5073 - Microeconomic Theory

Summer 2010 Registration **ECON 5073**

Fundamental features of partial equilibrium theory of the firm, consumer and market. General equilibrium and welfare economic topics are examined. Features of the models that have empirical applications are accented. Prereq: ECON 5803. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 5083 - Macroeconomic Theory

Summer 2010 Registration **ECON 5083**

Examines the major macroeconomic models within a common framework. Differences in the foundations, structure, and policy implications of the competing models are analyzed. Prereq: ECON 5803 or permission of the instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 5803 - Mathematical Economics

Summer 2010 Registration **ECON 5803**

Introduces the use of mathematics in advanced micro- and macro-economic analysis. Emphasis on model-building techniques, solution methods, and economic

interpretations. Prereq: ECON 4071 and 4081. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 5813 - Econometrics I

Summer 2010 Registration **ECON 5813**

Theory and application of statistical techniques used to analyze economic problems. Topics include simple and multiple regression models, simultaneous equation models, and the problems encountered in their application. Students formulate models, obtain data, estimate models, interpret results and, forecast. Prereq: ECON 4811 or equivalent. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 5823 - Econometrics II

Summer 2010 Registration **ECON 5823**

Second course in the econometrics sequence, covering intermediate topics in cross-section and time series analysis. Topics include limited dependent variables, autoregressive and distributed lag models, longitudinal data analysis and unit roots, co-integration and other time-series topics. Prereq: ECON 5083 and 5813. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 6053 - Seminar In Applied Economics

Summer 2010 Registration **ECON 6053**

Familiarizes students with applied research in economics. Students read, discuss, and critique articles in economic journals. Emphasis is placed on research design and methods employed in these articles to prepare students for development of their own research projects in subsequent courses. Topics vary with instructor, and may include international economics, labor economics, monetary theory, public or finance and development economics. Prereq: ECON 5813, 5073, 5083 at the instructor's discretion. **Semester Hours:** 1.5to 1.5

Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 6073 - Research Seminar

Summer 2010 Registration **ECON 6073**

Focuses on training students to do rigorous research in economics. Topics include the analysis of large data sets, further development of econometric skills, and writing a research paper. Note: Students attend lectures and also meet regularly with the instructor in the process of doing a sophisticated research project. Prereq: ECON 5823 and 6053. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 21 Hours

Electives

Three elective courses

Total: 9 Hours

Degree Total: 30 Hours

Educational Psychology MA

Office: Lawrence Street Center, 701

Telephone: 303-315-6300

Fax: 303-315-6311

E-mail: education@ucdenver.edu

Web site: www.ucdenver.edu/education

Faculty

Information about educational psychology faculty is available online at www.ucdenver.edu/education.

Master's Degree

The MA program in educational psychology prepares students to facilitate the teaching/learning process. Thus, many students pursue the degree to enhance their skills as professional classroom teachers. The degree also provides skills necessary for a variety of roles where knowledge of learning, development, motivation, and research is essential; examples would include teaching at the community college level, teaching adults and conducting program evaluation. Other students seek the MA as preparation for advanced study in educational psychology.

Note, too, that many students in the school's initial professional teacher education program—as well as interns in the alternative teacher licensure programs conducted by the Stanley British Primary School, the Boulder Journey School and Friends' School—also seek the MA degree in the Division of Educational Psychology.

Areas of Study

Four major areas of concentration are available—human learning, child growth and development, research and evaluation and individualized programs (such as adult learning). Regardless of the concentration area selected, all students must:

- take 9 semester hours of core courses required by the School of Education & Human Development
- demonstrate competence in educational psychology by successfully completing a minimum of 36 semester hours of relevant course work (9 of which are the core)
- complete either a master's thesis (4 semester hours, MA Plan I) or an independent study project (3 to 4 semester hours, MA Plan II), the latter involving the collection of data bearing on a given problem and its analysis and interpretation in writing
- perform satisfactorily on a written comprehensive examination (typically during the last term enrolled in regular courses)
- complete the degree on a timely basis, usually within three years

To stay current with the needs of a changing industry, faculty in the educational psychology program may choose to change curriculum requirements at semester for incoming students to the program. For the 2010-2011 term, please refer to the most current version of the handbook for academic requirements for this program.

EPSY Handbook 2010-11

Research and Evaluation Methodology

Office: Lawrence Street Center, 701

Telephone: 303-315-6300

Fax: 303-315-6311

E-mail: education@ucdenver.edu

Web site: www.ucdenver.edu/education

Faculty

To find information about faculty in this program visit www.ucdenver.edu/education.

Emphasis Track

There is a REM emphasis track within the educational psychology master's degree program; students can select either an evaluation/data analysis focus or an assessment focus. This area also provides classes to all education graduate programs, offering courses in research methods, evaluation, statistics, analysis, assessment and measurement.

To stay current with the needs of a changing industry, faculty in the educational psychology program may choose to change curriculum requirements at semester for

incoming students to the program. For the 2010-2011 term, please refer to the most current version of the handbook for academic requirements for this program.

EPSY Handbook 2010-11

Electrical Engineering MEng

► Graduate School Rules apply to this program

The master of engineering (MEng) degree program is broad based and is designed especially for that person who wants to further his/her education in more than just electrical engineering. A minimum of 30 semester hours of academic work is required for the MEng degree. At least 15 of these hours must be in electrical engineering courses at the 5000-level or above. At least 15 semester hours must be taken in the Department of Electrical Engineering at UC Denver. As many as 15 semester hours may be taken outside of engineering. The student who wishes to enter the master of engineering program should apply to the electrical engineering department in the same manner as a master of science applicant.

Electrical Engineering MS

► Graduate School Rules apply to this program

The master of science (MS) program offers two plans, thesis (Plan I) and master's project (Plan II). In each, the student must complete 30 graduate semester hours. To satisfy the breadth requirement, two courses outside the area of specialization are required and two mathematics courses are recommended. Plan I requires a minimum of 24 semester hours of graduate course work and 6 semester hours of MS thesis work. Plan II requires a minimum of 27 semester hours of graduate course work and 3 semester hours of MS project. A minimum of 21 graduate semester hours must be earned through the electrical engineering department at UC Denver. Candidates with a BS degree from UC Denver can count 6 electrical engineering UC Denver graduate credits toward both undergraduate and graduate degrees if their undergraduate GPA is at least 3.0. Double counting applies only to credits earned with a B or better grade.

English MA

- Graduate School Rules apply to this program

Program Director: Michelle Comstock

Telephone: 303-556-8479

E-mail: Michelle.Comstock@ucdenver.edu

The department offers three programs in the English MA degree: 1) the literature program increases students' knowledge of English and American literature and also their familiarity with a variety of critical methodologies; 2) the rhetoric and teaching of writing program introduces students to the theory, research and pedagogy underlying contemporary instruction in secondary and college composition; 3) the applied linguistics program introduces students to the principles, practices and concerns of teaching English to adults whose first language is not English.

Students concurrently pursuing a master's in education can count up to 6 hours of education courses toward their MA in English with their English advisor's permission.

Contact the graduate program director for more information on these programs.

Requirements for Admission

Applicants for any of the programs described above must submit all application materials by either the spring, summer or fall deadline. The deadline for fall enrollment is April 1; the deadline for spring and summer enrollment is October 1. Complete applications for all three programs must include the following:

- a completed University of Colorado graduate application
- two copies of all graduate and undergraduate transcripts, and for any nondegree courses previously taken
- three letters of recommendation in which the recommender specifically addresses the candidate's ability to pursue successfully the program chosen
- recent scores on the GRE, including the analytical, verbal and quantitative portions. GRE score average should be 600 or higher. Analytical writing score should be 4 or higher.
- evidence of a 3.0 GPA in previous courses
- statement of purpose
- 10-page critical writing sample

In addition to these requirements, applicants for the MA in literature must have successfully completed 24 semester hours in English courses (graduate or undergraduate), excluding courses in composition, creative writing or speech. At least 15 of these semester hours must be at the upper-division level.

Transfer of Credits from Other CU Campuses

Students admitted to graduate study in English may complete all of their course requirements for the MA degree at UC Denver. Up to 12 semester hours (total) may be transferred from the University of Colorado-Boulder, University of Colorado-Colorado Springs or other graduate program; however, such transfer requires the written approval of the specific program coordinator. Only 12 semester hours of courses taken at UC Denver before acceptance into the program can be counted toward the degree. Further, work already applied toward a graduate degree received at the University of Colorado or at another institution cannot be transferred toward another graduate degree of the same level at UC Denver. (For other rules concerning transfer of graduate credits, see the Graduate School Rules.) For more information, contact the graduate program director at 303-556-4648.

Degree Requirements

The literature program requires 33 semester hours; the rhetoric and teaching of writing program requires 30 hours; the applied linguistics program requires 30 hours. Students must receive a *B-* or above in all courses counted toward the MA degree.

Literature Program

This program provides a general knowledge of English and American literature, a familiarity with the range of theoretical approaches and critical methodologies, and an opportunity to take courses in film studies, creative writing, and ethnic and world literature.

GENERAL REQUIREMENTS

- Satisfactory completion of all required course work
- Satisfactory completion of the MA comprehensive exam OR thesis submission and defense
- Demonstrated fourth-semester proficiency in a foreign language. Old English or Latin will also satisfy this requirement
- Compliance with all graduate school policies and requirements

COURSE REQUIREMENTS (33 SEMESTER HOURS MINIMUM)

All courses are 3 credit hours unless otherwise noted. A minimum of 9 semester hours must be taken at the 6000 level.

REQUIRED COURSES

ENGL 5100 - Literary Research and Writing

Summer 2010 Registration **ENGL 5100**

Designed to prepare students for graduate scholarship and writing in literature; should be taken soon after entering the program. Introduction to the research methodologies of literary scholarship as well as the practical strategies and the formal and stylistic standards for writing graduate-level analytical-interpretive essays. Prereq: Must be enrolled or accepted into the Ma in English, Literature Option program. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 6001 - Critical Theory in Literature and Film

Summer 2010 Registration **ENGL 6001**

Designed to enrich students' understanding of a variety of modes of theoretical discourse that have influenced modern critical practice in literary and film studies. While the course explores the evolution of criticism, it gives primary emphasis to recent developments. Prereq: ENGL 5100 or permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 6 Hours

AREA REQUIREMENTS

Choose seven courses at the 5000/6000 level which fulfill seven different areas from the following 9 areas:

1. Classics
2. Medieval literature
3. Renaissance literature
4. Restoration and 18th-century literature
5. Romanticism
6. American literature, pre-1900
7. Victorian literature
8. American literature or film, post-1900
9. British modernism/ 20th century British literature or film

Any graduate literature/film course will fulfill at least one of these areas. Each area can be satisfied by several different courses periodically offered. Historical surveys count

within the most appropriate area based on the syllabus. Courses in film, world literature, ethnic literature and women's literature generally fulfill one of the 20th-century areas.

Total: 21 Hours

ELECTIVES

Choose one of the following:

ENGL 5093 - Teaching of Writing

Summer 2010 Registration **ENGL 5093**

Deals with the analysis of rhetorical theory with an emphasis on practical applications in the classroom, with attention to alternative pedagogies in teaching. **Semester Hours:** 3 to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 5913 - Practicum in Language and Rhetoric

Summer 2010 Registration **ENGL 5913**

Supervised work in applied language or rhetoric and the teaching of writing. **Semester Hours:** 1 to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

An ENGL 5000- or 6000-level literature or film course

Total: 3 Hours

THESIS OR NON-THESIS OPTIONS

Non-Thesis Option

Students not writing a thesis must take the MA comprehensive exam. Prior to the exam, students may take ENGL 6920. Directed Readings

for 1-3 semester hours to help them prepare for the exam, but this is not required. However, the 33-hour course requirement must be met through electives if directed readings or project/independent study credits are not taken.

Students must be registered during the semester in which they take the MA comprehensive exam, which can be met by signing up for candidate for degree (CAND 5940-900) if all course work is completed.

Thesis Option

Students must submit a proposal for a thesis to the graduate program director for permission to proceed to the thesis.

ENGL 6950 - Master's Thesis

Summer 2010 Registration **ENGL 6950**

Semester Hours: 1 to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

For details about writing, submitting and defending a thesis, see the current thesis guidelines.

Total: 3-6 Hours

LANGUAGE REQUIREMENT

Students must demonstrate fourth-semester proficiency in a foreign language. Old English or Latin also satisfies this requirement.

Total Literature Program: 33 Hours

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Rhetoric and Teaching of Writing Program

In this program, you'll study rhetorical and language traditions and apply that knowledge to the teaching of writing. Knowledge of multicultural dimensions of literacy will help you understand the rich cultural complexity of the modern classroom. This program also focuses on developing your own writing and editing skills to fulfill your professional role as a teacher-writer.

COURSE REQUIREMENTS (30 SEMESTER HOURS MINIMUM)

All courses are 3 credit hours unless otherwise noted.

REQUIRED COURSES

ENGL 5080 - History of the English Language

Summer 2010 Registration **ENGL 5080**

Examines how English has changed since A.D. 800 through examples of writing from different periods, with attention to the way various groups have enriched our vocabulary and altered our syntax. Prereq: ENGL 2070 or one year of a college foreign language.

Cross-listed with ENGL 4080. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

ENGL 5171 - Language Theory

Summer 2010 Registration **ENGL 5171**

Introduces linguistic theory to the beginning graduate student. Builds upon the material included in the undergraduate class, by adding materials pertaining to the teaching of writing and graduate language studies. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 5093 - Teaching of Writing

Summer 2010 Registration **ENGL 5093**

Deals with the analysis of rhetorical theory with an emphasis on practical applications in the classroom, with attention to alternative pedagogies in teaching. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 5150 - Research Methods

Summer 2010 Registration **ENGL 5150**

Designed to prepare students for graduate scholarship in language, literacy, and the teaching of writing; should be taken soon after entering the program. Introduction to the research methods and stylistic standards for graduate-level writing. Prereq: graduate student standing **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 5190 - Special Topics in Rhetoric and Writing

Summer 2010 Registration **ENGL 5190**

Focuses on particular issues in rhetoric and writing as they pertain to reading and writing, including language and gender, language and culture, and language of political action. Cross-listed with Engl 4190. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 5651 - Second Language Writing

Summer 2010 Registration **ENGL 5651**

Topics include the similarities between first and second language writing, the processes of composition and revision, teacher response to student writing, student processing of feedback, writing assessment, and the reading or writing connection. Cross-listed with

ENGL 4651. **Semester Hours:** 3 to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 6002 - Rhetorical Theory

Summer 2010 Registration **ENGL 6002**

Examines the principles and applications of rhetorical theory and its relationship to writing. **Semester Hours:** 3 to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 18 Hours

AREA OF CONCENTRATION

Chosen by the student and approved by the student's advisor, the area of concentration may be in virtually any field that complements the required core and that meets the student's goals in the program. Representative areas include but are not limited to literature, technical communication, reading, English as a second language and communication. ENGL 5913. Practicum in Language and Rhetoric may be included among these nine hours.

Total: 9 Hours

THESIS OR PROJECT OPTIONS

Thesis

ENGL 6950. Master's Thesis

For details about writing, submitting and defending a thesis, see the current thesis guidelines.

Total: 4-6 Hours

Project

ENGL 6960. Master's Project

Total: 3-6 Hours

Rhetoric and Teaching of Writing Total: 30 Hours

Applied Linguistics Program

If you want a thorough grounding in the principles and practice of teaching English to non-native adult users of English with a special focus on the discourses of the classroom and on teaching second-language writers, this program is a good choice.

GENERAL REQUIREMENTS

Students must demonstrate fourth semester proficiency in a foreign language prior to graduation; assessment of proficiency depends on the language to be demonstrated.

Those students who are not teaching adult ESL students at the time of their course work will be required to take a 3–6 credit internship in an area language school, workplace or high school/college ESL program, either through the Experiential Learning Center or by arrangement with the program coordinator.

COURSE REQUIREMENTS (30 SEMESTER HOURS MINIMUM)

All courses are 3 credit hours unless otherwise noted.

REQUIRED CORE COURSES

ENGL 5093 - Teaching of Writing

Summer 2010 Registration **ENGL 5093**

Deals with the analysis of rhetorical theory with an emphasis on practical applications in the classroom, with attention to alternative pedagogies in teaching. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 5150 - Research Methods

Summer 2010 Registration **ENGL 5150**

Designed to prepare students for graduate scholarship in language, literacy, and the teaching of writing; should be taken soon after entering the program. Introduction to the research methods and stylistic standards for graduate-level writing. Prereq: graduate student standing **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 5171 - Language Theory

Summer 2010 Registration **ENGL 5171**

Introduces linguistic theory to the beginning graduate student. Builds upon the material included in the undergraduate class, by adding materials pertaining to the teaching of writing and graduate language studies. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 5601 - Principles and Practices of Second Language Acquisition

Summer 2010 Registration **ENGL 5601**

Overview of basic principles and practices in the learning and teaching of English as a second language. Cross-listed with ENGL 4601. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 5651 - Second Language Writing

Summer 2010 Registration **ENGL 5651**

Topics include the similarities between first and second language writing, the processes of composition and revision, teacher response to student writing, student processing of feedback, writing assessment, and the reading or writing connection. Cross-listed with ENGL 4651. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 5913 - Practicum in Language and Rhetoric

Summer 2010 Registration **ENGL 5913**

Supervised work in applied language or rhetoric and the teaching of writing. **Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR- an ENGL elective approved by the student's advisor

Total: 18 Hours

ELECTIVE LANGUAGE OR RHETORIC COURSES

ENGL 5080 - History of the English Language

Summer 2010 Registration **ENGL 5080**

Examines how English has changed since A.D. 800 through examples of writing from different periods, with attention to the way various groups have enriched our vocabulary and altered our syntax. Prereq: ENGL 2070 or one year of a college foreign language. Cross-listed with ENGL 4080. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 5190 - Special Topics in Rhetoric and Writing

Summer 2010 Registration **ENGL 5190**

Focuses on particular issues in rhetoric and writing as they pertain to reading and writing, including language and gender, language and culture, and language of political

action. Cross-listed with Engl 4190. **Semester Hours:** 3 to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 6 Hours

SYNTHESIS OPTIONS

Students may choose from the following three options:

Comprehensive Exam or Portfolio Exam

Students will take a comprehensive exam or portfolio exam in their last semester. Students selecting this option must take two elective courses (6 hours) approved by their advisor.

Thesis

ENGL 5840. Independent Study (3 hours)

ENGL 6950. Master's Thesis (4-6 hours)

For details about writing, submitting and defending a thesis, see the current thesis guidelines.

Project:

ENGL 5840. Independent Study (3 hours) or an internship* (3 hours) — with advisor's approval

ENGL 6960. Master's Project

*** INTERNSHIPS**

Those students who are not teaching adult ESL students at the time of their course work will be required to take a 3-6 credit hour internship in a local area language school, workplace or high school/college ESL program, either through the Experiential Learning Center or by arrangement with the program coordinator.

Total: 6 Hours

Applied Linguistics Total: 30 Hours

Additional Information

Candidate for Degree: Graduate students must be registered for at least one credit hour during the semester in which they graduate. Those who have completed all required courses and requirements may register for candidate for degree: CAND 5940, section 900. CAND 5940 carries no course credit, but you are billed for one credit of tuition and \$10 in fees.

Teaching Assistantships: Graduate students who receive a teaching assistantship must take the following course in the fall during their first semester as a teaching assistant.

ENGL 5913. Practicum in Language and Rhetoric

Dual Degrees: Students concurrently pursuing a MA in education can count up to six hours of education courses toward their MA in English, with their English graduate advisor's permission.

Environmental Sciences MS

► Graduate School Rules apply to this program

Program Director: John Wyckoff

Associate Program Director: Jon Barbour

Office: North Classroom, 3622

Telephone: 303-556-4520

Fax: 303-556-6197

E-mail: Jon.Barbour@ucdenver.edu

Web site: clas.ucdenver.edu/ges/

Faculty (Concurrently Appointed)

Professors:

Larry Anderson, chemistry

Lloyd Burton, School of Public Affairs

Anne Chin, geography and environmental science

Lynn Johnson, civil engineering

John Lanning, chemistry

Diana Tomback, biology

Associate Professors:

Leo Bruederle, biology

Frederick Chambers, geography and environmental science

Greg Cronin, biology

Brian Page, geography and environmental science

Anu Ramaswami, civil engineering

Timberly Roane, biology

Deborah Thomas, geography and environmental science

John Wyckoff, geography and environmental science

Assistant Professors:

Casey Allen, geography and environmental science

Peter Anthamatten, geography and environmental science

Michael Green, biology

Rafael Moreno, geography and environmental science

Brian Muller, planning and design

Gregory Simon, geography and environmental science

Bryan S. Wee, geography and environmental science

Environmental sciences is a multidisciplinary study of the environment, housed in the Department of Geography and Environmental Sciences. Academic fields involved in environmental sciences include chemistry, biology and ecology, physics, geology, geography, anthropology, engineering, political science, law, economics and the health sciences. Students planning to pursue the MS in environmental sciences must either have earned a bachelor's degree or have taken significant course work in the natural/physical sciences or engineering and completed several other prerequisites (see the following graduate information). Graduate-level certificates in environmental sciences are also offered. The certificates may be earned stand-alone or as options in the MS in environmental sciences.

Environmental careers encompass a broad range of professions, from those with a strong foundation in the natural/physical sciences or engineering to those based in the social sciences and/or humanities. Students interested in environmental issues and careers should investigate the whole field before deciding which course to follow. At the Downtown Campus, the MS in environmental sciences emphasizes the natural/physical sciences and engineering with the addition of the social sciences and humanities.

The MS in environmental sciences degree is designed to provide training in engineering, natural/physical sciences and socioeconomic analysis. The goals of the program are to (1) enhance the interdisciplinary communication and analytical skills of the student, and (2) provide a multidisciplinary approach for more intensive study of a particular environmental issue. Students will receive instruction in the physical and biological dynamics of various ecosystems, environmental engineering and socioeconomic issues associated with environmental analysis.

Graduates of the environmental sciences program are involved in many different areas, such as reviewing environmental impact statements, monitoring groundwater quality and communicating with the public. Many students have found employment in various agencies (U.S. Environmental Protection Agency, U.S. Geological Survey, Colorado

State Department of Public Health and Environment) and private-sector environmental and engineering firms.

Requirements for Admission

The program is for students who either have baccalaureate degrees or significant background in one of the natural/physical sciences or engineering. In addition, minimum undergraduate science and math requirements are:

- one semester of calculus and one semester of upper-division statistics (*if applicant is missing the statistics course, he/she can be admitted but must take ENVS 5600, Applied Statistics, or an approved statistics course as an elective before receiving the MS in environmental sciences degree*)
- two semesters general chemistry with lab
- one semester physics
- two semesters general biology with lab

If only two semesters of the six prerequisite courses are lacking, students may be admitted, but must take them in the first year in the program. Applicants who have fulfilled all prerequisites have a better chance of acceptance. Applicants may be required to take additional prerequisite courses (necessary for completing particular core or elective courses). The prerequisite courses will not count toward the MS environmental sciences degree. As part of the admission review process, applicants are required to submit a graduate application, a minimum of three letters of recommendation and transcripts from all institutions previously attended. UC Denver has a minimum requirement of a 3.0 undergraduate GPA for applicants to the Graduate School. The program admits new students for the fall semester and the number of students admitted to the program depends, in part, on space availability. **Applicants must submit all materials by the March 1 deadline.**

Financial Aid

There are three types of financial aid available: tuition assistance; research assistantship positions funded by grants to specific program faculty; and the regular package of financial aid (primarily loans) available through the financial aid office on the Downtown Campus. Incoming students will be automatically considered for program-distributed tuition assistance at the time of admission to the program. Continuing students will be regularly apprised of available aid and positions. Students interested in research assistantships should consult individual faculty with whom they wish to work regarding potential assistantship positions. All other aid should be requested through the UC Denver Financial Aid Office, North Classroom, 1030, Campus Box 125, P.O. Box 173364, Denver, CO 80217-3364. Telephone: 303-556-2886.

Internships

Students in the MS in environmental sciences program are strongly encouraged to contact the Experiential Learning Center for internships and paid positions related to environmental sciences. The Experiential Learning Center is located in the Tivoli Student Union, Suite 260. Telephone: 303-556-2250. Many students have had internships in federal agencies, such as the U.S. Environmental Protection Agency and the U.S. Geological Survey.

Program Requirements

The MS in environmental sciences is a 39-hour program that provides students with two alternate plans: Plan I requires a thesis, while Plan II is a nonthesis program. General requirements for the program include: a set of core courses (15 semester hours), the MS in environmental sciences seminar course (ENVS 6002, 3 semester hours), an environmental policy course (3 semester hours), and elective courses (12 semester hours minimum). Students choosing Plan I must also complete 6 hours of thesis, while those choosing Plan II must complete 6 hours of additional elective course work. Students opting for Plan II are encouraged to enroll in 3 hours of independent study (ENVS 6840) as one of their electives.

The degree is offered through the College of Liberal Arts and Sciences with the cooperation of the College of Engineering and Applied Science. In addition, some courses offered by the College of Architecture and Planning, the School of Public Affairs and the Business School are relevant and applicable to the program.

Required Core Courses

Fall

CVEN 5401 - Introduction to Environmental Engineering

Summer 2010 Registration **C E 5401**

Provides a broad overview of the environmental engineering and pollution control system. Offers a unique systems approach to environmental engineering, examining the source-to-receptor feedback loop system of pollution control. Process principles underlying pollutant, transport, abatement, and control are presented in a unified manner, cross-cutting atmospheric, wastewater and sub-surface systems. Prereq: Graduate standing in MSCE or MSES programs or permission of instructor. Cross-listed with CVEN 3401. **Semester Hours:** 3 to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENVS 5030 - Environmental Geology

Summer 2010 Registration **ENVS 5030**

Applies geological information to interactions between people and the physical environment. Increasing awareness of its importance in our society means that this is an expanding field as companies are required to address the environmental consequences of their actions. Prereq: Entry into MSES program, senior standing in sciences or geography, or permission of instructor. Cross-listed with GEOL 4030 and 5030. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENVS 6200 - Risk Assessment

Summer 2010 Registration **ENVS 6200**

The process of determining the likelihood and extent of harm that may result from an activity or event. Topics covered are: hazard identification, dose-response evaluation, exposure assessment, and risk characterization. The subjects of risk management, risk perception, and risk communication are also discussed. Prereq: Graduate standing or permission of instructor. Cross-listed with CVEN 5494, HBSC 7340. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Spring

BIOL 5445 - Applied Environmental Biology

Summer 2010 Registration **BIOL 5445**

Examines the reciprocal relationships of organisms and the environment at scales from microbes to ecosystems. Explores the impact of human-caused perturbations on organisms as well as the impact of living systems on the flow of energy and materials (natural and man-made) through the environment. Prereq: Graduate standing or permission of instructor; one year of general biology and one year of general chemistry; introductory ecology recommended. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CHEM 5700 - Environmental Chemistry

Summer 2010 Registration **CHEM 5700**

A discussion of the sources, reactions, transport, effects, and fates of chemical species in the water, soil and air environments. Prereq: CHEM 3111, 3411, and graduate standing. Cross-listed with CHEM 4700. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 18 Hours

The core courses are to be taken first upon entry into the program. They are the foundation for other courses in environmental sciences.

Seminar Course

Students are required to register for ENVS 6002, Environmental Sciences Seminar, in the first fall semester they are enrolled in the MS in environmental sciences program. The seminar serves as an introduction to the program and helps students to develop research skills and further their professional development.

ENVS 6002 - Environmental Sciences Seminar

Summer 2010 Registration **ENVS 6002**

Introduces research and professional development in the environmental sciences, focusing on current issues and trends in the field, methods of developing research and project proposals, and defense of a proposal written during the semester. Students are introduced to the environmental sciences faculty and their research programs. Prereq: Must be an MS Environmental Science student or permission of instructor. **Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

Elective Courses

(See the MS in Environmental Sciences Web site for a complete list of elective courses for the MS in environmental sciences program.)

Students, with the coordinator and/or an advisor, will complete a program plan that will include 12-21 semester hours of elective requirements that will meet their interests. Students may choose to use four of the electives to fulfill one of the following options offered in environmental sciences: air quality, ecosystems, environmental health, geospatial analysis, hazardous waste and water quality. Students must have the prerequisites for each course and must meet the requirements listed in the notes below. Contact the option advisor for the particular option of interest before starting. Upon graduation, the option will be noted on the student's transcript.

Following are the requirements for each environmental sciences option:

AIR QUALITY OPTION

Option Advisor: Larry Anderson
Telephone: 303-556-2963
E-mail: Larry.Anderson@ucdenver.edu

Required Courses

CHEM 5710 - Air Pollution Chemistry

Summer 2010 Registration **CHEM 5710**

Chemical processes occurring in the atmosphere are discussed. Includes application to air pollution problems, including urban air pollution, air quality standards, non-urban air pollution, acid deposition, and stratospheric pollution. Prereq: CHEM 4521 or 4700. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENVS 5730 - Air Quality Modeling and Analysis

Summer 2010 Registration **ENVS 5730**

Emphasizes the use of air dispersion modeling tools. Topics include: sources and effects of air pollution, use of the WWW, and analysis of modeling results. Note: For graduate students in environmental sciences or engineering, and for those working in the environmental field. Prereq: Graduate standing. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 6 Hours

Electives

Choose two:

CHEM 5720 - Atmospheric Sampling and Analysis

Summer 2010 Registration **CHEM 5720**

Fundamentals of environmental sampling specifically applied to the atmosphere are discussed. Includes a variety of techniques for the measurement of monitoring gaseous, semi-volatile and particulate air pollutants, techniques for the measurement of criteria pollutants, chemical and physical measurements of particulate and air toxins. Prereq: CHEM 4700 or CHEM 5710 or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

URPL 6686 - Special Topics: Urban and Regional Planning

Summer 2010 Registration **URP 6686**

Various topical concerns are offered in urban and regional planning, theory, concepts,

methods, case studies and practice. **Semester Hours:** 1to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.
(when Air Quality Planning and Policy is the topic)

Total: 6 Hours

Option Total: 12 Hours

ECOSYSTEMS OPTION*

Option Advisor: Gregory Cronin
Telephone: 303-556-6036
E-mail: Gregory.Cronin@ucdenver.edu

Required Courses

BIOL 5415 - Microbial Ecology

Summer 2010 Registration **BIOL 5415**

An in-depth study of ecology as it relates to microorganisms; abiotic and biotic interactions within microbial populations in macro- and microhabitats; and the role of microorganisms in maintaining steady state conditions in natural ecosystems. Emphasis is placed on how the ecology of microorganisms affects the human condition. Prereq: Graduate standing or permission of instructor. Cross-listed with BIOL 4415. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 6 Hours

Electives

Choose two:

BIOL 5050 - Advanced Biology Topics

Summer 2010 Registration **BIOL 5050**

Examines current topics in the field of biology. Topics vary from term to term. See Schedule Planner for current topics. Prereq: Graduate standing or permission of instructor. Cross-listed with BIOL 4050. **Semester Hours:** 1to 8
Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 5154 - Conservation Biology

Summer 2010 Registration **BIOL 5154**

Basic concepts and theories in population biology and genetics as they apply to issues relating to the preservation of biodiversity, such as the genetics of small populations, captive propagation, restoration ecology and the design of nature reserves. Prereq: Graduate standing or permission of instructor. Cross-listed with BIOL 4154. **Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENVS 6220 - Toxicology

Summer 2010 Registration **ENVS 6220**

Introduces the field of toxicology. Emphasizes the mechanisms by which chemicals produce toxic effects and the methods for assessing toxicity. Note: Designed for students in the environmental sciences and occupational health fields. Prereq: One year college chemistry and one year college biology. Cross-listed with HBSC 7360. **Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

(see Note 2)

GEOG 5060 - Remote Sensing I: Introduction to Environmental Remote Sensing

Summer 2010 Registration **GEOG 5060**

An in-depth treatment of the use of aerial photographs and other forms of imagery for the analysis of urban-industrial patterns, vegetation, agriculture, landforms, and geologic structure. Prereq: GEOG 3080 or permission of instructor. Cross-listed with GEOG 4060, GEOL 4060, 5060. **Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 6 Hours

Option Total: 12 Hours

* BIOL 5445, Applied Environmental Biology, required as a prerequisite for the ecosystems option.

ENVIRONMENTAL HEALTH OPTION*

Option Advisor: Deborah Thomas

Telephone: 303-556-5292

E-mail: Deborah.Thomas@ucdenver.edu

Required Courses

ENVS 6220 - Toxicology

Summer 2010 Registration **ENVS 6220**

Introduces the field of toxicology. Emphasizes the mechanisms by which chemicals produce toxic effects and the methods for assessing toxicity. Note: Designed for students in the environmental sciences and occupational health fields. Prereq: One year college chemistry and one year college biology. Cross-listed with HBSC 7360. **Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.
(see Note 2) (fall, even years)

ENVS 6230 - Environmental Epidemiology

Summer 2010 Registration **ENVS 6230**

Provides a basic understanding of the methods used to study the effects on human health of exposures to physical, chemical, or biological factors in the external environment. The course explains the use of epidemiologic methods through a problem solving approach to investigating environmental health case studies. Prereq: A basic statistics course and graduate standing or permission of instructor. Cross-listed with HBSC 7310. **Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.
(spring, even years)

Total: 6 Hours

Electives

Choose two:

ANTH 4010 - Global Health Studies I: The Biocultural Basis of Health

Summer 2010 Registration **ANTH 4010**

This course is concerned with the underlying biological and cultural determinants of health throughout the human life cycle in global and cross-cultural perspective. Note: The first of a two-course sequence in medical anthropology and global health studies; the second is ANTH 4020. Prereq: Upper division and/or graduate standing. Cross-listed with ANTH 5014, HBSC 4010 and 5010. **Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENVS 6210 - Human Health and Environmental Pollution

Summer 2010 Registration **ENVS 6210**

Examines the roles of technology and society in the etiology and control/prevention of adverse health outcomes associated with releases of toxic substances. Examples come from experience and the literature on occupational cancer and reproductive hazards, occupational and environmental regulation of hazardous wastes, air, and water pollution.

Cross-listed with HBSC 7210. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.
(spring, odd years)

PUAD 5633 - Seminar in Natural Resource and Environmental Health Law

Summer 2010 Registration **P AD 5633**

Administrative law aspects of environmental policy implementation and enforcement, the role of courts in both stimulating and limiting statutory reform, and regulatory innovation. Focus on the legal aspects of both natural resource allocation and management, and environmental protection. Alternatives to traditional processes for environmental dispute resolution. Cross-listed with PUAD 7633. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 6 Hours

Option Total: 12 Hours

* ENVS 6200, Risk Assessment, required as a prerequisite for the environmental health option.

ENVIRONMENTAL SCIENCE EDUCATION OPTION

Option Advisor: Bryan Wee

Telephone: 303-315-4992

E-mail: bryan.wee@ucdenver.edu

Required Courses

ELED 5340 - Multicultural Science Education

Summer 2010 Registration **ELED 5340**

This course examines literature in science education related to multicultural issues, topics will be framed by an understanding of equity in diverse, urban classrooms and how it informs curriculum and instruction. Cross-listed with ENVS 5340. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

ENVS 5340 - Multicultural Science Education

Summer 2010 Registration **ENVS 5340**

This course examines literature in science education related to multicultural issues. Topics will be framed by an understanding of equity in diverse, urban classrooms and how it informs curriculum and instruction. Cross-listed with ELED/SECE 5340. **Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

SECE 5340 - Multicultural Science Education

Summer 2010 Registration **SECE 5340**

This course examines literature in science education related to multicultural issues, topics will be framed by an understanding of equity in diverse, urban classrooms and how it informs curriculum and instruction. Cross-listed with ENVS 5340.

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENVS 5500 - Topics in Environmental Sciences

Summer 2010 Registration **ENVS 5500**

Topics may vary from one offering to the next.

Semester Hours: 1to 6
Registration is changing. Visit our website for details ucdenver.edu/registration.

(Taken as Survey of Field Methods topic)

Total: 6 Hours

Electives:

Choose two:

ANTH 5170 - Culture and the Environment

Summer 2010 Registration **ANTH 5170**

Examines the historical origins of Western and non-Western ideas of the environment and the place of people within it. The imposition of Western ideas on non-Western groups regarding environmental policy is also examined, with special attention given to practices of conservation, development and transnational monetary policy. Prereq:

ANTH 2102 or equivalent. Cross-listed with ANTH 4170.

Semester Hours: 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 5154 - Conservation Biology

Summer 2010 Registration **BIOL 5154**

Basic concepts and theories in population biology and genetics as they apply to issues relating to the preservation of biodiversity, such as the genetics of small populations, captive propagation, restoration ecology and the design of nature reserves. Prereq:

Graduate standing or permission of instructor. Cross-listed with BIOL 4154.

Semester Hours: 3to 3

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 5282 - Environmental Communication

Summer 2010 Registration **CMMU 5282**

Studies the communication processes involved in policies and practices affecting natural and human environments. Prereq: Undergraduates with senior standing may enroll with permission of instructor. Cross-listed with COMM 4282. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 5335 - Contemporary Environmental Issues

Summer 2010 Registration **GEOG 5335**

Provides an overview of environmental challenges facing society today, focusing on how humans impact and change the environment. Opposing views and environmental policy at the local, state, national, and international levels are explored. Cross-listed with GEOG 4335. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 5350 - Environment and Society in the American Past

Summer 2010 Registration **GEOG 5350**

Overview of the geographical development of North American society from the late 15th century to the mid-20th century. A comparative regional approach emphasizing relationships between natural resource exploitation, cultural landscape formation and environmental change. Cross-listed with GEOG 4350. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.
Or another elective approved by the option advisor

Total: 6 Hours

Option Total: 12 Hours

GEOSPATIAL ANALYSIS OPTION*

Option Advisor: Rafael Moreno

Telephone: 303-556-3762

E-mail: Rafael.Moreno@ucdenver.edu

Required Courses

GEOG 5080 - Introduction to GIS

Summer 2010 Registration **GEOG 5080**

Introduces various aspects of geographic information systems (GIS), including justification, definition of hardware/software, database design, and data conversion. GIS is a computer-based mapping system providing a graphical interface to locational and relational attribute data on facilities and land. Includes hands-on use of a geographic information system workstation. Cross-listed with GEOG 4080. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 5090 - Environmental Modeling with Geographic Information Systems

Summer 2010 Registration **GEOG 5090**

Expands the basic knowledge of GIS to spatial models. Establishes a comprehensive framework that can be used to address a wide range of applications in natural and built environments. Prereq: GEOG 4080 or GEOG 5080 or permission of instructor. Cross-listed with GEOG 4090. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 6 Hours

Electives

Choose two:

CVEN 5382 - GIS Spatial Database Development

Summer 2010 Registration **C E 5382**

This second GIS course builds on the introductory course and addresses principles and technologies for development and conversion of spatial databases, including photogrammetry, surveying and geodesy, coordinate systems and transformations, and remote sensing. Prereq: Graduate and/or upper division standing; completion of CVEN 5381 (or equivalent) and MEng-GIS program prerequisites (especially surveying, mapping and computing); background in algebra, calculus fundamentals and facility to compute DOS/UNIX, spreadsheet, and FORTRAN; familiarity with various CAD (e.g. AutoCAD) and GIS (e.g. Arc Info, GRASS) software is also required. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 5385 - GIS Relational Database Systems

Summer 2010 Registration **C E 5385**

Introduces relational database management system concepts with emphasis on GIS. Includes examination of relational database systems from conceptual design through relational schema design and physical implementation. Topics include SQL, database design and implementation for large database systems, transaction management,

concurrency control, distributed database management systems and the interaction and progressive integration of GIS technologies and RDBMS technologies. Prereq: Graduate and/or upper division standing; completion of CVEN 5381 or equivalent and completion of MEng-GIS program prerequisites. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 5386 - GIS Laboratory

Summer 2010 Registration **C E 5386**

Provides in-depth experience with use and programming of a particular GIS software, including Arc GIS and related object-oriented programming languages. Advanced functionality for user authoring of software interface, data management and analysis functions and output generation. Exact content will vary by semester. Prereq: Computing and Introduction to GIS or their equivalent. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 6 Hours

Option Total: 12 Hours

* GEOG 3080, Introduction to Mapping and Map Analysis, is required as a prerequisite of the geospatial analysis option.

For more information, contact the option advisor or Jon Barbour at 303-556-4520, Jon.Barbour@ucdenver.edu.

HAZARDOUS WASTE OPTION*

Option Advisor: Anu Ramaswami

Telephone: 303-556-4734

E-mail: Anu.Ramaswami@ucdenver.edu

Required Courses

CVEN 5480 - Hazardous Wastes and Site Remediation

Summer 2010 Registration **C E 5480**

Students learn to: (1) define and classify hazardous wastes encountered at hazardous waste-contaminated sites, (2) learn basic principles underlying currently available technologies for site remediation, (3) use EPA's technology screening matrix for technology selection, and (4) provide engineering design for selected remediation systems, e.g. ground-water pump-and-treat, soil vapor extraction, soil washing, and bioremediation. Prereq: CVEN 5402. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 6 Hours

Electives

Choose two:

BIOL 5051 - Advanced Topics In Microbiology

Summer 2010 Registration **BIOL 5051**

An in-depth study of microbial concepts, including prokaryotic and eukaryotic structure and function; properties of biological macromolecules; microbial growth kinetics; and microbial diversity. Emphasis is on one of the following: virology, microbial physiology, environmental microbiology, microbial biotechnology and nucleic acids. Prereq: Graduate standing or permission of instructor. Cross-listed with BIOL 4051. **Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 5402 - Environmental and Water Quality Modeling

Summer 2010 Registration **C E 5402**

Provides unified understanding of fundamental physical, chemical and biological processes that govern the transport and fate of pollutants in environmental systems - water, air and subsurface. Includes hands-on experience in modeling surface and ground water systems. Prereq: CVEN 5401. **Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENVS 5403 - Unsaturated Zone Hydrology

Summer 2010 Registration **ENVS 5403**

Focuses on water and contaminant transport through the unsaturated zone, infiltration and drainage, and heat and gas transport. Students learn to design, perform field installation, and collect data in order to model and predict contaminant movement on/off site. Prereq: Chemistry, physics, calculus or permission of instructor. Cross-listed with GEOL 4402. **Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 6 Hours

Option Total: 12 Hours

*C E 5401, Introduction to Environmental Engineering, required as a prerequisite for the hazardous waste option.

WATER QUALITY OPTION*

Option Advisor: John Wyckoff
Telephone: 303-556-2590
E-mail: John.Wyckoff@ucdenver.edu

Required Courses

BIOL 5416 - Aquatic Ecology

Summer 2010 Registration **BIOL 5416**

This advanced ecology course examines the inter-relations of biological (including humans), physical and chemical components of wetlands, streams, rivers, lakes, reservoirs and groundwater. Learning is facilitated through lectures, discussions, student presentations, laboratory and field exercises. Prereq: Graduate standing or permission of instructor. Cross-listed with BIOL 4416. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ENVS 5410 - Aquatic Chemistry

Summer 2010 Registration **ENVS 5410**

Course objectives are to: (1) identify and understand chemical and physical principles and processes that control the composition of natural water, (2) prepare students to critically evaluate scientific literature and experimental design related to water quality and environmental remediation, and (3) examine the validity of environmental water data. Prereq: Graduate status and general chemistry and/or CHEM 4700. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 6 Hours

Electives

Choose two:

CVEN 5333 - Applied Hydrology

Summer 2010 Registration **C E 5333**

Engineering application of principles of hydrology. Subject matter includes precipitation measurement and data analysis, stream flow measurement and water budget analysis, evaporation and evapotranspiration, infiltration and rainfall-runoff relationships, hydrograph properties and unit hydrograph analysis, flood frequency, analysis and flood

routing. Prereq: Permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 5393 - Water Resources Development and Management

Summer 2010 Registration **C E 5393**

A multidisciplinary exploration of the principles governing water resources planning and development. Emphasis is on the sciences of water (physical, engineering, chemical, biological and social) and their interrelationships. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENVS 5403 - Unsaturated Zone Hydrology

Summer 2010 Registration **ENVS 5403**

Focuses on water and contaminant transport through the unsaturated zone, infiltration and drainage, and heat and gas transport. Students learn to design, perform field installation, and collect data in order to model and predict contaminant movement on/off site. Prereq: Chemistry, physics, calculus or permission of instructor. Cross-listed with GEOL 4402. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 6 Hours

Option Total: 12 Hours

*CHEM 5700, Environmental Chemistry, is required as a prerequisite of the water quality option.

Notes:

1. Many of the courses have prerequisites; student must check the catalog for prerequisite requirements for these courses. Some options have a prerequisite course requirement.
2. One course may not be used for more than one option, even if it is listed in several options. Other courses may be offered that will be acceptable as electives with approval of the option advisor and the director of the program.
3. No more than three courses may be from any one discipline (excluding ENVS); i.e., chemistry, biology, civil engineering.
4. Courses used by the student to fulfill a core requirement may not be used to fulfill the options.
5. All work submitted for the environmental sciences options must have a grade of B (3.0) or better.
6. All courses for the environmental sciences options must be completed at the Downtown Campus.

7. Courses applied to either a certificate* or an MS degree may later be applied toward the other if all pertinent course work is completed within a five-year time period.

* The above options of the program may be taken to earn a corresponding environmental sciences certificate. However, certificates may be earned without entrance into the MS in environmental sciences program. (See the Environmental Sciences Graduate Certificate description).

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Finance MS

Program Director: Ajeyo Banerjee
Telephone: 303.315.8456

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Richard Foster, PhD, University of Chicago
James Morris, PhD, University of California-Berkeley
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Associate Professors:

Ajeyo Banerjee, PhD, University of Massachusetts-Amherst
Elizabeth Cooperman, PhD, University of Georgia
Jian Yang, PhD, Texas A&M University

Senior Instructors:

John Byrd, PhD, University of Oregon
Chen Ji, MS, University of Colorado
Barbara Pelter, PhD, University of California-Davis
John Turner, PhD, St. Louis University

Instructors:

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The master of science in finance provides the necessary depth and specialized expertise to meet the need of businesses for financial managers, investment analysts and other finance specialists.

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The MS in finance offers flexibility with on-campus and online courses. The MS finance degree requirements are met by the following courses and options:

Required Courses

BUSN 6620 - Applied Economics for Managers

Summer 2010 Registration **BUSN 6620**

After taking this course, students should be able to apply economic principles to make optimal decisions given firm cost, demand and market circumstances. Also, they should be able to analyze the firms interactions with its competitive market environment.

Students will learn basic aspects of federal macroeconomic policy designed to achieve stable prices and economic growth. Also, they will learn to understand the measurement of output (GDP), employment and prices; the conduct of monetary and fiscal policy; and the balance of trade. Prereq: BUSN 6530 or FNCE 6290 and BUSN 6550, both may be taken concurrently. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

BUSN 6640 - Financial Management

Summer 2010 Registration **BUSN 6640**

This course is concerned with the business firm's decisions to make investments and to finance its operations. Students learn to use the tools and theories underlying business valuation, cost of capital, capital budgeting and capital structure. Students will learn to evaluate a firm's financial position through the examination of its financial statements and to prepare pro forma statements for the firm. Prereq: BUSN 6530 or FNCE 6290, BUSN 6620 (both may be taken concurrently) and BUSN 6550 completed prior and strictly enforced. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FNCE 6290 - Quantitative Methods for Finance

Summer 2010 Registration **FNCE 6290**

This course provides a statistical foundation for subsequent courses in the Master of Science in Finance program. Major topics include descriptive statistics, probability theory, statistical estimation and inference and regression analysis. The emphasis is on finance applications, such as risk measurement, for portfolio diversification and the "market model". In addition, students develop competence in the use of statistical software packages. This course provides preparation for the statistical portions of the Certified Financial Analyst professional examinations. Note: Students cannot receive credit for both FNCE 6290 and BUSN 6530. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FNCE 6300 - Macroeconomics and Financial Markets

Summer 2010 Registration **FNCE 6300**

Covers the U.S. financial system in the global economy. Specific topics include financial institutions, money creation and monetary policy; the Federal Reserve System and its operation; the international financial system; interest rate determination, yield curves, and their relation to fiscal policy; the role of households and business in financial markets; stock markets; and money markets and instruments. (Required for the M.S. in

Finance degree.) Prereq: BUSN 6620 (may be taken concurrently if student has previous economics coursework). **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FNCE 6330 - Investment Management Analysis

Summer 2010 Registration **FNCE 6330**

In this course students will learn investment theories and how to apply them to portfolio management. Topics covered include asset allocation, security markets, the analysis and use of investment information, risk analysis and security valuation. This course is required for the M.S. in Finance degree. Prereq: BUSN 6620 and BUSN 6640. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FNCE 6380 - Futures and Options

Summer 2010 Registration **FNCE 6380**

Covers both speculation and hedging using futures and options. The student learns about futures pricing, how futures are related to the underlying commodities and how to hedge risks. Stock index futures and interest rates futures get particular attention. The course covers the theory and application of option pricing, focusing on the binomial and Black-Scholes models. Option trading strategies such as bull and bear spreads, straddles, strangles, and other popular strategies are discussed. Prereq: BUSN 6640 and FNCE 6330. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FNCE 6382 - Survey of Financial Derivatives: Futures, Options and Swaps

Summer 2010 Registration **FNCE 6382**

This course provides an overview of financial derivatives and their markets. It covers futures, options, interest rate and currency swaps, convertible bonds, asset-backed securities and mortgage derivatives. Diagrams and simple mathematics are used to show how these instruments work and how they are used in corporate financing. This course is a less technical presentation of the topics covered in both FNCE 6350, Financial Innovations and FNCE 6380, Futures and Options. The course is suitable for both MBA and MS-Finance students. However, MS-Finance students who are interested in the deeper knowledge necessary for trading derivatives are advised to take either or both FNCE 6350 and FNCE 6380. Prereq: BUSN 6640. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FNCE Electives (3) (9 semester hours)

Free Elective (1) (3 semester hours)

Total: 30 Hours

Prerequisites: BUSN 6550, Analyzing and Interpreting Accounting Information, or the equivalent accounting background. Students are also expected to be knowledgeable in spreadsheet software.

Notes and Restrictions

Finance Electives. Choose three courses in finance from the list of regularly scheduled graduate classes in consultation with an advisor.

Free Elective. Students complete 3 semester hours of graduate business course work (excluding BUSN courses numbered below 6800). Modern finance is heavily mathematical and draws extensively on economics and accounting. Courses in these areas are especially useful. Petitions may be submitted to the program director for special courses that fit a student's individual needs.

Global Energy Management MS

Program Advisor: Sarah Dushame

Telephone: 303-605-6212

E-mail: Sarah.Dushame@ucdenver.edu

Faculty

Professors/Instructors

Timothy Antoniuk, MDes, University of Alberta

William Ascher, PhD, Yale University

Stephen Brown, PhD, University of Maryland

Matthew Clarke, PhD, University of Calgary

William Fox, JD, Catholic University of America

Mean Husein, PhD, McGill University

Merrily Kaut, PhD, University of Colorado Denver

L. Ann Martin, PhD, University of Minnesota

The master of science in global energy management (GEM) prepares individuals for leadership careers in the energy industry. This degree is particularly appropriate for individuals seeking to advance their existing careers in the energy field. Prior work experience within the field is preferred, but not required. The program consists of two components: the core curriculum and the more advanced and specialized elective courses. The MS GEM program requires the completion of the following core classes as well as four elective courses from the selection listed below.

Required Courses

GEMM 6000 - 21st Century Global Energy Issues and Realities

Summer 2010 Registration **GEMM 6000**

Introduction to the global energy industry's past, present and future. Current and historical issues in regions such as: Atlantic Basin, former Soviet Union, East of Suez, North and South America will be covered. World production centers and markets are discussed to include relevant energy security, scenario planning, risk management and regulation, deregulation, and environmental concerns. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEMM 6100 - Global Energy Economics and Geography

Summer 2010 Registration **GEMM 6100**

Introduction to managerial tools of trade including energy geo-economic. Topics discussed are: world energy markets, demand, supply, refining, marketing, forecasting, national v. international oil companies, transportation. An introduction to environmental economics will help connect energy industry to sustainable work practices, which include geographic distribution and political and governmental systems associated with the resources. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEMM 6200 - Environmental, Regulatory, Legal & Political Environment in the Energy Industry

Summer 2010 Registration **GEMM 6200**

Exploration of current political situations regarding the energy industry, its environmental impact in the short and long term. Topics include climate change, pollution, solid wastes and conversions to natural resources. Students will become familiar with national and international energy laws and regulations, financial arrangements, confidentiality, and bidding agreements. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEMM 6300 - Renewable and Alternative Energy: Opportunities & Challenges

Summer 2010 Registration **GEMM 6300**

This course will familiarize students with the newest renewable and alternative energy sources. The course does not focus on hydrocarbon sources but examines challenges and opportunities that exist for the establishment of the new energy sources to become

viable in the industry. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEMM 6400 - Leadership and Decision Making in the Global Energy Environment

Summer 2010 Registration **GEMM 6400**

Students will examine leadership from an energy executive perspective. Topics include: how execs lead, change, innovation, interacting with top management teams, the board, leadership issues involved with governance of the firm, strategies for enhancing executive influence and ethics and responsibilities associated with exec. **Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEMM 6500 - Energy Accounting in Global Markets

Summer 2010 Registration **GEMM 6500**

The course builds a basic understanding of how to convey to decision makers, in and out of the firm, information about its resources. Emphasis on; analysis of income statements, balance sheet, statement and cash flows (historical financial accounting information) with specific coverage of cost-volume-profit, variance, forecasting, joint interest accounting and measurement of divisional performance. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEMM 6600 - Financial Management and Hedging in the Global Energy Markets

Summer 2010 Registration **GEMM 6600**

Introduction to fundamental principal of asset valuation and financing in competitive global markets. Providing the tools necessary to analyze day-to-day financial issues in the energy industry (time value of money, valuation of income streams, risk weighted investment returns.) Topics such as: risk management, arbitrage, hedging and foreign exchange will be covered. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEMM 6410 - People Management in the Global Energy Environment

Summer 2010 Registration **GEMM 6410**

Explains that people are energy's most important asset. Students will learn the latest research in human resource theories, study models, and learn how to develop organizational effectiveness from the firm's human capital. Concepts on: effective teamwork, attracting and retaining talent and using HR processes such as performance management and development to drive engagement will be discussed. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Choose four

Choose four of the following courses. These courses are taken during the last two terms of the program and are offered based on enrollment.

GEMM 6210 - Land Management and Energy Contracts

Summer 2010 Registration **GEMM 6210**

The elective will focus on the process of managing the use and development of land resources in a sustainable way. Topics such as; public controls, powers used for land regulation, and an intro to real estate will be covered to enhance students understanding of land management and its application to the energy industry. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEMM 6430 - Organizational Behavior in the Energy Industry

Summer 2010 Registration **GEMM 6430**

Students will learn how to lead and manage human assets inside energy industries. Students will be exposed to fundamental principles of human behavior and increase their competence of working in diverse settings. Proper management can lead to a sustainable competitive advantage, because of management of employees and developing them into enthusiasts of your firm. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEMM 6450 - Strategic Management of the Energy Industry

Summer 2010 Registration **GEMM 6450**

The course focuses on how to improve an organization's competitiveness in a changing global environment. Emphasis on sustainable strategies, students develop skills to formulate, implement and evaluate organizational strategies in the rapidly changing environment. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEMM 6460 - Integrated Information Management for Energy Firms

Summer 2010 Registration **GEMM 6460**

This course covers issues associated with developing an integrated information managing strategy to identify major information categories used with an energy firm. It covers relationships to business processes to guide applications development and

facilitate the integration and sharing of data. Using case studies from energy firms operational, administrative and strategic systems will be discussed.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEMM 6470 - Energy Marketing

Summer 2010 Registration **GEMM 6470**

This course covers the challenges faced by energy industries in developing branding, and developing new markets. Marketing both products and the company to its stakeholders, in the face of competitive pressures, students learn practical marketing tools and how they can be used to effect corporate strategy.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEMM 6610 - Advanced Financial Management in the Energy Industry

Summer 2010 Registration **GEMM 6610**

This course is focused on understanding the costs and benefits of various forms of capital. By examining internal and external managers, students will be able to assess alternative capital sources to achieve their strategic objectives. The course will introduce effective investor communication techniques.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEMM 6620 - Energy Asset Management

Summer 2010 Registration **GEMM 6620**

The course covers management of an organization's energy resources and facilities as well as broader coverage of project management. Portfolio strategy, planning, scope, time, cost, quality and organizational effectiveness will be addressed. Also when budget, material, vendor relations or other factors disrupt a project, students will be prepared on how to react.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEMM 6630 - Production and Supply Chain Management for the Energy Industry

Summer 2010 Registration **GEMM 6630**

This course will focus on the business aspects running a renewable energy entity either as a separate company or sector within an established company. Students taking this course have completed a previous course on the basic science of renewable energy. This course is intended to focus on leadership issues and decision making regarding renewable energy. As a significant part of the course, students will learn how to review information and data supplied to them by engineers, accountants, finance, marketing, scientists, and other stakeholders within and outside their company including federal, state, and local governments and regulatory agencies to make sound business

decisions. **Semester Hours:** 3 to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Prerequisites

Applicants that do not have a science- or energy-related field undergraduate degree or three-plus years experience in the industry are required to take two prerequisite courses as well as the GMAT.

The prerequisite courses include physical geology and introduction to physical engineering. These courses can be taken at any accredited university, but must be approved by a GEM team staff member before registering. Also the prerequisites may be taken prior or concurrently with GEMM 6000 and GEMM 6100.

Notes and Restrictions

The program is a cohort group, hybrid online, 18-month master of science degree program. As a cohort program, all students start together, progress together and graduate together. Students cannot take time out from the program once it starts and need to plan on remaining in the program for the full 18 months. If it becomes necessary to take a term off, students may not re-enroll until the next cohort group catches up to the point where the student originally dropped out, which is 6 months later. As a hybrid online program, professors and students meet in class face to face for four days (Fridays through Mondays) at the start of each 3-month term with the rest of the term completed online. Please note that the GEM degree program runs on a completely separate schedule from the normal semester terms of the Business School. Please check the Business School Web site for deadlines and dates of each GEM term. All GEMM courses are restricted to those students who have been admitted to the MS GEM program.

Dual Degrees

In order to participate in the dual degree options offered by the Business School, students in the GEM program must first complete their entire GEM degree before they can begin their second degree.

Health Administration MS

Program Director: Errol L. Biggs
Telephone: 303-315-8851
E-mail: errol.biggs@ucdenver.edu

Faculty

Professors:

Heidi Boerstler, PhD/JD, Yale University/University of Denver
Peter Bryant, PhD, Stanford University
C.Marlena Fiol, PhD, University of Illinois-Urbana-Champaign
Richard Foster, PhD, University of Chicago
Bruce Neumann, PhD, University of Illinois
Edward O'Connor, PhD, University of Akron

Associate Professors:

Murray Cote, PhD, Texas A & M University
Blair Gifford, PhD, University of Chicago
Deborah Kellogg, PhD, University of Southern California
Stephen Ross, MD, University of North Carolina

Instructor:

Errol Biggs, PhD, Pennsylvania State University

The goal of the master of science in health administration degree is to prepare men and women who, after appropriate practical experience in responsible managerial positions, are capable of assuming positions as chief executive officers or senior administrators in complex, multiservice health care organizations or in organizations' purchasing and health services.

The curriculum is a synthesis of management concepts and techniques that are applicable to any economic organization and tools that can be specifically applied to health and health services systems. The program emphasizes skills that heighten basic analytical and decision-making processes used by top-level managers in selecting broad strategies for the institutions and by junior managers in administering subunits of health care organizations. The faculty guide the students in their mastery of theoretical, conceptual and quantitative topics.

The program has enjoyed continuous accreditation by the Commission on Accreditation of Healthcare Management Education since 1970.

A. Common Body of Knowledge (CBK)

BUSN 6521 - Managing Individuals and Teams (Health Section)

Summer 2010 Registration **BUSN 6521**

Students learn the strengths and weaknesses of their management style and how to work effectively with individual differences. Students also learn how to form teams around purpose/task, diagnose problems and identify and implement solutions by utilizing leadership skills such as setting goals, processes and measures, interpersonal communication, motivation and conflict management. Students develop an understanding of the effect of the organizational and social context on the behavior of individuals and teams. The emphasis is on health care issues and is intended for health care students. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

BUSN 6530 - Data Analysis for Managers

Summer 2010 Registration **BUSN 6530**

Provides an overview of techniques for data analysis, including multiple regression, sampling theory and applications of probabilistic inference from sample data. The emphasis is upon the applications of these techniques to management problems. Students are required to analyze data sets, present their analyses in written or oral form and defend their conclusions. Note: Students cannot receive credit for both BUSN 6530 and FNCE 6290. **Semester Hours:** 3to 3 **When Offered:** FASPRSUM

Registration is changing. Visit our website for details ucdenver.edu/registration.

BUSN 6550 - Analyzing and Interpreting Accounting Information

Summer 2010 Registration **BUSN 6550**

Emphasizes the use of accounting statements and data in making business decisions. External financial accounting information and concepts are used for investment and credit decisions. Internal managerial accounting information and concepts are used for product costing, cost analysis and management control. **Semester Hours:** 3to 3 **When Offered:** FASPRSUM

Registration is changing. Visit our website for details ucdenver.edu/registration.

BUSN 6560 - Marketing Management

Summer 2010 Registration **BUSN 6560**

Focuses on the formulation and implementation of a marketing plan in the context of the firm's strengths, overall strategy and competitive environment. Emphasis is on

understanding the marketing environment and on decision making skills regarding market selection, pricing, promotion, product configuration and management of distribution channels. **Semester Hours:** 3to 3**When Offered:** FASPRSUM
Registration is changing. Visit our website for details ucdenver.edu/registration.

BUSN 6630 - Management of Operations

Summer 2010 Registration **BUSN 6630**

This course is concerned with the production and delivery of goods and services. It provides an overview of a variety of key Operation Management issues including scheduling, capacity determination, facility location and layout, distribution and related topics. The use of model- assisted decision making is emphasized. **Semester Hours:** 3to 3**When Offered:** FASPRSUM
Registration is changing. Visit our website for details ucdenver.edu/registration.

BUSN 6640 - Financial Management

Summer 2010 Registration **BUSN 6640**

This course is concerned with the business firm's decisions to make investments and to finance its operations. Students learn to use the tools and theories underlying business valuation, cost of capital, capital budgeting and capital structure. Students will learn to evaluate a firm's financial position through the examination of its financial statements and to prepare pro forma statements for the firm. Prereq: BUSN 6530 or FNCE 6290, BUSN 6620 (both may be taken concurrently) and BUSN 6550 completed prior and strictly enforced. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 18 Hours

Waivers of CBK courses are possible. The entire CBK may be waived if the student has completed an undergraduate business degree from an AACSB-accredited college or university within the last 10 years. Specific courses may be waived based on a case-by-case evaluation of undergraduate or graduate course work in business completed at a regionally accredited college or university within the last 10 years.

B. Graduate Core in Health Administration

HLTH 6010 - Health Care Systems

Summer 2010 Registration **HLTH 6010**

Introduces the structure and function of the medical care delivery system. Includes basic concepts and measures of health, disease, quality, values, needs and utilization; issues in health care manpower, institutions and system organization; general issues in policy,

reimbursement and regulation; broad community, and organizational considerations in medical care organizations. The student is introduced to the principles of epidemiology and environmental health and demonstrates the application of epidemiology concepts to planning for the healthcare service needs of a population. **Semester Hours: 3to 3When Offered: FALL**

Registration is changing. Visit our website for details ucdenver.edu/registration.

HLTH 6040 - Health Care Financial Management

Summer 2010 Registration **HLTH 6040**

Theory of insurance applied to healthcare, including benefits design and co-payments. Existing and proposed competition in insurance markets, including rating methodologies and selection issues. Managed care and medical spending accounts as responses to problems with traditional insurance. Managerial accounting methods useful for analyzing contracts and managing profitability are presented. Prereq: BUSN 6550 and 6621 or permission of instructor. **Semester Hours: 3to 3When Offered: FALL**

Registration is changing. Visit our website for details ucdenver.edu/registration.

HLTH 6911 - Health Field Studies

Summer 2010 Registration **HLTH 6911**

The objective of this course is to expose students to health care organizations with which they are not familiar. Each student is assigned to a health care organization and given a specific problem or project to complete. Prereq: HLTH 6010 or permission of instructor. **Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

BUSN 6541 - Legal and Ethical Environment of Business (Health Section)

Summer 2010 Registration **BUSN 6541**

Students develop a working knowledge of legal and ethical parameters for business decision making. Addresses the legal system and mechanisms for resolving disputes. Topics include business entities, torts, contracts, employment relationships, litigation and alternative dispute resolution. It stresses the influence of legal issues on organization and decision making. The emphasis is on health care issues and is intended for health care students. **Semester Hours: 3to 3When Offered: SPRING**

Registration is changing. Visit our website for details ucdenver.edu/registration.

BUSN 6621 - Applied Economics for Managers (Health Section)

Summer 2010 Registration **BUSN 6621**

After taking this course, students should be able to apply economic principles to make optimal decisions given firm cost, demand and market circumstances. Also, they should be able to analyze the firm's interactions with its competitive market environment.

Students should understand basic aspects of federal macroeconomics policy designed to achieve stable prices and economic growth. Also, they should understand basic aspects of government regulation of business. The emphasis is on healthcare issues and is intended for healthcare students. Prereq: BUSN 6530 and BUSN 6550, both may be taken may concurrently. **Semester Hours:** 3to 3**When Offered:** *SPRING*
Registration is changing. Visit our website for details ucdenver.edu/registration.

DSCI 6440 - Quality and Process Improvement

Summer 2010 Registration **DSCI 6440**

Studies the identification, measurement and improvement of quality and the practical management issues related to implementing quality systems within organizations. Topics include historic and contemporary views of quality, statistical quality control tools including Six SigmaSM, work design and measurement and process flow and design. Note: Cannot receive credit for both DSCI 6440 and BUSN 6832. Prereq: BUSN 6530 or permission of instructor. Cross-listed with BUSN 6832. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

BUSN 6711 - Strategic Management (Health Section)

Summer 2010 Registration **BUSN 6711**

Concerned with the development of a general management perspective in establishing the strategic direction for a health delivery organization. Students gain an understanding of strategy formulation and implementation within the context of the managed care environment. Emphasis is on the integration of knowledge acquired in the previous functional area courses. Note: This course is intended as a final semester course. Required of Health Administration majors; open to others. Prereq: BUSN 6560 and 6640 - strictly enforced; BUSN 6630 strongly recommended and may betaken concurrently. **Semester Hours:** 3to 3**When Offered:** *SPRING*
Registration is changing. Visit our website for details ucdenver.edu/registration.

HLTH Electives (3) (9 semester hours)

Free Elective (1) (3 semester hours)

Total: 33 Hours

Notes and Restrictions

Free Elective. The free elective course can be chosen from the areas of accounting, finance, health administration, information systems, international business, management and marketing. A course with the BUSN prefix can be used as a free elective if the course number is 6800 or higher.

Management Residency. A management residency is optional, but recommended for all students, especially those with limited health care experience. The faculty of the

program provide assistance to students in securing the residency, as well as regular consultation during the residency period. Information on the full range of local, regional and national residencies is available in the program office.

Length of Program. The didactic portion of the degree will take at least two academic years, since most HA courses are offered only once each year and many have prerequisites. Part-time study is facilitated by courses being scheduled for late afternoon and evening hours.

Specialized Tracks in MS Health Administration

Each track carries its own specific course requirements. To provide a variety of perspectives and experiences within a specific area of health administration, each track includes courses that span various departments within the Business School, other schools on the Downtown Campus and other University of Colorado campuses.

- International health management and policy track
- Financial management track
- Health information technology management track

Institute for International Business

The international health track is affiliated with the Institute for International Business at UC Denver. The Institute for International Business is one of a few university programs to have received the prestigious CIBER grant from U.S. Department of Education. The grant is being used by the institute to provide effective internationally oriented education, research and outreach activities. Also, the institute is a participant in an international consortium of universities for faculty and student program and course exchanges. Students in the international health management and policy track will have access to the institute's exchange networks.

International Health Travel/Study Course

Program Director: Blair Gifford

Telephone: 303-315-8400

E-mail: Global-Health@ucdenver.edu

A unique feature of our international health management and policy track is its emphasis on making sure students gain international experience during their education. The travel study course requirement can be met by taking a University of Colorado health travel/study course, or a student can take a course at a partnering university. An example of a health travel/study was a three-week trip to Thailand and Vietnam to visit numerous cultural- and health-related facilities.

History MA

► Graduate School Rules apply to this program

The master of arts in history requires 36 semester hours (12 courses). Students applying for admission to the program should have some background in history, though not necessarily a BA in the subject. The department encourages applications from individuals of any age interested in resuming their education. Graduate students in history develop skills in critical thinking, writing and independent research. Our program prepares students for a wide variety of professions, including teaching, government service, museum and archive management and historic preservation, as well as further degree work in history, law, librarianship and business. The department expects that students graduating with an MA in history will master the following general skills for their degrees:

- The ability to pursue independent historical research projects
- The ability to analyze historiographical arguments
- The ability to analyze primary documents and develop arguments from them
- The ability to create bibliographies using archival, library and Internet resources
- The ability to write in a variety of formats, including historiographical essays, book reviews and research papers

Students will also master knowledge of the basic historical content of both their major and minor fields, and an understanding of the historiographies and historical methods in their major and minor fields.

Admission Requirements

- In addition to the general admission requirements of the Graduate School, the Department of History requires an undergraduate GPA of at least 3.25.
- All applicants to the history program must take the GRE. GRE scores form a part of the department's consideration of students' qualifications.
- Applicants are required to submit a sample of written work, usually a term paper or project of similar length.
- Applicants should address any gaps, weaknesses or special circumstances in their academic records in the statement of purpose portion of the application. In special circumstances, the department may modify its admission standards.

APPLICATION DEADLINES

April 1	Fall admission
October 1	Spring admission

Admission decisions are made by a graduate committee comprising the graduate advisor and faculty representing fields in U.S., European, global and public history.

Graduate School Policies

All history MA students are subject to Graduate School policies related to graduate study, as well as to all relevant university policies. These policies cover such topics as time limits on degree completion, changing degree programs, incomplete grades, and more. Further information on these policies can be found in the Graduate School section of this online catalog.

Transfer Credits

With approval from the graduate advisor and the appropriate faculty, students may transfer nine graduate-level credits accrued before enrollment in the UC Denver MA history degree program, provided that they earned a grade of *B+* or better in these courses. Students must submit a syllabus for each course they wish to transfer, and faculty may require students to complete additional assignments to meet the expectations of the department. The department will not accept transfer of courses comparable to HIST 6013. Introduction to the Professional Study of History.

Grade Requirements

A minimum grade of *B-* (2.7) is required in all UC Denver history courses applied toward the degree. Students who earn less than a *B-* in HIST 6013 must retake the class.

Residency Requirements

The history department requires a residency of at least one academic year for the degree.

Graduate Advising

Upon admission, students will sign a check list indicating their understanding and acceptance of the department's expectations. Early in their first semester students should contact the history department graduate advisor to discuss their path through the program and to receive advice regarding the selection of major and minor fields.

Degree Tracking Responsibility

Although faculty will provide reasonable guidance, it is up to students to monitor their own progress through the program in consultation with the graduate advisor and their major advisor; this includes knowledge and understanding of application and graduate deadlines, degree requirements, thesis guidelines, etc.

Choosing Advisors and Fields of Study

All history MA candidates choose a major and minor field. Students will take courses in these fields (see Degree Requirements below) and will be tested in these fields (see Comprehensive Examinations). As soon as possible after consulting with the graduate advisor, students are responsible for contacting two field advisors, one to oversee their progress in the major field, the other to oversee their minor field. All students should have chosen a major field and major advisor by the beginning of their second semester.

Major Fields, Minor Fields and Concentrations

The MA in history seeks to provide students with a balance of breadth and depth in the study of history. Major fields are broad areas of study within which students gain a general picture of historical processes. Concentrations provide focus for developing expertise within the major, either regionally or thematically. Minor fields provide a complementary or comparative area and must be from outside the major field.

Advisors and students together will work out Plans of Study, which indicate the courses students intend to take to meet their requirements, based on their selection of major and minor fields. *Students should make every effort to enroll in courses which best fit their major field, major concentration and minor field.*

Students can choose to major in one of the following four fields:

- European History
- Global History
- Public History
- U.S. History

The department has compiled a core readings list for each of these major fields. Students will draw on the core lists for their comprehensive exams. Core lists contain a number of themes with bibliographies for each theme. In consultation with their major advisor, students choose at least two books from each theme; for some themes, students will read more than two books.

Major Field Concentrations

Students work with advisors to select one of the major field concentrations listed above. Concentrations provide thematic or regional focus to a broad geographical major (e.g. for the global history major, students could concentrate on trade, borders, imperialism, etc. or any of the areas of regional expertise of our faculty). Readings for the major field concentration are in addition to the core reading list.

Minor Fields

Students choose minor fields from the list of major fields or the list of major field concentrations. They choose their minor field list in consultation with the minor field advisor.

Degree Requirements

All history MA students must have a major field and a minor field, and they must complete half of their course work at the 6000 level.

Required Introductory Course

HIST 6013 - Introduction to the Professional Study of History

Summer 2010 Registration **HIST 6013**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 3 Hours

Major Field

Core course in Major Field (3 semester hours)

Each major field has a core course covering major approaches and themes. The core course familiarizes students with the field in a broad sense.

Research Seminars (3-6 semester hours)

Research seminars focus on students' development of an original, primary research paper. One 3-semester-hour research seminar is required of all students. A second research seminar is required for students not pursuing an extended research option; the second 3 semester hours can be taken within the major or minor field.

Major electives (9-12 semester hours)

Electives are made up of courses in the major and concentration, including readings courses, which address specific field historiographies, and optional extended research credits. Students who choose to do a thesis may apply 6 thesis semester hours (HIST 6950) toward the major electives requirement.

Total: 18 Hours

Minor Field

Minor Electives

Electives are made up of courses in the minor field, including readings courses, which address specific field historiographies, or research seminars.

Total: 12 Semester Hours

Open Elective

Students may use the open elective to explore a course outside their major or minor or to do extra course work in one of their fields.

Total: 3 Hours

Degree Total: 36 Hours

PUBLIC HISTORY MA MAJOR PROGRAM

INDEPENDENT STUDY AND/OR INTERNSHIP

Candidates may register for up to 6 hours of internships or independent study, only one of which may be at the 6000-level. Students will not be allowed to fulfill the research requirement with an independent study. Any independent study at the 6000-level needs the permission of the graduate advisor. Students interested in pursuing an independent study must find a faculty member willing to oversee their work, and they should expect the workload for an independent study to equal or exceed that required for other courses at the same level.

HIST 5840 - Independent Study: History

Summer 2010 Registration **HIST 5840**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 6840 - Independent Study: HIST

Summer 2010 Registration **HIST 6840**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 6939 - Cooperative Education

Summer 2010 Registration **HIST 6939**

Semester Hours: 1to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMPREHENSIVE EXAMINATIONS

All history MA candidates must pass a comprehensive examination in the major and minor fields after the completion of course work and before embarking on a thesis, curriculum project or public history project. The comprehensive exam evaluates students' knowledge of their course work and their reading lists for their major, minor and concentration. The exam consists of a take-home written section, with broad essay questions in both the major and minor fields; this is followed by an oral exam with the student's faculty committee. In answering their exam questions, students are expected to construct arguments and to show mastery of the historiographies, narratives and historical content in their fields. The comprehensive exam is administered and evaluated by a committee of the major advisor, the minor advisor and an outside reader from the history faculty.

Master's Degree Extended Research Options

The MA program in history offers a set of courses in which students can develop extended research interests. Students must select an advisor and develop a proposal for a specific research agenda in the semester before beginning work on a project.

REQUIRED PUBLIC HISTORY THESIS (HIST 6950) OR PROJECT (HIST 6952)

Students majoring in public history must complete either a thesis (6 semester hours) or a project (3 semester hours).

OPTIONAL THESIS FOR STUDENTS IN U.S., GLOBAL AND EUROPEAN HISTORY (HIST 6950)

Students majoring in U.S., global or European history can choose to write a thesis (6 semester hours in their major field).

OPTIONAL ADVANCED HISTORY CURRICULUM DEVELOPMENT (HIST 6951)

Students who undertake their master's program when they are already teachers can choose to construct curriculum projects relevant to their teaching practice. See the separate section below on "Opportunities for Teachers and Teachers-in-Training."

HIST 6950 - Master's Thesis

Summer 2010 Registration **HIST 6950**

Semester Hours: 1to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 6951 - Masters Project: Advanced History Curriculum Development

Summer 2010 Registration **HIST 6951**

Students develop curricula for secondary-level history courses; must demonstrate thorough knowledge of subjects; understanding of historiographic and methodological problems; command of primary sources and their uses in teaching; and describe teaching strategies, methods, and assessments to be used in the curricula. Prereq:

Permission of instructor. **Semester Hours:** 1to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 6952 - Master's Project: Public History

Summer 2010 Registration **HIST 6952**

Public history majors may use three credits to complete a public history project. Projects can entail creating an exhibit, organizing a museum or archival collection, conducting a preservation survey, or similar activities. Students are required to prepare a paper describing the process and results of their project. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Thesis Requirements

Students writing theses are expected to develop an original research agenda resulting in an extended paper. Students work with their major field advisor, who will help guide them through the process of research and writing. Students are expected to take no less than two semesters (enrolled in HIST 6950) to complete their theses. Before registering for HIST 6950, students must have a thesis proposal and initial bibliography approved by their advisor. The first semester of the thesis course is organized as a seminar in which students meet regularly with a department member and other thesis writers.

A thesis is evaluated by a committee of three, including the major advisor and two other faculty members chosen by the student in consultation with the major advisor. Upon completion of the thesis, the student meets with the committee members, who ask questions about the research and conclusions which the student must defend. In many instances, the committee will require further revisions, sometimes major in scope, before the thesis is accepted and cleared for submission to the Graduate School in fulfillment of degree requirements.

Project Requirements

In lieu of a thesis, public history majors may choose to enroll in one semester of HIST 6952 to complete a public history project. Projects, which are usually conducted in collaboration with a public history organization, can entail creating an exhibit, organizing a museum or archival collection, conducting a preservation survey or similar activities. Students are required to prepare a paper describing the process and results of their project.

Opportunities for Teachers and Teachers-in-Training

Curriculum Projects

Licensed teachers enrolled in the history graduate program may choose to complete a curriculum development project. Students arrange curriculum development projects with a sponsoring faculty member. Generally, students are expected to develop and submit a complete course curriculum plan for each 3-semester-hour project. Projects need to show evidence of familiarity with the relevant historiographies and primary sources. Students may apply the hours from HIST 6951 to either the major field or the minor field, depending on the project subjects. Curriculum plans must meet minimum criteria established by the history department in the document Advanced History Curriculum Development Projects.

HIST 6951 - Masters Project: Advanced History Curriculum Development

Summer 2010 Registration **HIST 6951**

Students develop curricula for secondary-level history courses; must demonstrate thorough knowledge of subjects; understanding of historiographic and methodological problems; command of primary sources and their uses in teaching; and describe teaching strategies, methods, and assessments to be used in the curricula. Prereq: Permission of instructor. **Semester Hours:** 1 to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

(3 or 6 semester hours in their major field, or 3 semester hours in their major and 3 semester hours in their minor)

Secondary Teacher Licensure

Students interested in becoming secondary history and social studies teachers may choose to earn both the MA in history and secondary teacher licensure.

We strongly encourage students to complete the School of Education & Human Development's teacher licensure program before enrolling in the history MA program; the history graduate program and the teacher licensure program require separate admission. Students complete 36 semester hours in history and 37 semester hours in the teacher licensure program. For the history degree, students take 18 semester hours in their major field, 12 semester hours in their minor field and 6 semester hours in curriculum and methods course work, which apply both to the teacher licensure program and the MA in history:

HIST 5464 - Problems and Methods in Teaching History and Social Studies I

Summer 2010 Registration **HIST 5464**

Introduces students to problems and methods in secondary education history and social studies teaching. This course focuses primarily on the teaching of history. Note: Open to students in the Initial Professional Teacher Education program or a relevant graduate program, and to practicing teachers. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-and-

HIST 5465 - Problems and Methods in Teaching History and Social Studies II

Summer 2010 Registration **HIST 5465**

Introduces students to problems and methods in secondary education history and social studies teaching. This course focuses broadly on the teaching of all the social studies fields, including history, economics, government, and geography. Note: Open to students in the Initial Professional Teacher Education program or a relevant graduate program, and to practicing teachers. Prereq: HIST 5464. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Humanities MH

► Graduate School Rules apply to this program

Requirements for Admission

In addition to the general requirements of the Graduate School governing acceptance to a master's degree program, applicants must submit the following:

- a bachelor's degree
- two official copies of all transcripts, with an overall GPA of at least 3.0 out of 4.0
- a writing sample
- three letters of recommendation (at least two from academic sources)
- appropriate undergraduate training or professional background, or indicators that supply evidence of ability to pursue the MH degree
- a typed statement specifying the goal of advanced study in the humanities expressed in clear, correct and effective English
- standardized test scores are not required, but will be considered if submitted

After meeting all other requirements for admission, applicants may be required to have an interview to discuss their interest in the program and their plans for study. For out-of-state applicants, an appropriate substitute for the interview may be determined by the director.

Provisional admission:

Applicants may be admitted as provisional-status graduate students if their complete record indicates a high probability of success.

Nondegree students:

Potential applicants may take graduate-level courses as nondegree students (unclassified student with a bachelor's degree) if they:

1. Wish to strengthen their record in order to demonstrate that they can successfully complete courses in the program

-or-

2. Wish to start courses in the program prior to completing their application.

Up to 12 semester hours taken as a nondegree student may be accepted by the program once a student has been admitted to the program (the 12-hour limit also includes graduate work from another university).

International Students:

International students must also meet UC Denver requirements for international admission. See the Information for International Students section of this catalog or call 303-315-2230 for further information.

Degree Requirements

The master of humanities offers two general plans of study: Track I (individualized program) and Track II (cultural studies in interdisciplinary cluster areas).

Thirty-six semester hours are required for Track I and 39 semester hours are required for Track II. All courses credited toward the MH degree must be taken at UC Denver over a period not exceeding five years (a maximum of 12 graduate semester hours may be transferred from other institutions). At least a *B* average (3.0) must be maintained. A grade of *B-* or below will not be counted toward the degree. Each student's program is supervised by a faculty advisor. All independent study contracts must be approved in advance by one of the program directors. A total of two independent study courses and two 4000-level undergraduate courses may count toward the degree. The rest must be 5000/6000-level courses offered through various departments. All students must pass an oral comprehensive exam in order to graduate.

TRACK I (Individualized Program) Requirements— Thesis or Project Option

Students in Track I have the opportunity to fashion a course of study based on their individual interests and goals. In consultation with a faculty advisor, students choose two

or three academic disciplines as areas of concentration. Students who select a thesis (6 semester hours) will submit a thesis proposal after completing 30 hours of course work. In the case of a project (3 semester hours), students will submit a project proposal after 33 hours.

TRACK I REQUIREMENTS:

Three interdisciplinary seminars

HUMN 5025 - Methods and Texts of the Humanities

Summer 2010 Registration **HUM 5025**

Exposes the beginning graduate student to exemplary works and methodologies of select humanistically oriented disciplines, such as philosophy, fine arts, literature, history, communication, music, and theatre. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

(Must be taken during the first year of entrance into the program. Offered fall only.)

Mid-Program Seminar, an interdisciplinary seminar with a HUM prefix, which is approved for the student's program by one of the program directors (note that a Mid-Program Seminar **must** have a HUM prefix).

HUMN 5924 - Directed Research and Reading in Interdisciplinary Humanities

Summer 2010 Registration **HUM 5924**

Provides background reading, theory and research approaches for students to develop a thesis, project, or an individualized theme for the oral exam based on their interdisciplinary focus. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

(A final seminar that provides background reading, theory and research approaches for students to develop a thesis or project. Offered spring only; student must have completed 24 hours of course work and must register for the course via a schedule adjustment form with instructor approval.)

Total: 9 Hours

Electives

Additionally, students must complete a total of 21-24 semester hours comprising a coherent selection of courses from a variety of disciplines. All courses for the self-

structured portion of the program must be selected with the approval of one of the MSS program directors.

A total of two independent study courses and two 4000-level undergraduate courses taken when enrolled in the program may count toward the degree. All independent study contracts must be approved by one of the program directors. The remaining course work must be 5000/6000-level courses offered through various departments.

Students completing a project take 24 hours of electives, while thesis students complete 21 hours of electives.

Total: 21-24 Hours

Thesis or Project

A thesis (6 semester hours) or a final project (3 semester hours), which must include a substantial scholarly paper and may include a creative exercise involving at least two disciplines. In order to proceed with a thesis or project, all students must submit a proposal approved by three faculty members (and approved by one of the program directors in cases where one of the directors is not serving on the committee).

HUMN 5950 - Master's Thesis

Summer 2010 Registration **HUM 5950**

Semester Hours: 1to 8

Registration is changing. Visit our website for details ucdenver.edu/registration.

HUMN 5960 - Master's Project

Summer 2010 Registration **HUM 5960**

Semester Hours: 1to 8

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 3-6 Hours

Oral Exam

An oral exam before a committee of three faculty members in order to graduate.

Track I Total: 36 Hours

TRACK II (Cultural Studies)—Non-thesis or Project Option

This track is somewhat more structured than Track I, but does not require a thesis or a project. In consultation with a faculty advisor, students choose from courses organized into eight interdisciplinary clusters:

- classics
- identity and gender
- meaning and values
- philosophy and theory
- self, society and community
- social and political thought
- technology and culture
- understanding America/understanding the world

TRACK II REQUIREMENTS:

Core cluster courses

Complete 15 semester hours in one of the above clusters.

Total: 15 Hours

Three required interdisciplinary seminars

HUMN 5025 - Methods and Texts of the Humanities

Summer 2010 Registration **HUM 5025**

Exposes the beginning graduate student to exemplary works and methodologies of select humanistically oriented disciplines, such as philosophy, fine arts, literature, history, communication, music, and theatre. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

(Must be taken during the first year of entrance into the program.)

Mid-Program Seminar, an interdisciplinary seminar with a HUM prefix, which is approved for the student's program by one of the program directors (note that a Mid-Program Seminar **must** have a HUM prefix).

HUMN 5924 - Directed Research and Reading in Interdisciplinary Humanities

Summer 2010 Registration **HUM 5924**

Provides background reading, theory and research approaches for students to develop a thesis, project, or an individualized theme for the oral exam based on their interdisciplinary focus. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

(A final seminar that provides background reading, theory and research approaches for students to develop a theme for the oral exam. Offered spring

only; student must have completed 24 hours of course work and must register for the course via a schedule adjustment form with instructor approval.)

Total: 9 Hours

Electives

15 additional elective semester hours (students retain considerable flexibility in selecting these hours).

Total: 15 Hours

Comprehensive Exam

A comprehensive oral exam and a brief paper (15-20 pages) presented before a committee of three faculty members in order to graduate.

Track II Total: 39 Hours

Information and Learning Technologies MA

Lawrence Street Center, 701

Telephone: 303-315-6300

Fax: 303-315-6311

E-mail: education@ucdenver.edu

Web site: www.ucdenver.edu/education

Faculty

Information about Information ILT faculty is available online at www.ucdenver.edu/education

Master's Degree

The ILT master's program helps people design and use various resources and technologies for learning. Applying sound principles of instructional design, graduates can integrate a variety of learning technologies into their teaching including multimedia presentations, social-networking tools and tools for authoring, production, assessment and participation. Program graduates learn to implement learning technologies in

specific professional settings—either K–12 schools or adult learning settings such as business or higher education.

Students are assigned to tracks according to their professional goals:

- The instructional design track prepares students to work in adult learning settings such as business, higher education, health care, nonprofits or government.
- The eLearning track prepares educators to develop online courses and learning materials and to teach and facilitate learning in those eLearning environments.
- The K–12 teaching track helps teachers integrate technologies into schools and classrooms with a focus on improving teaching practices. Teachers may earn a state endorsement in instructional technology.

Once admitted, students begin a plan of study that typically takes about 1-1/2 years to complete. Some students are organized into a cohort to complete courses together at a fixed sequence. Other students select courses at a more flexible pace. Consult the ILT Web site for more information about specific plans of study, course offerings and expectations of cohort groups.

ILT faculty members also participate in the school's doctoral program. Students interested in a PhD may participate in a technology-focused doctoral lab with a number of ILT faculty members. The program also delivers an online certificate on eLearning design.

Admission Requirements

Admission decisions are based on undergraduate and graduate grades, external letters of recommendation, writing samples and fit with the program as reflected in a letter of intent. In some cases, results of a test (GRE) are also required. Prospective students should consult the ILT program Web site for complete admission procedures and requirements.

Professional Expectations

All students in the ILT program are expected to show a strong commitment to the program and to maintain high academic, professional and ethical standards. Inappropriate or unprofessional conduct is cause for discipline or dismissal from the program.

Technology Expectations

The ILT program uses computers and related technologies either as a focus or a tool for learning. Students are expected to obtain an e-mail account and check it frequently. In addition to on-campus facilities, ILT students need convenient access to Internet-

connected computers off campus, either at their place of work or at home. In addition to textbooks, software purchases may be required or recommended for specific classes.

Program Requirements

Instructional Design

Students complete at least 30 graduate semester hours of course work from a set of core courses and approved electives within and outside the ILT program. The plan of study is nationally accredited by NCATE and AECT and is consistent with standards for instructional designers.

Sample plan for Instructional Design Track			
	Fall	Spring	Summer
Year 1	INTE 6750 - Current Trends and Issues in Instructional Technology EPSY 5220 Adult Learning and Education	INTE 5600 - Multimedia Authoring INTE 6710 Creative Designs for Instructional Materials	INTE 5680 - Integrating Media in eLearning Environments INTE 5830 Information and Learning Technologies Workshop
Year 2	INTE 6930 - Internship in Information and Learning Technologies INTE 6720 - Research in Information and Learning Technologies	INTE 5160 - Managing Information and Learning Technology Programs Elective	

eLearning Design and Implementation

Students may complete a 30 semester hours online master's degree with an eLearning emphasis. The focus of this master's track is on the planning, design, development, delivery, facilitation and evaluation of online learning resources and programs. A certificate is also available in this area, constituting the first-year requirements of the master's program.

Sample plan for eLearning Track			
	Fall	Spring	Summer
Year 1	INTE 5660 - Designing and Teaching in eLearning Environments	INTE 5670 - Developing eLearning Instruction	INTE 5680 - Integrating Media in eLearning Environments INTE 5650 - Policies and Planning for eLearning Programs
Year 2	INTE 6720 - Research in Information and Learning Technologies INTE 6710 Creative Designs for Instructional Materials	INTE 5160 - Managing Information and Learning Technology Programs Elective	

K-12 Teaching

Students may select a master's program or an endorsement program in instructional technology. For the full master of arts degree, students complete at least 30 graduate semester hours of course work consisting of a core set of courses and approved electives. The plan of study is accredited by NCATE and AECT and is designed in line with standards of the Colorado Department of Education. Students may also complete an endorsement-only program in instructional technology consisting of 24 graduate semester hours.

Sample Plan for K-12 Teaching Track			
	Fall	Spring	Summer
Year 1	INTE 6750 - Current Trends and Issues in Instructional Technology INTE 5830 Information and Learning Technologies Workshop	INTE 5600 - Multimedia Authoring INTE 6710 Creative Designs for Instructional Materials	INTE 6515 - Leadership for Learning Technologies Integration INTE 5710 - Telecommunications

			and Networking in Education
Year 2	INTE 6930 - Internship in Information and Learning Technologies INTE 6720 - Research in Information and Learning Technologies	INTE 6999 - Leadership and Practice in Information and Learning Technologies Elective	

Information Systems MS

Program Director: Jahangir Karimi

Telephone: 303-315-8430

E-mail: Jahangir.Karimi@ucdenver.edu

Web site: <http://business.ucdenver.edu/Disciplines/InfoSystems/InfoSystemsMS.htm>

Faculty

Professors:

James Gerlach, PhD, Purdue University

Jahangir Karimi, PhD, University of Arizona

Associate Professors:

Dawn Gregg, PhD, Arizona State University

Michael Mannino, PhD, University of Arizona

Judy Scott, PhD, University of California-Irvine

Steven Walczak, PhD, University of Florida

Assistant Professors:

Ronald Ramirez, PhD, University of California-Irvine
Zhiping Walter, PhD, University of Rochester

Senior Instructors:

Eric Thompson, MS, University of Colorado

Instructor:

Linda Fried, JD/LLM, University of Miami

The master of science in information systems (MSIS) program at the Business School meets industry needs by providing specializations. The program prepares students for career paths in systems development and management services, enterprise application services, business intelligence, health information technology, information security audit and control, business consulting and development and consumer products and services. Whether students aim to be systems analysts or designers, software engineers, applications programmers, database administrators, Web developers, systems integrators, project managers, LAN administrators or application and technology consultants, the MSIS program provides the necessary knowledge and skills. This entire MS in information systems can be completed online.

The MSIS program offers a wide choice of courses. The course work consists of a common body of knowledge courses plus 30 semester hours, which includes a choice of a specialization. Those specialization include two required courses, 6 courses from a list specific to your chosen specialization and two elective courses. Candidates for the MS degree are not required to take a comprehensive examination or to complete a thesis in the major field.

A. Common Body of Knowledge (CBK)

Waivers of CBK courses are possible. The entire CBK may be waived if the student has completed an undergraduate business degree from an AACSB-accredited college or university within the last 10 years. Specific courses may be waived based on a case-by-case evaluation of undergraduate or graduate course work in business completed at a regionally accredited college or university within the last 10 years.

Four of the following courses are required if you do not meet the above waiver policy.

BUSN 6530 - Data Analysis for Managers

Summer 2010 Registration **BUSN 6530**

Provides an overview of techniques for data analysis, including multiple regression,

sampling theory and applications of probabilistic inference from sample data. The emphasis is upon the applications of these techniques to management problems. Students are required to analyze data sets, present their analyses in written or oral form and defend their conclusions. Note: Students cannot receive credit for both BUSN 6530 and FNCE 6290. **Semester Hours:** 3to 3**When Offered:** FASPRSUM
Registration is changing. Visit our website for details ucdenver.edu/registration.

BUSN 6550 - Analyzing and Interpreting Accounting Information

Summer 2010 Registration **BUSN 6550**

Emphasizes the use of accounting statements and data in making business decisions. External financial accounting information and concepts are used for investment and credit decisions. Internal managerial accounting information and concepts are used for product costing, cost analysis and management control. **Semester Hours:** 3to 3**When Offered:** FASPRSUM

Registration is changing. Visit our website for details ucdenver.edu/registration.

BUSN 6560 - Marketing Management

Summer 2010 Registration **BUSN 6560**

Focuses on the formulation and implementation of a marketing plan in the context of the firm's strengths, overall strategy and competitive environment. Emphasis is on understanding the marketing environment and on decision making skills regarding market selection, pricing, promotion, product configuration and management of distribution channels. **Semester Hours:** 3to 3**When Offered:** FASPRSUM

Registration is changing. Visit our website for details ucdenver.edu/registration.

BUSN 6630 - Management of Operations

Summer 2010 Registration **BUSN 6630**

This course is concerned with the production and delivery of goods and services. It provides an overview of a variety of key Operation Management issues including scheduling, capacity determination, facility location and layout, distribution and related topics. The use of model- assisted decision making is emphasized. **Semester Hours:** 3to 3**When Offered:** FASPRSUM

Registration is changing. Visit our website for details ucdenver.edu/registration.

BUSN 6640 - Financial Management

Summer 2010 Registration **BUSN 6640**

This course is concerned with the business firm's decisions to make investments and to finance its operations. Students learn to use the tools and theories underlying business valuation, cost of capital, capital budgeting and capital structure. Students will learn to evaluate a firm's financial position through the examination of its financial statements

and to prepare pro forma statements for the firm. Prereq: BUSN 6530 or FNCE 6290, BUSN 6620 (both may be taken concurrently) and BUSN 6550 completed prior and strictly enforced. **Semester Hours:** 3 to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 12 Hours for Common Body of Knowledge (CBK)

B. Information Systems Specializations

This set of courses consists of selected areas of specialization designed to provide the fundamental knowledge necessary for a career as an IS professional. Up to 9 semester hours may be transferred from an AACSB international accredited graduate school and applied to the information systems specializations upon approval. Students should take the required courses in each specialization before taking the chosen electives in each specialization.

The IS specializations provide students with a set of related courses necessary to acquire skills and expertise within a specific area in the development, management and use of information technology applications. Students are required to choose one specialization and complete the 6 hours of required coursework, 18 hours of selected electives, 3 hours of any other ISMG course or an internship in IS, and 3 hours of any Business School graduate course.

Accounting and Information Systems Audit and Control (AISAAC) Specialization

Recently, new regulatory environments have required companies to provide better documentation of their accounting and IT systems to improve the management and disclosure of their business processes for better financial and regulatory controls. Accounting and IT professionals have significant roles in audit and control activities, since they control the systems that monitor and report on finance, planning and operations. The courses within this specialization cover business-process management and financial controls; the emerging trends and practices in privacy and security; the strategies for integrating governance and compliance; and the IT organization's financial and business intelligence services. These courses will focus on how to leverage the existing IT infrastructure to establish quality in financial and internal audit processes and address the regulatory issues associated with reporting, consolidation and document/content management more effectively and completely.

Prerequisite

ACCT 6030 - Financial Accounting

Summer 2010 Registration **ACCT 6030**

Accelerated analysis of financial accounting concepts, the development of accounting thought and principles and critical review of generally accepted accounting principles. Prereq: BUSN 6550 or equivalent. Note: students who have taken ACCT 3220 or ACCT 3230 (or equivalent) may not take this course. **Semester Hours:** 3to 3**When Offered:** FALL

Registration is changing. Visit our website for details ucdenver.edu/registration.

Required Courses

ACCT 6020 - Auditing

Summer 2010 Registration **ACCT 6020**

Generally accepted auditing techniques and the philosophy supporting them; auditing techniques available to the independent public accountant. Pertinent publications of the AICPA reviewed. Prereq: ACCT 3230 with a grade of 'C' or better and ACCT 3054, strictly enforced. Cross-listed with ACCT 4620. **Semester Hours:** 3to 3**When Offered:** FALL SPR

Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 6040 - Business Process Management

Summer 2010 Registration **ISMG 6040**

Designing effective information systems for business requires an awareness of the organization(s) business processes and how to manage and streamline them. The objectives of the course are for students to understand the importance of business processes; the main types of business processes; and the evolution of business process management; business process outsourcing; business process re-engineering; business process redesign; technology enabled business processes; and automated workflow. An important activity is graphically mapping business processes, which are transformed into an application or set of applications. The organization needs to manage the electronic workflow to monitor that the work gets done and allow changes to the workflow. Case studies of organizations are studied for most topics to enhance understanding. The group projects let students apply their knowledge of the course to a specific organization. By the end of this course students should have an appreciation of the important process-centric issues in business systems design. **Semester Hours:** 3to 3**When Offered:** SPRING

Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 6060 - Analysis, Modeling and Design

Summer 2010 Registration **ISMG 6060**

Spring. Provides an understanding and application of systems analysis and design processes. Students are exposed to system development life cycle (SDLC), structured

systems analysis and design methods, object-oriented analysis and design methods, prototyping and commercial off-the-shelf package software approaches, and joint and rapid application development. Emphasizes the skills required for system analysts such as analytical, interpersonal, technical, fact-finding, and project management skills. Topics include data, process and object modeling, input-output and user interface design, and systems implementation and support. To provide an opportunity to develop these skills, an information system project is completed by a group of students. Students use a Case tool for their group project. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 6080 - Database Management Systems

Summer 2010 Registration **ISMG 6080**

The success of today's business often hinges on the ability to utilize critical information to make the right decisions quickly and efficiently. Transforming mountains of data into critical information to improve decision making is a skill every business decision maker must possess. This focus course covers the database design topics with a focus on enabling business decision making. Detailed topics include collecting, capturing, querying and manipulating data (using SQL and QBE) for simple to medium complex business applications. Commercial database products (e.g. ORACLE and ACCESS) are utilized to demonstrate the design of database applications in management, marketing, finance, accounting, and other business areas. Students will be able to design and implement simple to medium complex database applications after successful completion of this course. **Semester Hours:** 3to 3 **When Offered:** FALL
Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 6180 - Information Systems Management and Strategy

Summer 2010 Registration **ISMG 6180**

The effective use of information technology requires the alignment of competitive strategies, business processes, and IT applications. In this course, we take a top management perspective to the development of policies and plans that maximize the contribution of IT to organizational goals. We begin by examining the systems that support the operational, administrative, and strategic needs of organizations. We then investigate the approaches used to manage the IT function, taking into account legacy and emerging technologies. The vital role of the CIO and project champions are explored. Note: Students cannot receive credit for both ISMG 6180 and BUSN 6610. Cross-listed with BUSN 6610. **Semester Hours:** 3to 3 **When Offered:** FASPRSUM
Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 6220 - Business Intelligence Systems

Summer 2010 Registration **ISMG 6220**

This course covers technical and managerial issues associated with the development

and use of decision support systems, expert systems, executive information systems, and advanced intelligent systems. The DSS component covers decision theory, model management, and business intelligence with an emphasis on how decision-making can be supported using data warehouses, OLAP, and data mining and visualization tools. The ES component focuses on knowledge acquisition, representation, reasoning, and using advanced intelligent systems, over the web. In addition, collaboration, communication, enterprise decision support system integration, impacts, and the future of MSS are discussed. The use of DSS and online analytical processing (OLAP) and the selection of decision support applications and tools are important learning objectives for this course. Critical to the success of DSS is the use of data warehouses. The basics of data warehousing are covered through a variety of companies' experiences. The course also covers Business Performance Management (BPM) and the use of digital dashboards and balanced scorecards as evolution of EIS. Hands-on experience is provided through the use of leading-edge technologies including MicroStrategy business intelligence tool. Prereqs: ISMG 6080. **Semester Hours:** 3to 3**When Offered:** SPR SUM Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 6420 - Global Enterprise Systems

Summer 2010 Registration **ISMG 6420**

Examines the evolution of global enterprise systems - from internally focused enterprise resource planning (ERP) client or server systems to externally focused eBusiness. Studies the types of issues managers need to consider in implementing cross-functional integrated enterprise systems. Examines the general nature of global enterprise computing, re-engineering principles and the technical foundations of client or server systems and enterprise information architectures. Students learn about the global enterprise systems marketplace. Topics include the tools and methodology, modules, processes and industry initiatives. Finally, the course looks into the future and predicts enterprise system trends. The objective of the course is to make students aware of the potential and limitations of global enterprise systems. The objective will be reached through case studies, lectures, guest speakers and a group project. Prereq: ISMG 6180 or BUSN 6610 (6810). **Semester Hours:** 3to 3**When Offered:** FALL Registration is changing. Visit our website for details ucdenver.edu/registration.

Either

ACCT 6510 - Accounting and Information Systems Processes and Controls

Summer 2010 Registration **ACCT 6510**

The course is designed to develop knowledge and skills used to understand and evaluate corporate accounting processes and systems. Focuses on financial and information system internal controls and the flow of corporate information through an accounting system. A financial system objective and risk assessment approach is used to present concepts and techniques for evaluating the adequacy of system processes and controls. Prereq: ACCT 3054 or ISMG 3000 or equivalent professional experience.

Cross-listed with ACCT 4780, ISMG 4780 and 6510. **Semester Hours:** 3to 3**When Offered:** FALL

Registration is changing. Visit our website for details ucdenver.edu/registration.

OR

ISMG 6510 - Accounting and Information Systems Processes and Controls

Summer 2010 Registration **ISMG 6510**

Designed to develop knowledge and skills used to understand and evaluate corporate accounting processes and systems. Focuses on financial and information system internal controls and the flow of corporate information through an accounting system. A financial system objective and risk assessment approach issued to present concepts and techniques for evaluating the adequacy of system processes and controls. Cross-listed with ACCT 6510, 4780 and ISMG 4780. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

Choose two:

ACCT 6340 - Financial Statement Analysis

Summer 2010 Registration **ACCT 6340**

Financial statements are used as an information source on which to base investment, lending potential or even employment. Designed to develop skills in using, understanding, analyzing, and interpreting financial statements and to make students aware of the value and limitations of financial statement information. Note: Should take in the third semester of the graduate program. Prereq: BUSN 6550 or equivalent. **Semester Hours:** 3to 3**When Offered:** FALL
Registration is changing. Visit our website for details ucdenver.edu/registration.

ACCT 6360 - Fraud Examination

Summer 2010 Registration **ACCT 6360**

This course examines the theories and methods of fraud examination in the context of auditing both for-profit and not-for-profit entities. Topics include identification of weaknesses in accounting controls, analytical review, and forensic accounting methods. Prereq: ACCT 4620 or ACCT 6020. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 6430 - Information Systems Security and Privacy

Summer 2010 Registration **ISMG 6430**

Designed to develop knowledge and skills for security of information and information systems within organizations. Focuses on concepts and methods associated with planning, designing, implementing, managing, and auditing security at all levels and on

all systems platforms, including enterprise systems. This course presents techniques for assessing risk associated with accidental and intentional breaches of security as well as disaster recovery planning. Prereq: ISMG 6180 or BUSN 6610 (6810). **Semester Hours:** 3to 3**When Offered:** *SPRING*

Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 6450 - IT Project Management

Summer 2010 Registration **ISMG 6450**

Focuses on how firms successfully manage the adoption of It. Projects and program management principles are the primary focus of this course. Topics covered include approaches to prioritizing projects, estimating cost and time-to-market, build vs. buy decision, planning, monitoring and controlling implementation, measurement, total cost of ownership, effective management of both behavioral and technical aspects of the project and change management. Prereq: ISMG 6180 or BUSN 6610 (6810). **Semester Hours:** 3to 3**When Offered:** *FALL*

Registration is changing. Visit our website for details ucdenver.edu/registration.

ACCT 6470 - Internal Auditing

Summer 2010 Registration **ACCT 6470**

Intro course for business students and CIA candidates. Topics include: IA fundamentals; IA standards; internal controls; managing the IA department; IA working papers, procedures and evidences; fraud detection and prevention; ethics; evaluation of the IA function, and Sarbanes-Oxley Act of 2002. Prereq: BUSN 6550 or equivalent. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ACCT 6620 - Advanced Auditing

Summer 2010 Registration **ACCT 6620**

Development of auditing as a profession, including evolution of standards and audit reports. Historical and contemporary literature in the field reviewed. Prereq: ACCT 4620 or ACCT 6020 or equivalent. **Semester Hours:** 3to 3**When Offered:** *FALL SPR*

Registration is changing. Visit our website for details ucdenver.edu/registration.

Business Intelligence Specialization

Business intelligence (BI) systems combine operational data with analytical tools to present complex and competitive information to planners and decision makers. The objective is to improve the timeliness and quality of inputs to the decision process. BI is used to understand the capabilities available in the firm; the state-of-the-art, trends, and future directions in the markets, the technologies, and the regulatory environment in which the firm compete; and the actions of competitors and the implications of these

actions. With this specialization, you get the necessary skills and knowledge in real-time data warehousing, data visualization, data mining, online analytical processing, customer relationships management, dashboards and scorecards, corporate performance management, expert and advanced intelligent systems, and hands-on experience with leading BI tools.

Required Courses

ISMG 6080 - Database Management Systems

Summer 2010 Registration **ISMG 6080**

The success of today's business often hinges on the ability to utilize critical information to make the right decisions quickly and efficiently. Transforming mountains of data into critical information to improve decision making is a skill every business decision maker must possess. This focus course covers the database design topics with a focus on enabling business decision making. Detailed topics include collecting, capturing, querying and manipulating data (using SQL and QBE) for simple to medium complex business applications. Commercial database products (e.g. ORACLE and ACCESS) are utilized to demonstrate the design of database applications in management, marketing, finance, accounting, and other business areas. Students will be able to design and implement simple to medium complex database applications after successful completion of this course. **Semester Hours:** 3 to 3 **When Offered:** FALL

Registration is changing. Visit our website for details ucdenver.edu/registration.

Choose six:

DSCI 6828 - Business Applications of Data Mining

Summer 2010 Registration **DSCI 6828**

Addresses statistical approaches to the very large data sets increasingly common in business applications such as internet-based business, fraud detection, credit scoring and market segmentation. Topics include limitations of classical statistical when applied to large data sets, alternative approaches and applications of key data mining algorithms such as logistic regression, decision trees and cluster analysis. Emphasis is placed on proper choice of method, interpretation of the results and understanding of the strengths and limitations of the methods. Students are expected to analyze and report on a variety of data sets drawn from business application areas. Note: Cannot receive credit for both BUSN 6828 and DSCI 6828. Prereq: BUSN 6530 or permission of instructor. Cross-listed with BUSN 6828. **Semester Hours:** 3 to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 6180 - Information Systems Management and Strategy

Summer 2010 Registration **ISMG 6180**

The effective use of information technology requires the alignment of competitive strategies, business processes, and It applications. In this course, we take a top management perspective to the development of policies and plans that maximize the contribution of IT to organizational goals. We begin by examining the systems that support the operational, administrative, and strategic needs of organizations. We then investigate the approaches used to manage the IT function, taking into account legacy and emerging technologies. The vital role of the CIO and project champions are explored. Note: Students cannot receive credit for both ISMG 6180 and BUSN 6610. Cross-listed with BUSN 6610. **Semester Hours:** 3to 3**When Offered:** *FASPRSUM* Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 6420 - Global Enterprise Systems

Summer 2010 Registration **ISMG 6420**

Examines the evolution of global enterprise systems - from internally focused enterprise resource planning (ERP) client or server systems to externally focused eBusiness. Studies the types of issues managers need to consider in implementing cross-functional integrated enterprise systems. Examines the general nature of global enterprise computing, re-engineering principles and the technical foundations of client or server systems and enterprise information architectures. Students learn about the global enterprise systems marketplace. Topics include the tools and methodology, modules, processes and industry initiatives. Finally, the course looks into the future and predicts enterprise system trends. The objective of the course is to make students aware of the potential and limitations of global enterprise systems. The objective will be reached through case studies, lectures, guest speakers and a group project. Prereq: ISMG 6180 or BUSN 6610 (6810). **Semester Hours:** 3to 3**When Offered:** *FALL* Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 6430 - Information Systems Security and Privacy

Summer 2010 Registration **ISMG 6430**

Designed to develop knowledge and skills for security of information and information systems within organizations. Focuses on concepts and methods associated with planning, designing, implementing, managing, and auditing security at all levels and on all systems platforms, including enterprise systems. This course presents techniques for assessing risk associated with accidental and intentional breaches of security as well as disaster recovery planning. Prereq: ISMG 6180 or BUSN 6610 (6810). **Semester Hours:** 3to 3**When Offered:** *SPRING* Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 6480 - Data Warehouse and Administration

Summer 2010 Registration **ISMG 6480**

Management of large, complex data warehouses and operational databases involves technical skills and background needed by information systems professionals as well as tactical and strategic issues faced by information technology managers. This course provides conceptual knowledge, practical skills, and policy background for prospective information systems professionals and information technology managers. The course covers business aspects, conceptual background, and product material about management of data warehouses and operational databases. Assignments and projects involve Oracle skills for database administration and tactical or strategic issues faced by information technology management. Prereq: ISMG 6080. **Semester Hours:** 3to 3**When Offered:** *SPRING*

Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 6810 - Business Intelligence in Healthcare

Summer 2010 Registration **ISMG 6810**

Provides students with an overview of how business intelligence is used in the healthcare industry. Students study the evolution of It in healthcare including enterprise systems and systems integration. Next the course looks at the evolution of business intelligence in general. Using case studies and hands on exercises, students learn about different aspects of business intelligence in various subsets of the healthcare industry. **Semester Hours:** 3to 3**When Offered:** *FALL*

Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 6820 - Business Intelligence and Financial Modeling

Summer 2010 Registration **ISMG 6820**

This course will introduce students to the application of business intelligence in a corporate finance setting. Financial data intelligence is essential for effective decision making throughout the firm, in finance directly and in other functions supported by the finance department. Strategy setting, budgeting, and new product development are just a few decision areas where finance personnel play an active role. In this course, we learn how to apply Oracle e-Business Suite, a finance and business intelligence software tool that provides modules for financial reporting, analysis, budgeting, and planning. These tools enable finance personnel to access and analyze corporate data in support of critical decision making across the enterprise. Students will also analyze data through the use of financial models built in Microsoft Excel. The development of complex financial models will provide students with valuable hands-on experience with a software tool used widely incorporate finance departments. **Semester Hours:** 3to 3**When Offered:** *SPRING*

Registration is changing. Visit our website for details ucdenver.edu/registration.

MKTG 6090 - Customer Relationship Management

Summer 2010 Registration **MKTG 6090**

Involves the management of customer relationships to maximize customer service and its associated benefits at minimal cost. Includes services marketing concepts and techniques, IT applications, and software. Designed to acquaint students with practices and issues in state-of-the-art customer relationship management systems in an array of different types of organizations. The course initially focuses on the nature of customer relationship management (CRM) the interaction between strategic management planning, corporate culture and CRM. Other topics examined include successful models of CRM, managing the employee or CRM interface, marketing research, and CRM, and customer trust, loyalty, CRM customer service levels, customer service levels, customer profitability or metrics, selecting and integrating CRM software, CRM integration and timing of CRM roll-out. Prereq: BUSN 6560. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

Enterprise Technology Management (ETM) Specialization

This specialization focuses on information technology as the prime driver of business strategy. It focuses on the strategic, technological, financial and organizational issues involved with the effective management of information technology within an enterprise. The courses in this specialization cover the emerging technologies and the evolving roles and importance of IT in modern organizations; IT-enabled organizational processes and knowledge management; methods to develop, acquire and implement information systems; implementing and managing complex IT projects; security and privacy issues associated with IT.

Required Courses

ISMG 6040 - Business Process Management

Summer 2010 Registration **ISMG 6040**

Designing effective information systems for business requires an awareness of the organization(s) business processes and how to manage and streamline them. The objectives of the course are for students to understand the importance of business processes; the main types of business processes; and the evolution of business process management; business process outsourcing; business process re-engineering; business process redesign; technology enabled business processes; and automated workflow. An important activity is graphically mapping business processes, which are transformed into an application or set of applications. The organization needs to manage the electronic workflow to monitor that the work gets done and allow changes to the workflow. Case studies of organizations are studied for most topics to enhance understanding. The group projects let students apply their knowledge of the course to a specific organization. By the end of this course students should have an appreciation of the

important process-centric issues in business systems design. **Semester Hours:** 3to 3**When Offered:** *SPRING*
Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 6180 - Information Systems Management and Strategy

Summer 2010 Registration **ISMG 6180**

The effective use of information technology requires the alignment of competitive strategies, business processes, and It applications. In this course, we take a top management perspective to the development of policies and plans that maximize the contribution of IT to organizational goals. We begin by examining the systems that support the operational, administrative, and strategic needs of organizations. We then investigate the approaches used to manage the IT function, taking into account legacy and emerging technologies. The vital role of the CIO and project champions are explored. Note: Students cannot receive credit for both ISMG 6180 and BUSN 6610. Cross-listed with BUSN 6610. **Semester Hours:** 3to 3**When Offered:** *FASPRSUM*
Registration is changing. Visit our website for details ucdenver.edu/registration.

Choose six:

ISMG 6080 - Database Management Systems

Summer 2010 Registration **ISMG 6080**

The success of today's business often hinges on the ability to utilize critical information to make the right decisions quickly and efficiently. Transforming mountains of data into critical information to improve decision making is a skill every business decision maker must possess. This focus course covers the database design topics with a focus on enabling business decision making. Detailed topics include collecting, capturing, querying and manipulating data (using SQL and QBE) for simple to medium complex business applications. Commercial database products (e.g. ORACLE and ACCESS) are utilized to demonstrate the design of database applications in management, marketing, finance, accounting, and other business areas. Students will be able to design and implement simple to medium complex database applications after successful completion of this course. **Semester Hours:** 3to 3**When Offered:** *FALL*
Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 6120 - Internet and Mobile Technologies

Summer 2010 Registration **ISMG 6120**

Communication, knowledge sharing, and information acquisition within and between businesses are critical for long term strategic business success. Technological advancements are radically changing the way business communication and knowledge sharing is performed. This course will briefly examine traditional concepts of wired local area networks for reference purposes, but then will focus on how newer mobile

technologies are changing the way business communication and knowledge transfer are conducted. Mobile technologies that will be examined in this course include: WiFi wide area networks, wireless local area networks, cellular telephones, smart phones, and other portable computing devices. **Semester Hours:** 3to 3**When Offered:** FALL
Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 6420 - Global Enterprise Systems

Summer 2010 Registration **ISMG 6420**

Examines the evolution of global enterprise systems - from internally focused enterprise resource planning (ERP) client or server systems to externally focused eBusiness. Studies the types of issues managers need to consider in implementing cross-functional integrated enterprise systems. Examines the general nature of global enterprise computing, re-engineering principles and the technical foundations of client or server systems and enterprise information architectures. Students learn about the global enterprise systems marketplace. Topics include the tools and methodology, modules, processes and industry initiatives. Finally, the course looks into the future and predicts enterprise system trends. The objective of the course is to make students aware of the potential and limitations of global enterprise systems. The objective will be reached through case studies, lectures, guest speakers and a group project. Prereq: ISMG 6180 or BUSN 6610 (6810). **Semester Hours:** 3to 3**When Offered:** FALL
Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 6430 - Information Systems Security and Privacy

Summer 2010 Registration **ISMG 6430**

Designed to develop knowledge and skills for security of information and information systems within organizations. Focuses on concepts and methods associated with planning, designing, implementing, managing, and auditing security at all levels and on all systems platforms, including enterprise systems. This course presents techniques for assessing risk associated with accidental and intentional breaches of security as well as disaster recovery planning. Prereq: ISMG 6180 or BUSN 6610 (6810). **Semester Hours:** 3to 3**When Offered:** SPRING
Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 6450 - IT Project Management

Summer 2010 Registration **ISMG 6450**

Focuses on how firms successfully manage the adoption of It. Projects and program management principles are the primary focus of this course. Topics covered include approaches to prioritizing projects, estimating cost and time-to-market, build vs. buy decision, planning, monitoring and controlling implementation, measurement, total cost of ownership, effective management of both behavioral and technical aspects of the project and change management. Prereq: ISMG 6180 or BUSN 6610 (6810). **Semester**

Hours: 3to 3**When Offered:** FALL

Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 6460 - Emerging Technologies

Summer 2010 Registration **ISMG 6460**

Provides an introduction to the expansive array of information technologies that form the infrastructure of a modern business enterprise. Emphasis is placed on learning conceptual technological foundations and understanding the business value of the various technologies. The purpose of the course is to develop the student's ability to discuss recent technological advancements with other It professionals and management. Technology assessment is emphasized. Prereq: ISMG 6180 or BUSN 6610 (6810).

Cross-listed with BUSN 6800. **Semester Hours:** 3to 3**When Offered:** FALL

Registration is changing. Visit our website for details ucdenver.edu/registration.

Health Information Technology Management Specialization

Recently, the health care industry has shifted its focus from using proprietary and expensive IT solutions to more innovative IT applications in electronic health records (EHR) and other health information technology (HIT) innovations for sharing information effectively to help manage health care crisis. The courses within this specialization cover the evolving roles and importance of IT in health care industry; the innovative IT applications for delivering health care with reduced cost and increased quality; the management of health care using effective IT systems; and the security and privacy issues associated with health information. These courses will focus on how IT-enabled health care organizations can integrate information from various resources in order to deliver innovative IT solutions to meet unique requirements of health care industry.

Required Courses

ISMG 6060 - Analysis, Modeling and Design

Summer 2010 Registration **ISMG 6060**

Spring. Provides an understanding and application of systems analysis and design processes. Students are exposed to system development life cycle (SDLC), structured systems analysis and design methods, object-oriented analysis and design methods, prototyping and commercial off-the-shelf package software approaches, and joint and rapid application development. Emphasizes the skills required for system analysts such as analytical, interpersonal, technical, fact-finding, and project management skills. Topics include data, process and object modeling, input-output and user interface design, and systems implementation and support. To provide an opportunity to develop these skills, an information system project is completed by a group of students. Students

use a Case tool for their group project. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 6080 - Database Management Systems

Summer 2010 Registration **ISMG 6080**

The success of today's business often hinges on the ability to utilize critical information to make the right decisions quickly and efficiently. Transforming mountains of data into critical information to improve decision making is a skill every business decision maker must possess. This focus course covers the database design topics with a focus on enabling business decision making. Detailed topics include collecting, capturing, querying and manipulating data (using SQL and QBE) for simple to medium complex business applications. Commercial database products (e.g. ORACLE and ACCESS) are utilized to demonstrate the design of database applications in management, marketing, finance, accounting, and other business areas. Students will be able to design and implement simple to medium complex database applications after successful completion of this course. **Semester Hours:** 3to 3 **When Offered:** FALL
Registration is changing. Visit our website for details ucdenver.edu/registration.

Choose six:

HLTH 6071 - Introduction To Health Information Technology

Summer 2010 Registration **HLTH 6071**

Examines what needs transforming in healthcare to improve value, safety, and appropriateness of care, and what the role of IT is in that transformation. IT also examines the challenges of cultural change and IT strategy in succeeding with clinical information projects. Differences between installation, implementation, transition and actual transformation are suggested, and methods for managing subcultures in healthcare (IT, clinical, administrative) are reviewed. Cross-listed with ISMG 6071. **Semester Hours:** 3to 3 **When Offered:** SPRING
Registration is changing. Visit our website for details ucdenver.edu/registration.

HLTH 6072 - Fundamentals of Health Information Technology Management

Summer 2010 Registration **HLTH 6072**

Provides an introduction to the management of information technology in healthcare. A description of information processing, the origin, content, evolution of healthcare information systems, and the methodologies deployed to acquire and manage information requirements are discussed. Cross-listed with ISMG 6072. **Semester Hours:** 3to 3 **When Offered:** FALL
Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 6220 - Business Intelligence Systems

Summer 2010 Registration **ISMG 6220**

This course covers technical and managerial issues associated with the development and use of decision support systems, expert systems, executive information systems, and advanced intelligent systems. The DSS component covers decision theory, model management, and business intelligence with an emphasis on how decision-making can be supported using data warehouses, OLAP, and data mining and visualization tools. The ES component focuses on knowledge acquisition, representation, reasoning, and using advanced intelligent systems, over the web. In addition, collaboration, communication, enterprise decision support system integration, impacts, and the future of MSS are discussed. The use of DSS and online analytical processing (OLAP) and the selection of decision support applications and tools are important learning objectives for this course. Critical to the success of DSS is the use of data warehouses. The basics of data warehousing are covered through a variety of companies' experiences. The course also covers Business Performance Management (BPM) and the use of digital dashboards and balanced scorecards as evolution of EIS. Hands-on experience is provided through the use of leading-edge technologies including MicroStrategy business intelligence tool. Prereqs: ISMG 6080. **Semester Hours:** 3to 3**When Offered:** SPR SUM Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 6280 - Service Oriented Architecture

Summer 2010 Registration **ISMG 6280**

Explores "Service Oriented Architecture" (SOA), which refers to a design pattern made up of components and interconnections that stress interoperability and location transparency. Covers the latest heterogeneous models for carrying out large scale distributed computing using Web services. The fundamentals of defining, designing, building, testing and rolling-out a SOA system are explored using tools from major Web service vendors. Also, looks at the impact of SOA on software quality, efficiency, performance and flexibility. Prereq: ISMG 6060. **Semester Hours:** 3to 3**When Offered:** FALL

Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 6430 - Information Systems Security and Privacy

Summer 2010 Registration **ISMG 6430**

Designed to develop knowledge and skills for security of information and information systems within organizations. Focuses on concepts and methods associated with planning, designing, implementing, managing, and auditing security at all levels and on all systems platforms, including enterprise systems. This course presents techniques for assessing risk associated with accidental and intentional breaches of security as well as disaster recovery planning. Prereq: ISMG 6180 or BUSN 6610 (6810). **Semester Hours:**

3to 3**When Offered:** *SPRING*

Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 6460 - Emerging Technologies

Summer 2010 Registration **ISMG 6460**

Provides an introduction to the expansive array of information technologies that form the infrastructure of a modern business enterprise. Emphasis is placed on learning conceptual technological foundations and understanding the business value of the various technologies. The purpose of the course is to develop the student's ability to discuss recent technological advancements with other It professionals and management. Technology assessment is emphasized. Prereq: ISMG 6180 or BUSN 6610 (6810).

Cross-listed with BUSN 6800.**Semester Hours:** 3to 3**When Offered:** *FALL*

Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 6810 - Business Intelligence in Healthcare

Summer 2010 Registration **ISMG 6810**

Provides students with an overview of how business intelligence is used in the healthcare industry. Students study the evolution of It in healthcare including enterprise systems and systems integration. Next the course looks at the evolution of business intelligence in general. Using case studies and hands on exercises, students learn about different aspects of business intelligence in various subsets of the healthcare industry.**Semester Hours:** 3to 3**When Offered:** *FALL*

Registration is changing. Visit our website for details ucdenver.edu/registration.

Web and Mobile Computing Specialization

This specialization focuses on building and managing large systems using platforms for Web site development, mobile and wireless applications, and Web services and service oriented architectures. The courses provide expertise in .Net programming, business process management, Internet and mobile technologies, Web site development technologies, data warehousing and administration, and service oriented architecture. Project management course work enables graduates to successfully handle highly complex systems development projects in the business world.

Required Courses

ISMG 6060 - Analysis, Modeling and Design

Summer 2010 Registration **ISMG 6060**

Spring. Provides an understanding and application of systems analysis and design processes. Students are exposed to system development life cycle (SDLC), structured systems analysis and design methods, object-oriented analysis and design methods, prototyping and commercial off-the-shelf package software approaches, and joint and rapid application development. Emphasizes the skills required for system analysts such as analytical, interpersonal, technical, fact-finding, and project management skills. Topics include data, process and object modeling, input-output and user interface design, and systems implementation and support. To provide an opportunity to develop these skills, an information system project is completed by a group of students. Students use a Case tool for their group project. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 6080 - Database Management Systems

Summer 2010 Registration **ISMG 6080**

The success of today's business often hinges on the ability to utilize critical information to make the right decisions quickly and efficiently. Transforming mountains of data into critical information to improve decision making is a skill every business decision maker must possess. This focus course covers the database design topics with a focus on enabling business decision making. Detailed topics include collecting, capturing, querying and manipulating data (using SQL and QBE) for simple to medium complex business applications. Commercial database products (e.g. ORACLE and ACCESS) are utilized to demonstrate the design of database applications in management, marketing, finance, accounting, and other business areas. Students will be able to design and implement simple to medium complex database applications after successful completion of this course. **Semester Hours:** 3to 3 **When Offered:** FALL

Registration is changing. Visit our website for details ucdenver.edu/registration.

Choose six:

ISMG 6020 - .Net Programming Fundamentals

Summer 2010 Registration **ISMG 6020**

This course is designed to provide a thorough introduction to the .Net programming environment. C# is studied as the target object-oriented programming language. Principles of object-oriented programming are demonstrated using programming constructs taken from the business domain. Students are required to apply this knowledge through a series of C# programming exercises, which includes developing Windows Forms applications for the desktop and mobile platforms. Prereq: Basic knowledge of a programming language such as JAVA, C, or Basic. **Semester Hours:** 3to 3 **When Offered:** SPRING

Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 6040 - Business Process Management

Summer 2010 Registration **ISMG 6040**

Designing effective information systems for business requires an awareness of the organization(s) business processes and how to manage and streamline them. The objectives of the course are for students to understand the importance of business processes; the main types of business processes; and the evolution of business process management; business process outsourcing; business process re-engineering; business process redesign; technology enabled business processes; and automated workflow. An important activity is graphically mapping business processes, which are transformed into an application or set of applications. The organization needs to manage the electronic workflow to monitor that the work gets done and allow changes to the workflow. Case studies of organizations are studied for most topics to enhance understanding. The group projects let students apply their knowledge of the course to a specific organization. By the end of this course students should have an appreciation of the important process-centric issues in business systems design. **Semester Hours:** 3to 3**When Offered:** *SPRING*

Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 6120 - Internet and Mobile Technologies

Summer 2010 Registration **ISMG 6120**

Communication, knowledge sharing, and information acquisition within and between businesses are critical for long term strategic business success. Technological advancements are radically changing the way business communication and knowledge sharing is performed. This course will briefly examine traditional concepts of wired local area networks for reference purposes, but then will focus on how newer mobile technologies are changing the way business communication and knowledge transfer are conducted. Mobile technologies that will be examined in this course include: WiFi wide area networks, wireless local area networks, cellular telephones, smart phones, and other portable computing devices. **Semester Hours:** 3to 3**When Offered:** *FALL*

Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 6240 - Website Development Practice and Technologies

Summer 2010 Registration **ISMG 6240**

Presents a broad coverage of design principles and techniques to develop effective web sites. The course emphasizes: (1) understanding the principles of web page and web site design and the process of publishing web pages, (2) developing client-side scripts for use in web sites, (3) using server-side programs or scripts to develop dynamic web sites using databases, and (4) understanding technologies for managing large web sites including XML schemas, content management systems and web services. Prereq: ISMG

6080.**Semester Hours:** 3to 3**When Offered:** FALL

Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 6280 - Service Oriented Architecture

Summer 2010 Registration **ISMG 6280**

Explores "Service Oriented Architecture" (SOA), which refers to a design pattern made up of components and interconnections that stress interoperability and location transparency. Covers the latest heterogeneous models for carrying out large scale distributed computing using Web services. The fundamentals of defining, designing, building, testing and rolling-out a SOA system are explored using tools from major Web service vendors. Also, looks at the impact of SOA on software quality, efficiency, performance and flexibility. Prereq: ISMG 6060.**Semester Hours:** 3to 3**When Offered:** FALL

Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 6450 - IT Project Management

Summer 2010 Registration **ISMG 6450**

Focuses on how firms successfully manage the adoption of It. Projects and program management principles are the primary focus of this course. Topics covered include approaches to prioritizing projects, estimating cost and time-to-market, build vs. buy decision, planning, monitoring and controlling implementation, measurement, total cost of ownership, effective management of both behavioral and technical aspects of the project and change management. Prereq: ISMG 6180 or BUSN 6610 (6810).**Semester Hours:** 3to 3**When Offered:** FALL

Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 6480 - Data Warehouse and Administration

Summer 2010 Registration **ISMG 6480**

Management of large, complex data warehouses and operational databases involves technical skills and background needed by information systems professionals as well as tactical and strategic issues faced by information technology managers. This course provides conceptual knowledge, practical skills, and policy background for prospective information systems professionals and information technology managers. The course covers business aspects, conceptual background, and product material about management of data warehouses and operational databases. Assignments and projects involve Oracle skills for database administration and tactical or strategic issues faced by information technology management. Prereq: ISMG 6080.**Semester Hours:** 3to 3**When Offered:** SPRING

Registration is changing. Visit our website for details ucdenver.edu/registration.

Electives

Students fulfill an additional 6 semester hours by completing the following:

Note: If you are pursuing the accounting and information systems audit and control specialization, you do not complete these electives. All other students will complete the following electives.

- an elective course from any of the ISMG graduate courses OR an internship **AND**
- a free elective selected from any graduate course offered by the Business School, except BUSN courses numbered below 6800.

Candidates for the MS degree are not required to take a comprehensive examination or to complete a thesis in the major field.

Total: 30 hours for MS in Information Systems

Geographic Information Systems (GIS) Option

The geographic information systems option expands upon system development skills through the understanding geographic information systems work flows, analysis processes and data models. This option for the mobile and Internet computing specialization and business intelligence specialization addresses how map representations can be abstracted in geo-databases to develop intelligent GIS systems. Learn how GIS can improve efficiencies, decision making, planning, geographic accountability, science-based plans and communication. The GIS option is offered in conjunction with the College of Engineering and Applied Science and a certificate in GIS is awarded by the College of Engineering and Applied Science.

Students must complete all requirements for the MS in information systems, as well as the requirements below.

CVEN 5381 - Introduction to Geographic Information Systems

Summer 2010 Registration **C E 5381**

Provides an over-view exposure and experience with various aspects of GIS technology and its uses for natural resource and infrastructure, planning, design and management. This course involves a survey of GIS software and hardware, review of cartographic mapping principles, hands-on applications to environmental impact assessment, municipal facilities management, transportation, water resources and demographics. GIS project management factors are addressed. Prereq: Graduate and/or upper division standing. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Choose three:

CVEN 5382 - GIS Spatial Database Development

Summer 2010 Registration **C E 5382**

This second GIS course builds on the introductory course and addresses principles and technologies for development and conversion of spatial databases, including photogrammetry, surveying and geodesy, coordinate systems and transformations, and remote sensing. Prereq: Graduate and/or upper division standing; completion of CVEN 5381 (or equivalent) and MEng-GIS program prerequisites (especially surveying, mapping and computing); background in algebra, calculus fundamentals and facility to compute DOS/UNIX, spreadsheet, and FORTRAN; familiarity with various CAD (e.g. AutoCAD) and GIS (e.g. Arc Info, GRASS) software is also required. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 5383 - GIS Analysis -- Theory and Practice

Summer 2010 Registration **C E 5383**

This third course reviews GIS software functions and terminology, including data entry (input, editing), manipulation (projection, merge, window, aggregate), analysis (map algebra, overlay, Boolean, interpolation network, measurements, distance, terrain modeling, statistical analysis), query (spatial, attribute), and display/reporting. Integration of various domain-specific systems analysis models with GIS databases is also addressed. Laboratory activities involve programming applications using available GIS. Prereq: graduate and/or upper division standing; completion of CVEN 5381 (or equivalent) and completion of MEng-GIS prerequisites (especially applied Statistics); background in algebra, calculus fundamentals, facility to compute DOS/UNIX, OS/UNIX, spreadsheet, and FORTRAN; familiarity with various CAD (e.g., AutoCAD) and GIS (e.g., Arc Info, GRASS), software is also required. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 5384 - GIS Management and Policies

Summer 2010 Registration **C E 5384**

This fourth course addresses aspects of GIS planning and development. These include topics of benefit-cost and financial analysis, scheduling, project management, internal and external marketing. Also, addressed are issues of GIS institutional acceptance, the role of computerized spatial data systems indecision making, application of planning techniques for accomplishing resource goals, administrative structure which enhances efficiency of use, and legal considerations involved with development and use of such databases. Prereq: Graduate and/or upper division standing; completion of CVEN 5381 (or equivalent); familiarity with various CAD (e.g. AutoCAD) and GIS (e.g. Arc Info,

GRASS) software is also required. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 5385 - GIS Relational Database Systems

Summer 2010 Registration **C E 5385**

Introduces relational database management system concepts with emphasis on GIS. Includes examination of relational database systems from conceptual design through relational schema design and physical implementation. Topics include SQL, database design and implementation for large database systems, transaction management, concurrency control, distributed database management systems and the interaction and progressive integration of GIS technologies and RBDMS technologies. Prereq: Graduate and/or upper division standing; completion of CVEN 5381 or equivalent and completion of MEng-GIS program prerequisites. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 5386 - GIS Laboratory

Summer 2010 Registration **C E 5386**

Provides in-depth experience with use and programming of a particular GIS software, including Arc GIS and related object-oriented programming languages. Advanced functionality for user authoring of software interface, data management and analysis functions and output generation. Exact content will vary by semester. Prereq: Computing and Introduction to GIS or their equivalent. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 12 Hours

- GIS courses are offered online and can be completed concurrently with the information systems courses.
- Students will be able to register for the classes on the Web. There are not any special registration requirements.
- Students need to notify the graduate advising office at the Business School, 303-315-8200, prior to graduation if they are planning to complete the GIS option. Students also need to indicate the completion of the course work when they submit their application for diploma card.

Integrated Sciences MIS

- Graduate School Rules apply to this program

Degree Requirements

Minimum Hours

Students must complete a minimum of 30 semester hours at the 4000+ level, of which 1-4 must be project hours or 4-6 must be thesis hours. In accordance with Graduate School rules, a minimum of 18 hours must be at the 5000+ level.

Breadth Requirement

Students are required to take classes in a minimum of two (2) areas and maximum of three (3) areas within the disciplines of computer science, math, chemistry, biology, physics or geology. With approval, students may take a maximum of three (3) hours at the 4000+ level in one other school or college. All classes counted toward the degree must be related to the student's stated program goal and be approved as part of a program of study by the program director. The student is responsible for insuring that all prerequisite requirements for the classes they take have been met.

Depth Requirement

The student must designate a primary area (either within a department or as an interdisciplinary concentration including, but not limited to, biophysics, biochemistry and computational biology). The student must take a minimum of nine (9) semester hours in the chosen area of concentration.

Project or Thesis

All students must conduct independent research that results in either a thesis or project, which is presented to their committee in written form and is subject to an oral defense.

Graduate Advisor and Project Committee

All candidates for the master of integrated sciences degree must select a faculty advisor and two other faculty members to serve with the advisor as the candidate's graduate committee. The committee members must be part of the graduate faculty and approved by the program director. The name of the faculty advisor must be submitted to the MIS director no later than two semesters following full admission to the program.

DEGREE TOTAL: 30 HOURS

International Business MS

Advisor: Manuel G. Serapio, Jr.

Telephone: 303-315-8436

E-mail: Manuel.Serapio@ucdenver.edu

Faculty

Professors:

Wayne Cascio, PhD, University of Rochester

Lawrence Cunningham, DBA, University of Tennessee

John Ruhnka, JD/LLM, Yale School of Law/Cambridge University

Associate Professors:

L. Ann Martin, PhD, University of Minnesota

Kang RaeCho, PhD, University of Washington

Manuel Serapio, PhD, University of Illinois

Senior Instructors:

John Byrd, PhD, University of Oregon

John Turner, PhD, St. Louis University

Instructors:

Chen Ji, MS, University of Colorado

Mary Lee Stansifer, PhD, Northwestern University

The master of science in international business prepares individuals for the careers in international business or with international organizations.

The MS program in international business requires the completion of the following:

A. Common Body of Knowledge (CBK)

Required CBK

BUSN 6520 - Managing Individuals and Teams

Summer 2010 Registration **BUSN 6520**

Students learn the strengths and weaknesses of their management style and how to work effectively with individual differences. Students also learn how to form teams around purpose/task, diagnose problems and identify and implement solutions by utilizing leadership skills such as setting goals, processes and measures, interpersonal

communication, motivation and conflict management. Students develop an understanding of the effect of the organizational and social context on the behavior of individuals and teams. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

BUSN 6530 - Data Analysis for Managers

Summer 2010 Registration **BUSN 6530**

Provides an overview of techniques for data analysis, including multiple regression, sampling theory and applications of probabilistic inference from sample data. The emphasis is upon the applications of these techniques to management problems. Students are required to analyze data sets, present their analyses in written or oral form and defend their conclusions. Note: Students cannot receive credit for both BUSN 6530 and FNCE 6290. **Semester Hours:** 3to 3**When Offered:** FASPRSUM
Registration is changing. Visit our website for details ucdenver.edu/registration.

BUSN 6540 - Legal and Ethical Environment of Business

Summer 2010 Registration **BUSN 6540**

Students develop a working knowledge of legal and ethical parameters for business decision making. The course addresses the legal system and mechanisms for resolving disputes. Topics include constitutional law, torts, product liability, contracts, property law, consumer protection, intellectual property, business entities and employment law. It stresses the influence of legal issues on organizational decision making. Note: Students can substitute ENTP 6822 but credit cannot be received for both. Health Administration students must take BUSN 6541. **Semester Hours:** 3to 3**When Offered:** FASPRSUM
Registration is changing. Visit our website for details ucdenver.edu/registration.

BUSN 6550 - Analyzing and Interpreting Accounting Information

Summer 2010 Registration **BUSN 6550**

Emphasizes the use of accounting statements and data in making business decisions. External financial accounting information and concepts are used for investment and credit decisions. Internal managerial accounting information and concepts are used for product costing, cost analysis and management control. **Semester Hours:** 3to 3**When Offered:** FASPRSUM
Registration is changing. Visit our website for details ucdenver.edu/registration.

BUSN 6560 - Marketing Management

Summer 2010 Registration **BUSN 6560**

Focuses on the formulation and implementation of a marketing plan in the context of the firm's strengths, overall strategy and competitive environment. Emphasis is on understanding the marketing environment and on decision making skills regarding

market selection, pricing, promotion, product configuration and management of distribution channels. **Semester Hours:** 3to 3**When Offered:** FASPRSUM
Registration is changing. Visit our website for details ucdenver.edu/registration.

BUSN 6620 - Applied Economics for Managers

Summer 2010 Registration **BUSN 6620**

After taking this course, students should be able to apply economic principles to make optimal decisions given firm cost, demand and market circumstances. Also, they should be able to analyze the firms interactions with its competitive market environment. Students will learn basic aspects of federal macroeconomic policy designed to achieve stable prices and economic growth. Also, they will learn to understand the measurement of output (GDP), employment and prices; the conduct of monetary and fiscal policy; and the balance of trade. Prereq: BUSN 6530 or FNCE 6290 and BUSN 6550, both may be taken concurrently. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

BUSN 6640 - Financial Management

Summer 2010 Registration **BUSN 6640**

This course is concerned with the business firm's decisions to make investments and to finance its operations. Students learn to use the tools and theories underlying business valuation, cost of capital, capital budgeting and capital structure. Students will learn to evaluate a firm's financial position through the examination of its financial statements and to prepare pro forma statements for the firm. Prereq: BUSN 6530 or FNCE 6290, BUSN 6620 (both may be taken concurrently) and BUSN 6550 completed prior and strictly enforced. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 21 Hours

Waivers of CBK courses are possible. Specific courses may be waived based on a case-by-case evaluation of undergraduate or graduate course work in business completed at a regionally accredited college or university within the last 10 years.

B. Foreign Language Competency

Prior to graduation, students must demonstrate proficiency in a foreign language (other than English). This is accomplished through completion of three semesters of college-level course work in a single foreign language with a grade of C or better in all three terms or by passing a proficiency exam.

C. Graduate Core in International Business

Required Courses

INTB 6000 - Introduction to International Business

Summer 2010 Registration INTB 6000

An overview of the international business environment, the impact of environmental factors on international business operations, and the identification of current and complex managerial issues facing organizations engaged in international business.

Prereq: Completion or waiver of CBK or completion of nine graduate credit hours. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

INTB 6020 - Cross-Cultural Management

Summer 2010 Registration INTB 6020

Focuses on the management of diverse socio-cultural and political norms and values in the global marketplace. The goal of this course is to develop skills in managing impacts of such values and norms on the effectiveness of international business operations and managerial activities. Prereq: INTB 6000 or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

INTB 6200 - International Business Policy

Summer 2010 Registration INTB 6200

The objective of this course is to develop competence relevant to strategy formulation and implementation in a multi-national enterprise, and in an international context. Provides theoretical knowledge, skills, and sensitivities that help deal effectively with the strategic and managerial problems of managing in a global environment. Prereq: INTB 6000 and 18 graduate credit hours. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

International Electives (4) (12 semester hours)

Free Elective (1) (3 semester hours)

Advanced Study Requirements in International Business (2) (6 semester hours)

Total: 30 Hours

Notes and Restrictions

International Topics Electives. Choose four courses (12 semester hours) from any INTB 6000-level course or higher or any approved international course.

Free Elective. One graduate-level class may be selected from any functional area of business, including international business topics classes, except BUSN courses numbered below 6800. International business majors can petition for transfer of 3 semester hours of relevant nonbusiness graduate courses offered at UC Denver's Downtown Campus.

Advanced Study Requirements. This 6-semester-hour requirement may be fulfilled by a master's thesis, research internship, international field study/study abroad or advanced courses in international business.

Landscape Architecture MLA

Prerequisites

Students are expected to have achieved a basic level of computer literacy and are required to have their own computer.

Program Requirements

The landscape architecture program offers professional and advanced professional graduate degree curricula leading to the degree master of landscape architecture (MLA).

- The first-professional degree program, requiring a six-semester sequence of course work totaling 90 semester hours, is fully accredited by the Landscape Architecture Accreditation Board (LAAB) and recognized by the Council of Educators in Landscape Architecture (CELA).
- Students completing the college's bachelor of environmental design on the Boulder campus—or completing an undergraduate design degree at another institution—may be given advanced standing in the three-year program. Advanced standing will be based on prior academic accomplishment.
- The advanced professional degree program for qualified students having already earned a first professional degree in landscape architecture (BLA) or related discipline requires 48 semester hours. Advanced standing will be based on prior academic accomplishment.

Course Sequence

(90-semester-hour MLA for students without a professional degree in landscape architecture or related profession)

The curriculum consists of core and elective course work. Core courses are grouped into five components:

	<i>Semester hours</i>
Design Studios	36
History and Theory	12
Site Works	15
Media	6
Ethics	3
<i>Total core courses</i>	72
Electives	18
<i>Total courses</i>	90

Typical 90-semester-hour program of study in required courses for the first professional MLA degree

First Year

Fall

LDAR 5501 - Landscape Architecture Design Studio 1

Summer 2010 Registration L A 5501

Introduction to basic strategies, methods and techniques of landscape architectural design with emphasis in theory, history, analysis and criticism. First in a three studio course sequence. **Semester Hours:** 6to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

LDAR 5510 - Graphic Media in Landscape Architecture

Summer 2010 Registration **L A 5510**

Introduces basic principles and methods associated with analog and digital drawing - plan, sections, perspectives, color, shading, composition and projection. **Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

LDAR 5521 - History of Landscape Architecture

Summer 2010 Registration **L A 5521**

Investigates architectural thought from antiquity to the present. Begins with a review of Greek ideals and proceeds -- through an appreciation of landscape and nature as essential cultural constituents -- with a survey of major themes such as Renaissance Humanism, Enlightenment, Rationalism, Romantic Historicism, Neo-Medievalism, the varieties of Modernism, Neo-Eclecticism and the most recent directions in landscape and garden design. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

LDAR 5572 - Landscape Ecology

Summer 2010 Registration **L A 5572**

Focuses on the study of physiography, cultural factors, and aesthetic criteria in relation to landscape, spatial organization, and urban and regional structure. Emphasizes continuity and change in an ecology of both natural and man-made landscape. **Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 15 Hours

Spring

LDAR 5502 - Landscape Architecture Design Studio 2

Summer 2010 Registration **L A 5502**

Strategies, methods and techniques of landscape architectural design with emphasis in more complex issues, design processes and development and the application of theory and research. Second in a three studio course sequence. Prereq: LDAR 5501 or permission of department chair. **Semester Hours:** 6to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

LDAR 5532 - Landform Manipulation

Summer 2010 Registration **L A 5532**

Focuses on the fundamental technical aspects of landscape architectural design and implementation of related topography, grading and drainage design, landform

manipulation, earthwork calculations, and road alignment. Note: course is to be taken with LDAR 6641, Computer Applications in Landscape Architecture. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

LDAR 6632 - Site Planning

Summer 2010 Registration L A 6632

Focuses on the site planning process, including research and data gathering, data analysis and synthesis, design analysis and its relationship to building program and concept, and design synthesis of site and preparation of site plan. Design through grading, representation, manipulation and calculation of road work, utilities, and other site features. Vertical and horizontal alignment, earthwork and cost computation, and integration with existing and proposed features or systems are covered. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

LDAR 6641 - Computer Applications in Landscape Architecture

Summer 2010 Registration L A 6641

Introduces digital technologies and methods commonly used in Landscape Architecture including primarily CADD, visualization, simulation, graphic design, GIS and other emerging applications. Includes hands-on exercises. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 15 Hours

Second Year

Fall

LDAR 5503 - Landscape Architecture Design Studio 3

Summer 2010 Registration L A 5503

Problem-based studio covering the approaches, technologies and means for planning and designing sites to accommodate an intensive development program on a particular site within a regional context. Covers issues definition, site analysis, programming, development of design strategies, evaluation site planning, placemaking, regionalism and communication. Prereq: LDAR 5501 and LDAR 5502 or permission of department chair. **Semester Hours:** 6to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

LDAR 6631 - Landscape Construction Materials and Methods

Summer 2010 Registration **L A 6631**

Develops understanding of detailed design processes, construction materials and selection of construction methods and documents. Typically taken with LDAR 6605 and 6606 (LDAR Design Studios 5 and 6). **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

LDAR 6670 - Plants in Design

Summer 2010 Registration **L A 6670**

Focuses on the study of design methods used in landscape architecture. Formal design principles, spatial sequencing, and plant functions are applied in design studies, based on botanical aesthetic traits and physical requirements of a wide variety of plant material. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

One Elective. **Semester hours:** 3

Total: 15 Hours

Spring

LDAR 6604 - Landscape Architecture Design Studio 4

Summer 2010 Registration **L A 6604**

Advanced landscape architecture design studio covering situations of urbanization and change of various scales and complexities. This is the first in a two studio course sequence. Prereq: LDAR 5501, 5502, 5503 or permission of department chair. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

LDAR 6605 - Landscape Architecture Design Studio 5

Summer 2010 Registration **L A 6605**

Advanced landscape architecture design studio covering situations of urbanization and change of various scales and complexities. This is the second in a two studio course sequence. Prereq: LDAR 5501, 5502, 5503, 6604 or permission of department chair. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

LDAR 6620 - Landscape Architecture Theory and Criticism

Summer 2010 Registration **L A 6620**

Focuses on exploring and assessing current state of theory in landscape architecture and related design disciplines and the ideas undergoing contemporary design approaches. Narrative and explanatory theories are the objects of study. Emphasis is

placed on history and pedagogic theories and their theories and relationships to other disciplines such as art, ecology, geography, architecture and anthropology. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

LDAR 6721 - Regionalism

Summer 2010 Registration L A 6721

Explores environmental and cultural factors that shape regionally responsive design.

Prereq: LDAR 5521 and 6620 or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

One Elective. **Semester hours:** 3

Total: 15 Hours

Third Year

Fall

LDAR 6606 - Landscape Architecture Design Studio 6

Summer 2010 Registration L A 6606

Advanced landscape architecture design studio covering situations of urbanization and change of various scales and complexities. This is the first in a two studio course sequence. Prereq: LDAR 5501, 5502, 5503, 6604, 6605 or permission of department chair. **Semester Hours:** 6to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

Three Electives. **Semester hours:** 9

Total: 15 Hours

Spring

LDAR 6607 - Landscape Architecture Design Studio 7

Summer 2010 Registration L A 6607

Advanced landscape architecture design studio covering situations of urbanization and change of various scales and complexities. This is the second in a two studio course sequence. Prereq: LDAR 5501, 5502, 5503, 6604, 6605, 6606 or permission of department chair. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

LDAR 6608 - Landscape Architecture Design Studio 8

Summer 2010 Registration L A 6608

Advanced design studio that reflects topical situations in landscape architectural practice and/or applied research interests of instructor. This is the first in a two studio sequence.

Prereq: LDAR 5501, 5502, 5503, 6604, 6605, 6606, 6607 or permission of department chair. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

LDAR 6750 - Professional Practice

Summer 2010 Registration L A 6750

Focuses on studies in the professional practice of landscape architecture and related professions and case problems in initiating and managing a professional practice.

Explores the essential elements of professional practice and equips students with the fundamental knowledge and skills requisite to an understanding of and participation in the conduct of practice in landscape architecture. Covers organization of the landscape office, professional services of landscape architects, fee structures and fee management, contracts, legal rights and responsibilities, management, marketing, and delivery of professional services. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Two Electives. **Semester hours:** 6

Total: 15 Hours

Course Sequence

(48-semester-hour MLA for students with a professional degree in landscape architecture or related disciplines)

This route requires 48 semester hours and typically two years of full-time study. The core curriculum consists of two groups:

	<i>Semester Hours</i>
Design	24
History and Theory	12
<i>Total core courses</i>	36

Electives	12
<i>Total courses</i>	48

The department chair will advise each student engaged in this program of study.

Thesis

The graduate thesis in landscape architecture provides an opportunity for students to conduct independent research and design investigations that demonstrate their capacity for rigorous original thinking. The thesis is not required for graduation and not all students are approved to write a thesis. Choosing to pursue a thesis project constitutes a significant commitment to the endeavor; the topic must be chosen with care and thoughtfully and critically developed. Topics can explore material that has been previously unstudied, reinterpret existing material in a new light, or engage research and design practices in ways that strengthen and define the final project. For all theses, the research and products must meet the highest standards of academic excellence and contribute significantly to the discipline and/or profession.

Pursuing a thesis requires students to enroll in a three-course sequence for a maximum total of 12 semester hours. Students are required to formulate their research proposals two full semesters prior to their enrollment for the 6-semester-hour thesis, typically taken in lieu of the final studio. To proceed through the sequence, students must have completed and passed the research tools and methods class (LA6940) and have secured departmental approval of the thesis proposal. The completion of the thesis is dependent on acceptance of the student's work by the faculty member acting as the thesis chair and by the committee. For work to be accepted it must meet the standards established by the University of Colorado Denver for graduate thesis projects.

Dual Degree Options

Students may enroll in a dual degree program with architecture (MArch), with urban design (MUD) or with urban and regional planning (MURP).

Linguistically Diverse Education, MA Curriculum and Instruction

Linguistically Diverse Education

Requirements for LDE Program

(Degree/Endorsement or Certificates - TESOL, CIEL, CRUE)

Office: Lawrence Street Center, 701

Telephone: 303-315-6300

Fax: 303-315-6311

E-mail: education@ucdenver.edu

Web site: www.ucdenver.edu/education/lde

Faculty

Information about faculty in this program is available at www.ucdenver.edu/education/lde. The faculty of linguistically diverse education (LDE) believe that effective teaching requires an awareness of and the ability to respond to individual differences. LDE faculty also emphasize the importance of teachers as scholars and reflective practitioners. In particular, teachers must understand how linguistic and cultural diversity affect their teaching. Two themes run throughout all program offerings. The first concerns the importance of recognizing a variety of literacies—"home" literacies, school literacy, "mainstream" literacy, first and second language literacies—and to develop teaching practices that utilize an understanding of the complexity of literacy development across language contexts. The second theme involves the meaningful use of language and literacy to improve the quality of one's life. As an approach to teaching, this theme emphasizes the creation of diverse, rich environments in which learners experience oral and written language as part of authentic tasks, and where concern for the cultural and linguistic heritage of the students is evident.

Program Options

The LDE program offers options leading to the following:

- a Master of Arts in Curriculum and Instruction
- the Colorado Endorsement for Linguistically Diverse Education
- a Teaching English to Speakers of Other Languages (TESOL) certificate
- a Content Instruction for English Learners (CIEL) certificate
- a Culturally Responsive Urban Education (CRUE) certificate

The program is intended for:

- novice teachers who have completed their Colorado teaching credentials in UC Denver's graduate teacher education licensure program and are enrolled in the MA in curriculum and instruction with an emphasis in LDE (see 27 semester-hour option)

- veteran elementary and secondary teachers returning to graduate studies for the master's degree (36 semester hours)
- veteran elementary and secondary teachers returning to acquire Colorado endorsement credentials (24 semester hours)
- individuals interested in teaching English abroad (TESOL: 15 semester hours)
- veteran elementary and secondary teachers returning to graduate studies for a certificate to aid them in helping their English language learners succeed (CIEL: 9 semester hours)
- elementary and secondary teachers who desire preparation in better meeting the needs of culturally diverse learners (CRUE: 9 semester hours)
- individuals interested in teaching adults (MA: 36 semester hours)

The MA is a field-based professional development program involving university faculty and practicing LDE instructors in public school and intensive English settings. Courses, laboratories and practica emphasize scholarly approaches to complex problems of practice and feature interactive, collaborative and practical approaches to working with English language learners.

We advocate a sociocultural approach to issues of language and learning, acknowledging the legitimacy of linguistic and cultural differences and recognizing that academic settings represent important socializing forces in students' lives. Because of this, we emphasize the "whole learner" in our teaching and in teacher education and teacher development, understanding that individuals do not merely add a language to their repertoire of communication but make fundamental identity adjustments as they progress in their studies. For this reason, all our course work, laboratories and practica experiences are field-based, putting our program participants in contact with veteran teachers and English language learners. We draw heavily on recent scholarship in collaborative approaches to school-university partnerships and systemic school change in developing classroom methods and materials, curricula and teacher development experiences.

The MA program also provides a foundation in teaching English in a variety of contexts in the United States and abroad. Teachers who work in LDE programs or in other content areas (such as art, language arts, math, music, science, social studies or technology), but who wish to integrate LDE principles and strategies into their instruction for their English language learners, will find the MA program relevant to their interests and goals.

Course work includes language teaching methodology, language acquisition, linguistic analysis of English, multicultural foundations, assessment, literacy and other areas. This program has been developed as an advanced course of study for practicing teachers or individuals with some teaching experience.

Applicants who are new to teaching, and who wish to teach in U.S. K–12 public school settings, should inquire about the teacher education licensure program. Applicants who are new to teaching, but who do not need a teaching license (certification) because they

do not wish to teach in U.S. public schools, may consider the TESOL certificate to gain initial teaching experiences before applying for the MA.

Program Requirements and Courses

To complete the LDE program and earn a master's degree and/or endorsement, or to earn a TESOL certificate, students must complete the appropriate course work as outlined in the table below.

Requirements for LDE Program (Degree/Endorsement or TESOL Certificate)					
Course	MA without CDE Endorsement in LDE	MA and CDE Endorsement in LDE	CDE Endorsement in LDE Only	MA and CDE Endorsement in LDE (when added to UC Denver's graduate teacher education licensure program)	TESOL Certificate
LALC 5910 - Foundations of Language, Literacy and Culture	Required	Required	Required	Required	
One course from culture options: LALC 5140 - Multicultural Education LALC 5150 - Culture of the Classroom LALC 5160 - Historical and Legal	Select One	Select One	Select One	Select One	

Foundations of Bilingual Education					
LALC 5070 - Linguistic Analysis of English: Implications for Teaching	Required	Required	Required	Required	Required
LALC 5030 - Language/Literacy Acquisition Part I	Required	Required	Required	Required	Required
LALC 5820 - Techniques in Teaching English as a Second Language	Required	Required	Required	Required	Required
LALC 5050 - Linguistic and Cultural Issues in Linking Assessment and Instruction	Required	Required	Required	Required	Required
<i>One course from field-based teaching options:</i> LALC 5020 - Workshop in Literacy and Language Teaching LALC 5825 - Methods and Materials of Language Teaching LALC 5826 - Language	5826 preferred	Elem: 5825 preferred Sec: 5826 preferred	Elem: 5825 preferred Sec: 5826 preferred	Elem: 5825 preferred Sec: 5826 preferred	5826

Teaching Lab LALC 5730 - Language and Literacy Across the Curriculum LALC 5770 - Effective Literacy Instruction for Second Language Learners					
LALC 5035 - Language and Literacy: Acquisition, Processes, and Cognition, Part II	Required	Required			
LALC 6912 - Seminar and Practicum in Literacy and Language, ESL and Bilingual Education	Required	Required	Required	Required	
<i>One course from research and evaluation methodology:</i> RSEM 5050 - Assessment for Teachers RSEM 5080 - Research for Teachers	Select One	Select One		Select One	
<i>One course from educational psychology:</i> EPSY 5110 - Human Learning EPSY 5220 -	Select One	Select One			

Adult Learning and Education					
Graduate-level University of Colorado elective	Select One	Select One			
Cumulative online portfolio	Required	Required	Required	Required	
LDE PLACE Exam		Required	Required	Required	
Total Semester Hours	36	36	24	27	15

Content Instruction for English Learners (CIEL) Certificate Requirements

Students interested in the CIEL certificate must complete the following:

LALC 5030 - Language/Literacy Acquisition Part I Semester Hours: 3

-OR-

LALC 5070 - Linguistic Analysis of English: Implications for Teaching Semester Hours: 3

LALC 5050 - Linguistic and Cultural Issues in Linking Assessment and Instruction
Semester Hours: 3

-OR-

LALC 5820 - Techniques in Teaching English as a Second Language Semester Hours:
3

-OR-

LALC 5825 - Methods and Materials of Language Teaching Semester Hours: 3

-OR-

LALC 5826 - Language Teaching Lab Semester Hours: 3

LALC 6912 - Seminar and Practicum in Literacy and Language, ESL and Bilingual
Education Semester Hours: 3

Total: 9 Hours

Culturally Responsive Urban Education (CRUE) Certificate Requirements

Those considering the CRUE certificate must complete the following:

LALC 5170 - Race, Class and Culture in Public Schools Semester Hours: 3

LALC 5180 - Working with Communities and Families Semester Hours: 3

LALC 5190 - Culturally Responsive Pedagogy and Practices Semester Hours: 3

Total: 9 Hours

Additional information about the CRUE certificate can be found at
www.cruecenter.org/certificate.php.

Cumulative Portfolio of Performance Based Assessments (PBAS)

The portfolio is required for the CDE endorsement, counts as the comprehensive exam for the master's degree and permits you to document your development over the course of your program. Portfolios are reviewed by LDE faculty members. At least two faculty members must agree that the portfolio is acceptable in order to pass. The portfolio process is reviewed in every class as each of the PBAs is completed in the classes, helping students to update their portfolios throughout the program. For more portfolio guidelines, visit the Web site at www.ucdenver.edu/education/lde.

PLACE Exam for Linguistically Diverse Education Endorsement

To add the endorsement to their teaching license, students must pass the PLACE (Program for Licensing Assessments for Colorado Educators) exam for linguistically diverse education, secure and submit the appropriate paperwork from the Colorado Department of Education, and pay fees required for the PLACE and for the endorsement paperwork. Information about PLACE is online at www.place.nesinc.com.

Course Scheduling

During the fall and spring semesters, most university courses are offered in the late afternoon and evening and meet for three hours once a week over a 16-week semester. Some alternative course schedules are available, such as meeting on five Friday-

evening/all-day Saturday combinations. In the summer semester, three-to eight-week sessions are offered, and courses may be in the morning, afternoon or evening.

Planning

For practicing full-time teachers, we recommend taking one course each fall and spring semester and up to two courses each summer. Students may simultaneously complete requirements for the MA and the endorsement for linguistically diverse education. Support for course planning is available in LDE advising sessions—usually held once in fall and once in spring. These sessions help students build their programs around course sequences and availability (some courses are offered only once per year).

Active Status in the Graduate School

Students must complete their programs within seven years, maintaining a GPA of 3.0. Students typically take four courses each calendar year. Failure to enroll over three contiguous semesters will result in a requirement to resubmit part I of the application for admission and a letter of intent.

Management and Organization MS

Program Director: Kenneth L. Bettenhausen

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Faculty

Professors:

Heidi Boerstler, PhD/JD, Yale University/University of Denver

Wayne Cascio, PhD, University of Rochester

C. Marlena Fiol, PhD, University of Illinois-Urbana-Champaign

Edward O'Connor, PhD, University of Akron

John Ruhnka, JD/LLM, Yale School of Law/Cambridge University

Associate Professors:

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Blair Gifford, PhD, University of Chicago

Sarah Koovor-Misra, PhD, University of Southern California

Assistant Professors:

Vinit Desai, PhD, University of California at Berkeley

Stephanie Johnson, PhD, Rice University

Instructors:

Linda Fried, JD/LLM, University of Miami
Barry McConnell, MBA, University of Colorado
Jeffrey Nystrom, MS, University of Colorado
Ira Selkowitz, JD, University of Denver

The MS management program prepares students for significant managerial responsibilities in the private and public sectors. Core course requirements provide students with advanced understanding of how to manage interpersonal dynamics, effectively design organizations, implement planned change and organizational transformations and develop human resources. Students build on this foundation with any four electives in MGMT, ENTP or INTB, or with the courses that comprise one of 12 career-focused specializations.

The specializations include: business strategy, change and innovation, communications management, enterprise technology management, entrepreneurship and innovation, human resources management, global management, leadership, strategic management, managing for sustainability, quantitative decision methods and sports and entertainment management. These specializations will help students master the tools and knowledge to be successful in each focused competency.

The MS management and organization degree requirements are met by the following:

Management MS Core

Required Management Courses

BUSN 6520 - Managing Individuals and Teams

Summer 2010 Registration **BUSN 6520**

Students learn the strengths and weaknesses of their management style and how to work effectively with individual differences. Students also learn how to form teams around purpose/task, diagnose problems and identify and implement solutions by utilizing leadership skills such as setting goals, processes and measures, interpersonal communication, motivation and conflict management. Students develop an understanding of the effect of the organizational and social context on the behavior of individuals and teams. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MGMT 6320 - Organizational Development

Summer 2010 Registration **MGMT 6320**

Instruction in the analysis, diagnosis, and resolution of problems in organizing people at

work. Models of organizational change are examined. Group experiences, analysis of cases and readings are stressed. Prereq: BUSN 6520, may be taken concurrently. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MGMT 6360 - Designing Effective Organizations

Summer 2010 Registration **MGMT 6360**

Examines how to design organizations within the context of environmental, technological, and task constraints. The emphasis is on learning how to recognize and correct structural problems through the analysis of existing organizations in which the students are involved. Prereq: BUSN 6520, may be taken concurrently. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MGMT 6380 - Managing People for Competitive Advantage

Summer 2010 Registration **MGMT 6380**

Focuses on the management of human resources in organizations. Oriented toward the practical application of human resources management principles in areas such as: equal employment opportunity, affirmative action, human resources planning, recruitment, staffing, benefits and compensation, labor relations, training, career management, performance management, and occupational health and safety. Prereq: BUSN 6520, may be taken concurrently. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 12 Hours

Management Emphasis (or elective) courses (12-18 semester hours)

A student may choose to complete the program by taking any four MGMT, INTB or ENTP elective courses.

Choose from one of the following emphasis areas:

- communications management
- enterprise technology management
- entrepreneurship and innovation
- global management
- human resources management
- leadership
- quantitative decision methods

- sports and entertainment management
- strategic management
- sustainability management

Communications Management

For the communications management specialization you must complete six courses from the Business School, five of which must be within the MGMT course curriculum. You are allowed no more than four communications courses (three required and one free elective).

Required Courses

COMM 5240 - Organizational Communication

Summer 2010 Registration **CMMU 5240**

Relationships among such communication factors as flow, media, channel, diversity, information delivery and organization functioning, morale, and productivity. Prereq: Undergraduates with senior standing may enroll with permission of instructor. Cross-listed with COMM 4240. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 5250 - Difference Matters and Organizational Communication

Summer 2010 Registration **CMMU 5250**

Explores theoretical and practical issues regarding relationships between communication processes in contemporary U.S. organizations and socially constructed aspects of individuals' identity (e.g., race, gender, sexual orientation, class, ability and age). Prereq: Undergraduates with senior standing may enroll with permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 5405 - Technical Communication: Writing

Summer 2010 Registration **CMMU 5405**

Provides intensive practice in technical writing using simulations of professional writing situations. Students analyze diverse audience and communication problems, including those with challenging technical content. Special emphasis is placed on the document-design process and techniques of self-editing. Prereq: Undergraduates with senior standing may enroll with permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Choose one:

MGMT 6800 - Special Topics in Management

Summer 2010 Registration **MGMT 6800**

Current topics in management will be occasionally offered. Consult the 'Schedule Planner' for specific offerings or contact an advisor for information. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MGMT 6803 - Visionary Leadership

Summer 2010 Registration **MGMT 6803**

Examines the challenges faced by visionary leaders and the approaches used by these individuals (creation, articulation, and implementation of vision) to transform organizations. Participants utilize these approaches employed by effective leaders to develop plans for their own organizational success. Group experiences, applied readings, and videos are used to clarify the opportunities available. Prereq: BUSN 6520, may be taken concurrently. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MGMT 6804 - Bargaining and Negotiation

Summer 2010 Registration **MGMT 6804**

Designed as a seminar in bargaining, negotiation and interpersonal conflict management. Through simulations, role plays and personal experience, students practice and develop their negotiation skills and see how negotiations differ depending on the type of situation encountered. Specific topics covered include: the nature of negotiation, the role of the negotiation context, interdependence and power, strategies and tactics of distributive and integrative bargaining, negotiation ethics and interpersonal conflicting resolution. Prereq: BUSN 6520, may be taken concurrently. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 12 Hours

Approved COMM Elective Courses

Choose one:

The following is a list of communication courses that may be used to fulfill a free elective on your degree plan.

For the communications specialization you must complete six courses from the Business School, of which five must be within the MGMT course curriculum. You are allowed no more than four communications courses.

COMM 5151 - Group Communication

Summer 2010 Registration **CMMU 5151**

Analysis of the impact of small groups on individual behavior in social and task settings. Focuses on the dynamics of small groups, including leadership, roles, norms, goals and cohesion. Prereq: Undergraduates with senior standing may enroll with permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 5222 - Professional Communication

Summer 2010 Registration **CMMU 5222**

Provides strategies for analyzing workplace situations, constructing clear and persuasive arguments and narratives to bring about positive change in organizations, and assessing the effectiveness of communication. Prereq: Undergraduates with senior standing may enroll with permission of instructor. Cross-listed with COMM 4222. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 5245 - Advanced Organizational Communication

Summer 2010 Registration **CMMU 5245**

Explores critical theoretical perspectives on communication in complex organizations, including issues and standpoints that have not been included in mainstream theory and research. Analyzes assumptions and pragmatic solutions associated with these theories. Prereq: Undergraduates with senior standing may enroll with permission of instructor. Cross-listed with COMM 4245. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 5260 - Communication and Conflict

Summer 2010 Registration **CMMU 5260**

Studies the influence of communication on intrapersonal, interpersonal, intragroup and intergroup conflict situations. Prereq: Undergraduates with senior standing may enroll with permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 5262 - Mediation

Summer 2010 Registration **CMMU 5262**

Explores theoretical and practical aspects of mediation in a variety of contexts ranging from divorce mediation to labor-management disputes. Prereq: Undergraduates with senior standing may enroll with permission of instructor. Cross-listed with COMM

4262.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 5270 - Intercultural Communication

Summer 2010 Registration **CMMU 5270**

Examines the philosophy, process, problems, and potentials unique to communication across cultural boundaries. Prereq: Undergraduates with senior standing may enroll with permission of instructor.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 5280 - Communication and Change

Summer 2010 Registration **CMMU 5280**

Examines the role of communication in change processes of various kinds, including social change and diffusion of innovations. Prereq: Undergraduates with senior standing may enroll with permission of instructor.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 5500 - Health Communication

Summer 2010 Registration **CMMU 5500**

Examines the role of communication in a wide range of health contexts. Topics include cultural constructions of health and illness, public health communication campaigns, client-provider interactions, telemedicine, community-based health programs and medical journalism. Prereq: Undergraduates with senior standing may enroll with permission of instructor. Cross-listed with COMM 4500.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 5505 - Technical Communication: Editing

Summer 2010 Registration **CMMU 5505**

Provides intensive practice in editing technical documents. Emphasis is on contextual editing (i.e., editing parts of a document as they relate to the whole document and the communication purpose). Students discuss the editor's role, review editing strategies, and examine methods of increasing document usability and readability. Prereq: COMM 5405. Undergraduates with senior standing may enroll with permission of instructor.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 5640 - Advanced Public Relations

Summer 2010 Registration **CMMU 5640**

Examines key public relations practices in private, not-for-profit and public sectors.

Strategic planning processes, research methods, evaluation, reports, and collateral development are addressed, with an emphasis on the intersection of theory and practice. Prereq: COMM 4635 or COMM 5635. Undergraduates with senior standing may enroll with permission of instructor. Cross-listed with COMM 4640. **Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 5760 - Computer-Mediated Communication

Summer 2010 Registration **CMMU 5760**

Analysis and discussion of the nature, use, and effects of computer-mediated communication in interpersonal, work, educational, societal and international contexts. Focus is on the social aspects of computer-mediated communication rather than on specific software or hardware technologies. Prereq: Undergraduates with senior standing may enroll by permission of instructor. Cross-listed with COMM 4760. **Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 5830 - Visual Principles in Technical Communication

Summer 2010 Registration **CMMU 5830**

Explores the rhetoric and usability of typography and text displays, tables and charts, data graphics, technical pictorials, page and screen layout, and other visual elements of technical communication. The course focuses on principles and research, not software training. Prereq: COMM 5405. Undergraduates with senior standing may enroll by permission of instructor. Cross-listed with COMM 4830. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Enterprise Technology Management

Required Courses

Choose four:

ISMG 6430 - Information Systems Security and Privacy

Summer 2010 Registration **ISMG 6430**

Designed to develop knowledge and skills for security of information and information systems within organizations. Focuses on concepts and methods associated with planning, designing, implementing, managing, and auditing security at all levels and on all systems platforms, including enterprise systems. This course presents techniques for assessing risk associated with accidental and intentional breaches of security as well as disaster recovery planning. Prereq: ISMG 6180 or BUSN 6610 (6810). **Semester Hours:**

3to 3**When Offered:** *SPRING*

Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 6450 - IT Project Management

Summer 2010 Registration **ISMG 6450**

Focuses on how firms successfully manage the adoption of It. Projects and program management principles are the primary focus of this course. Topics covered include approaches to prioritizing projects, estimating cost and time-to-market, build vs. buy decision, planning, monitoring and controlling implementation, measurement, total cost of ownership, effective management of both behavioral and technical aspects of the project and change management. Prereq: ISMG 6180 or BUSN 6610 (6810).

Semester Hours: 3to 3**When Offered:** *FALL*

Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 6460 - Emerging Technologies

Summer 2010 Registration **ISMG 6460**

Provides an introduction to the expansive array of information technologies that form the infrastructure of a modern business enterprise. Emphasis is placed on learning conceptual technological foundations and understanding the business value of the various technologies. The purpose of the course is to develop the student's ability to discuss recent technological advancements with other It professionals and management. Technology assessment is emphasized. Prereq: ISMG 6180 or BUSN 6610 (6810).

Cross-listed with BUSN 6800.**Semester Hours:** 3to 3**When Offered:** *FALL*

Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 6420 - Global Enterprise Systems

Summer 2010 Registration **ISMG 6420**

Examines the evolution of global enterprise systems - from internally focused enterprise resource planning (ERP) client or server systems to externally focused eBusiness. Studies the types of issues managers need to consider in implementing cross-functional integrated enterprise systems. Examines the general nature of global enterprise computing, re-engineering principles and the technical foundations of client or server systems and enterprise information architectures. Students learn about the global enterprise systems marketplace. Topics include the tools and methodology, modules, processes and industry initiatives. Finally, the course looks into the future and predicts enterprise system trends. The objective of the course is to make students aware of the potential and limitations of global enterprise systems. The objective will be reached through case studies, lectures, guest speakers and a group project. Prereq: ISMG 6180 or BUSN 6610 (6810).

Semester Hours: 3to 3**When Offered:** *FALL*

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 12 Hours

Entrepreneurship and Innovation

ENTP 6000 - Fundamentals of Entrepreneurship

Summer 2010 Registration **ENTP 6000**

Focuses on the concepts, skills, know-how, attitudes, information, and alternatives that are relevant for start-up and early-stage entrepreneurs, entrepreneurial managers, and their stakeholders. Speakers, exercises, and lectures focus on the critical role of opportunity creation and recognition, and the entrepreneur as the principal success factor in new entrepreneurial formation and building. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ENTP 6020 - The Business Plan

Summer 2010 Registration **ENTP 6020**

Business plan development which incorporates all key ingredients necessary for various users. Includes the ins and outs of business plans for new ventures through environmental scans of new business opportunities, case studies, by sharing the experience of entrepreneurs and investors that have been through the process and by writing a business plan, either individually or with a team of other students. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

6000-level ENTP courses (2) or

6000-level ENTP course (1) and 6000-level MGMT course (1) (6 semester hours)

Total: 12 Hours

Global Management

Required Courses

INTB 6000 - Introduction to International Business

Summer 2010 Registration **INTB 6000**

An overview of the international business environment, the impact of environmental factors on international business operations, and the identification of current and complex managerial issues facing organizations engaged in international business. Prereq: Completion or waiver of CBK or completion of nine graduate credit hours. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

INTB 6020 - Cross-Cultural Management

Summer 2010 Registration **INTB 6020**

Focuses on the management of diverse socio-cultural and political norms and values in the global marketplace. The goal of this course is to develop skills in managing impacts of such values and norms on the effectiveness of international business operations and managerial activities. Prereq: INTB 6000 or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MGMT 6040 - International Human Resources Management

Summer 2010 Registration **MGMT 6040**

This course has two objectives: (1) to understand the impact of cultural differences in the management of people in multinational firms; and (2) to compare and contrast critical human resource issues in the contexts of domestic and international operations. Topics include recruitment, staffing, training, performance appraisal, compensation, and labor and management relations in markets around the world. (This course qualifies as an international elective for the MS in International Business program.) Prereq: MGMT 6380 or BUSN 6520 (or equivalent). Cross-listed with INTB 6040. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

INTB 6040 - International Human Resources Management

Summer 2010 Registration **INTB 6040**

This course has two objectives: (1) to understand the impact of cultural differences in the management of people in multinational firms; and (2) to compare and contrast critical human resource issues in the contexts of domestic and international operations. Topics include recruitment, staffing, training, performance appraisal, compensation, and labor and management relations in markets around the world. (This course qualifies as an international elective for the MS in International Business program.) Prereq: MGMT 6380 or BUSN 6520 (or equivalent). Cross-listed with MGMT 6040. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

Any travel-study program or
6000-level INTB course (3 semester hours)

Total: 12 Hours

Leadership

Prerequisite

BUSN 6530 - Data Analysis for Managers

Summer 2010 Registration **BUSN 6530**

Provides an overview of techniques for data analysis, including multiple regression, sampling theory and applications of probabilistic inference from sample data. The emphasis is upon the applications of these techniques to management problems. Students are required to analyze data sets, present their analyses in written or oral form and defend their conclusions. Note: Students cannot receive credit for both BUSN 6530 and FNCE 6290. **Semester Hours:** 3to 3 **When Offered:** FASPRSUM
Registration is changing. Visit our website for details ucdenver.edu/registration.

Required Courses

INTB 6000 - Introduction to International Business

Summer 2010 Registration **INTB 6000**

An overview of the international business environment, the impact of environmental factors on international business operations, and the identification of current and complex managerial issues facing organizations engaged in international business. Prereq: Completion or waiver of CBK or completion of nine graduate credit hours. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ENTP 6000 - Fundamentals of Entrepreneurship

Summer 2010 Registration **ENTP 6000**

Focuses on the concepts, skills, know-how, attitudes, information, and alternatives that are relevant for start-up and early-stage entrepreneurs, entrepreneurial managers, and their stakeholders. Speakers, exercises, and lectures focus on the critical role of opportunity creation and recognition, and the entrepreneur as the principal success factor in new entrepreneurial formation and building. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MGMT 6803 - Visionary Leadership

Summer 2010 Registration **MGMT 6803**

Examines the challenges faced by visionary leaders and the approaches used by these individuals (creation, articulation, and implementation of vision) to transform organizations. Participants utilize these approaches employed by effective leaders to develop plans for their own organizational success. Group experiences, applied readings, and videos are used to clarify the opportunities available. Prereq: BUSN 6520, may be taken concurrently. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MGMT 6804 - Bargaining and Negotiation

Summer 2010 Registration **MGMT 6804**

Designed as a seminar in bargaining, negotiation and interpersonal conflict management. Through simulations, role plays and personal experience, students practice and develop their negotiation skills and see how negotiations differ depending on the type of situation encountered. Specific topics covered include: the nature of negotiation, the role of the negotiation context, interdependence and power, strategies and tactics of distributive and integrative bargaining, negotiation ethics and interpersonal conflicting resolution. Prereq: BUSN 6520, may be taken concurrently. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MGMT 6800 - Special Topics in Management

Summer 2010 Registration **MGMT 6800**

Current topics in management will be occasionally offered. Consult the 'Schedule Planner' for specific offerings or contact an advisor for information. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 12 Hours

Management of Change

Required Courses

Choose four:

BUSN 6811 - IT and New Business Paradigms

Summer 2010 Registration **BUSN 6811**

Introduces graduate students to the relationship between information technology and the other functional areas of the business. During the course, students have an opportunity to listen and learn from guest speakers who have been involved with either guiding or interpreting the impact of information technology among functional areas of existing or new business. Through the use of current readings, guest lectures and case analysis, students examine various models of IT and new business paradigms to determine the decisions and success criteria for integrating It in ongoing business. a unique feature of the class will be the opportunity for students to present proposals and projects to be critiqued by individuals with It or business experience. Those individuals provide feedback and perspectives regarding potential It or new business paradigm activities.

Prereq: Permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

BUSN 6830 - Business and the Natural Environment

Summer 2010 Registration **BUSN 6830**

Class considers the impact of economic activity on the natural environment and the regulatory, market and corporate voluntary responses to reducing this impact. Topics include externalities, life cycle assessment, environmental accounting, corporate environmental reporting, ISP 14000 certification and sustainability. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENTP 6820 - Business Consulting

Summer 2010 Registration **ENTP 6820**

Assists to understand how to successfully grow experience and current knowledge so that any future business consulting goals are realized, regardless of whether the student is an "inside" consultant to the organization or an "Outside" consultant to many organizations. Students are expected to identify experiences, current knowledge, and future goals. The course includes "Practice" of 32 topics within 16 classes. Students learn how to identify root problems instead of treating the symptoms. Most importantly, student deliver recommendations and implement the optimum solution. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MGMT 6730 - Human Resources Management: Performance Management

Summer 2010 Registration **MGMT 6730**

Focuses on the design and implementation of human resources management systems to assess and enhance employee performance. Areas of study include performance measurement, rater training, goal setting and feedback. Prereq: MGMT 6380. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MGMT 6803 - Visionary Leadership

Summer 2010 Registration **MGMT 6803**

Examines the challenges faced by visionary leaders and the approaches used by these individuals (creation, articulation, and implementation of vision) to transform organizations. Participants utilize these approaches employed by effective leaders to develop plans for their own organizational success. Group experiences, applied readings, and videos are used to clarify the opportunities available. Prereq: BUSN 6520, may be taken concurrently. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MGMT 6804 - Bargaining and Negotiation

Summer 2010 Registration **MGMT 6804**

Designed as a seminar in bargaining, negotiation and interpersonal conflict management. Through simulations, role plays and personal experience, students practice and develop their negotiation skills and see how negotiations differ depending on the type of situation encountered. Specific topics covered include: the nature of negotiation, the role of the negotiation context, interdependence and power, strategies and tactics of distributive and integrative bargaining, negotiation ethics and interpersonal conflicting resolution. Prereq: BUSN 6520, may be taken concurrently. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MGMT 68__ - Leadership in Difficult Times (3 semester hours)

MGMT 6821 - Managing for Sustainability

Summer 2010 Registration **MGMT 6821**

This course will consider how companies are using social responsibility as a competitive advantage. The so-called green revolution is calling for organizations to take on increasing responsibility for environmental conservation, employee well being, and community development. This course considers how organizations can work with various stockholders (employees, customers, communities, society-at-large) to develop and promote mutually beneficial products and solutions to key social needs and concerns. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 12 Hours

Managing Human Resources

Prerequisites

BUSN 6530 - Data Analysis for Managers

Summer 2010 Registration **BUSN 6530**

Provides an overview of techniques for data analysis, including multiple regression, sampling theory and applications of probabilistic inference from sample data. The emphasis is upon the applications of these techniques to management problems. Students are required to analyze data sets, present their analyses in written or oral form and defend their conclusions. Note: Students cannot receive credit for both BUSN 6530 and FNCE 6290. **Semester Hours:** 3to 3 **When Offered:** FASPRSUM

Registration is changing. Visit our website for details ucdenver.edu/registration.

MGMT 6380 - Managing People for Competitive Advantage

Summer 2010 Registration **MGMT 6380**

Focuses on the management of human resources in organizations. Oriented toward the practical application of human resources management principles in areas such as: equal employment opportunity, affirmative action, human resources planning, recruitment, staffing, benefits and compensation, labor relations, training, career management, performance management, and occupational health and safety. Prereq: BUSN 6520, may be taken concurrently. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HR emphasis prerequisite courses are in addition to the 30-hour MS core.

Required Courses

Choose four:

BUSN 6540 - Legal and Ethical Environment of Business

Summer 2010 Registration **BUSN 6540**

Students develop a working knowledge of legal and ethical parameters for business decision making. The course addresses the legal system and mechanisms for resolving disputes. Topics include constitutional law, torts, product liability, contracts, property law, consumer protection, intellectual property, business entities and employment law. It stresses the influence of legal issues on organizational decision making. Note: Students can substitute ENTP 6822 but credit cannot be received for both. Health Administration students must take BUSN 6541. **Semester Hours:** 3to 3 **When Offered:** FASPRSUM
Registration is changing. Visit our website for details ucdenver.edu/registration.

MGMT 6040 - International Human Resources Management

Summer 2010 Registration **MGMT 6040**

This course has two objectives: (1) to understand the impact of cultural differences in the management of people in multinational firms; and (2) to compare and contrast critical human resource issues in the contexts of domestic and international operations. Topics include recruitment, staffing, training, performance appraisal, compensation, and labor and management relations in markets around the world. (This course qualifies as an international elective for the MS in International Business program.) Prereq: MGMT 6380 or BUSN 6520 (or equivalent). Cross-listed with INTB 6040. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

INTB 6040 - International Human Resources Management

Summer 2010 Registration **INTB 6040**

This course has two objectives: (1) to understand the impact of cultural differences in the management of people in multinational firms; and (2) to compare and contrast critical human resource issues in the contexts of domestic and international operations. Topics

include recruitment, staffing, training, performance appraisal, compensation, and labor and management relations in markets around the world. (This course qualifies as an international elective for the MS in International Business program.) Prereq: MGMT 6380 or BUSN 6520 (or equivalent). Cross-listed with MGMT 6040. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MGMT 6710 - Human Resources Management: Staffing

Summer 2010 Registration **MGMT 6710**

Focuses on the design and implementation of human resources management systems to recruit and select employees. Areas of study include planning, job analysis, external and internal recruitment and selection, and decision making. Prereq: MGMT 6380 and BUSN 6530. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MGMT 6720 - Human Resources Management: Training

Summer 2010 Registration **MGMT 6720**

Methods, theories, research findings, and issues in training. Topics include how to design, deliver, and evaluate training programs. Prereq: MGMT 6380. Cross-listed with MGMT 4430. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MGMT 6730 - Human Resources Management: Performance Management

Summer 2010 Registration **MGMT 6730**

Focuses on the design and implementation of human resources management systems to assess and enhance employee performance. Areas of study include performance measurement, rater training, goal setting and feedback. Prereq: MGMT 6380. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MGMT 6740 - Human Resources Management: Compensation

Summer 2010 Registration **MGMT 6740**

Develop and administer pay systems considering economic and social pressures, traditional approaches and strategic choices in managing compensation. Current theory research and practice. Students design a compensation strategy and a system that translates that strategy into reality. Prereq: MGMT 6380 and BUSN 6530. Cross-listed with MGMT 4450. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 12 Hours

Managing for Sustainability

Courses and course numbers in this emphasis were still being finalized when this catalog went to print. See a graduate advisor for details.

Quantitative Decision Methods

Prerequisite

(completion of prerequisite is in addition to the 30-hour MS in management and organization)

BUSN 6530 - Data Analysis for Managers

Summer 2010 Registration **BUSN 6530**

Provides an overview of techniques for data analysis, including multiple regression, sampling theory and applications of probabilistic inference from sample data. The emphasis is upon the applications of these techniques to management problems. Students are required to analyze data sets, present their analyses in written or oral form and defend their conclusions. Note: Students cannot receive credit for both BUSN 6530 and FNCE 6290. **Semester Hours:** 3to 3**When Offered:** FASPRSUM
Registration is changing. Visit our website for details ucdenver.edu/registration.

Required Courses

Choose four:

BUSN 6630 - Management of Operations

Summer 2010 Registration **BUSN 6630**

This course is concerned with the production and delivery of goods and services. It provides an overview of a variety of key Operation Management issues including scheduling, capacity determination, facility location and layout, distribution and related topics. The use of model- assisted decision making is emphasized. **Semester Hours:** 3to 3**When Offered:** FASPRSUM
Registration is changing. Visit our website for details ucdenver.edu/registration.

BUSN 6820 - Project Management

Summer 2010 Registration **BUSN 6820**

Introduces the knowledge and skills of Project Management (PM) in a business environment. Emphasis will be on the entire project life cycle, the project management process groups and the knowledge areas as presented in the Project Management Body of Knowledge (PMBOK) from the Project Management Institute (PMI). Managerial

aspects, quantitative tools and traditional techniques of Project Management will be covered. Application to various industries will be included. Note: cannot receive credit for both BUSN 6820 and DSCI 6820. Cross-listed with DSCI 6820 and URPL

6686.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

or

DSCI 6820 - Project Management

Summer 2010 Registration **DSCI 6820**

Introduces the knowledge and skills of Project Management (PM) in a business environment. Emphasis will be on the entire project life cycle, the project management process groups and the knowledge areas as presented in the Project Management Body of Knowledge (PMBOK) from the Project Management Institute (PMI). Managerial aspects, quantitative tools and traditional techniques of Project Management will be covered. Application to various industries will be included. Note: cannot receive credit for both DSCI 6820 and BUSN 6820. Cross-listed with BUSN 6820 and URPL

6686.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

BUSN 6822 - Services Operations

Summer 2010 Registration **BUSN 6822**

Examines the unique issues involved in the management of service operations. Operations Management principles specific to service industries are given in depth coverage. In addition, simulation is introduced as a technique for studying service industries. Note: cannot receive credit for both BUSN 6822 and DSCI 6822. Prereq: BUSN 6530 or permission of instructor. Cross-listed with DSCI 6822.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

or

DSCI 6822 - Services Operations

Summer 2010 Registration **DSCI 6822**

Examines the unique issues involved in the management of service operations. Operations management principles specific to service industries are given in-depth. In addition, simulation is introduced as a technique for studying service industries. Note: Cannot receive credit for both BUSN 6822 and DSCI 6822. Prereq: BUSN 6530 or permission of instructor. Cross-listed with BUSN 6822**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

BUSN 6824 - Business Forecasting

Summer 2010 Registration **BUSN 6824**

Modern businesses use forecasts in marketing, finance, accounting, human resources management and supply chain and production management decision making. This course focuses on practical application of forecasting techniques, choosing and comparing appropriate methods and applying the results to the business application.

Note: Can only receive credit for one of the cross listed courses. Prereq: BUSN 6530 or FNCE 6290. Cross-listed with DSCI 6230 and FNCE 6372. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

or

DSCI 6230 - Business Forecasting

Summer 2010 Registration **DSCI 6230**

Modern businesses use forecasts in marketing, finance, accounting, human resources management and supply chain and production management decision-making. This course focuses on practical application of forecasting techniques, choosing and comparing appropriate methods and applying the results to the business application.

Note: Can only receive credit for either DSCI 6230, BUSN 6824, or FNCE 6372. Prereq: BUSN 6530 or FNCE 6290. Cross-listed with BUSN 6824 and FNCE 6372. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

BUSN 6826 - Supply Chain Management

Summer 2010 Registration **BUSN 6826**

Introduces the application of purchasing, operations, and logistics to the entire supply chain of an organization. Because of globalization and the rapid advancement of information technology, emphasis is placed on integration management of processes and systems, relationship management of upstream and downstream players and strategies that incorporate current and future trends. Note: Cannot receive credit for both BUSN 6826 and DSCI 6826. Cross-listed with DSCI 6826. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

BUSN 6828 - Business Applications of Data Mining

Summer 2010 Registration **BUSN 6828**

Addresses statistical approaches to the very large data sets increasingly common in business applications such as internet-based business, fraud detection, credit scoring and market segmentation. Topics include limitations of classical statistical when applied to large data sets, alternative approaches and applications of key data mining algorithms such as logistic regression, decision trees and cluster analysis. Emphasis is placed on proper choice of method, interpretation of the results and understanding of the strengths and limitations of the methods. Students are expected to analyze and report on a variety of data sets drawn from business applications areas. Note: cannot receive credit for both

BUSN 6828 and DSCI 6828. Prereq: BUSN 6530 or permission of instructor. Cross-listed with DSCI 6828. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

or

DSCI 6828 - Business Applications of Data Mining

Summer 2010 Registration **DSCI 6828**

Addresses statistical approaches to the very large data sets increasingly common in business applications such as internet-based business, fraud detection, credit scoring and market segmentation. Topics include limitations of classical statistical when applied to large data sets, alternative approaches and applications of key data mining algorithms such as logistic regression, decision trees and cluster analysis. Emphasis is placed on proper choice of method, interpretation of the results and understanding of the strengths and limitations of the methods. Students are expected to analyze and report on a variety of data sets drawn from business application areas. Note: Cannot receive credit for both BUSN 6828 and DSCI 6828. Prereq: BUSN 6530 or permission of instructor. Cross-listed with BUSN 6828. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

DSCI 6440 - Quality and Process Improvement

Summer 2010 Registration **DSCI 6440**

Studies the identification, measurement and improvement of quality and the practical management issues related to implementing quality systems within organizations. Topics include historic and contemporary views of quality, statistical quality control tools including Six SigmaSM, work design and measurement and process flow and design. Note: Cannot receive credit for both DSCI 6440 and BUSN 6832. Prereq: BUSN 6530 or permission of instructor. Cross-listed with BUSN 6832. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 12 Hours

Note: One of two free electives must be aMGMT, ENTP or INTB course.

Sports and Entertainment Management

Required Courses

Choose four:

FNCE 6____ - Sports and Entertainment Finance (3 semester hours)

MGMT 5939 - Internship or Cooperative Education

Summer 2010 Registration **MGMT 5939**

Supervised experiences involving the application of concepts and skills in an employment situation. Prereq: 21 semester hours and 3.5 GPA. **Semester Hours:** 1to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MGMT 6830 - Sports and Entertainment Management

Summer 2010 Registration **MGMT 6830**

This course is designed as a speaker series of sports and entertainment industry elite focusing on: industry trends, strategic planning, managing revenue streams, managing media, managing for effectiveness, managing post-merger integration, leadership and leading change. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MGMT 6832 - Law and Negotiation in the Sports/ Entertainment Industries

Summer 2010 Registration **MGMT 6832**

Provides an overview of major legal issues in the sports and entertainment industries. Students develop the skills required to negotiate contracts in these industries. Topics include contracts with athletes (agency, player and sponsorship), stadium financing and sports franchises, labor law and collective bargaining agreements, entertainment contracts in the music, film and live theater fields and copyright, trademark and tort law principles in the sports and entertainment industries. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MKTG 6820 - Sports & Entertainment Marketing

Summer 2010 Registration **MKTG 6820**

This course focuses on techniques for formulating marketing plans for various types of sports organizations. The course deals with marketing issues particularly germane to sports organizations such as: fans as consumers, fan loyalty, sports pricing, servicescapes, player development and sports sponsorships. This course includes lectures, guest speakers, cases, examinations and student group projects. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 12 Hours

Courses and course numbers in this emphasis were still being finalized when this catalog went to print. See a graduate advisor for details.

Strategic Management

Students pursuing a dual MBA/MS in organization and management are not eligible for this emphasis.

Prerequisites

BUSN 6530 - Data Analysis for Managers

Summer 2010 Registration **BUSN 6530**

Provides an overview of techniques for data analysis, including multiple regression, sampling theory and applications of probabilistic inference from sample data. The emphasis is upon the applications of these techniques to management problems. Students are required to analyze data sets, present their analyses in written or oral form and defend their conclusions. Note: Students cannot receive credit for both BUSN 6530 and FNCE 6290. **Semester Hours:** 3to 3**When Offered:** *FASPRSUM*
Registration is changing. Visit our website for details ucdenver.edu/registration.

BUSN 6550 - Analyzing and Interpreting Accounting Information

Summer 2010 Registration **BUSN 6550**

Emphasizes the use of accounting statements and data in making business decisions. External financial accounting information and concepts are used for investment and credit decisions. Internal managerial accounting information and concepts are used for product costing, cost analysis and management control. **Semester Hours:** 3to 3**When Offered:** *FASPRSUM*
Registration is changing. Visit our website for details ucdenver.edu/registration.

Required Courses

BUSN 6560 - Marketing Management

Summer 2010 Registration **BUSN 6560**

Focuses on the formulation and implementation of a marketing plan in the context of the firm's strengths, overall strategy and competitive environment. Emphasis is on understanding the marketing environment and on decision making skills regarding market selection, pricing, promotion, product configuration and management of distribution channels. **Semester Hours:** 3to 3**When Offered:** *FASPRSUM*
Registration is changing. Visit our website for details ucdenver.edu/registration.

BUSN 6640 - Financial Management

Summer 2010 Registration **BUSN 6640**

This course is concerned with the business firm's decisions to make investments and to finance its operations. Students learn to use the tools and theories underlying business valuation, cost of capital, capital budgeting and capital structure. Students will learn to

evaluate a firm's financial position through the examination of its financial statements and to prepare pro forma statements for the firm. Prereq: BUSN 6530 or FNCE 6290, BUSN 6620 (both may be taken concurrently) and BUSN 6550 completed prior and strictly enforced. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

BUSN 6710 - Strategic Management

Summer 2010 Registration **BUSN 6710**

Concerned with the development of a general management perspective in establishing the strategic direction for an enterprise. Students gain an understanding of strategy formulation and implementation within the context of the global environment. Emphasis is on the integration of knowledge acquired in the previous functional area courses.

Note: This course is intended as a final semester Capstone course. Prereq: BUSN 6560 and BUSN 6640 - strictly enforced; BUSN 6630 strongly recommended and may be taken concurrently. **Semester Hours:** 3to 3 **When Offered:** *FASPRSUM*

Registration is changing. Visit our website for details ucdenver.edu/registration.

MGMT 6803 - Visionary Leadership

Summer 2010 Registration **MGMT 6803**

Examines the challenges faced by visionary leaders and the approaches used by these individuals (creation, articulation, and implementation of vision) to transform organizations. Participants utilize these approaches employed by effective leaders to develop plans for their own organizational success. Group experiences, applied readings, and videos are used to clarify the opportunities available. Prereq: BUSN 6520, may be taken concurrently. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 12 Hours

Free Electives (6 semester hours)

Free electives can be anything in the Business School (graduate level), except BUSN prefix courses below 6800. Any 6000-level or higher ACCT, FNCE, ENTP, MKTG, MGMT, ISMG, INTB or HLTH course can count as your free elective requirement.

*For the **communications emphasis**, the student is allowed to use an approved COMM course as the free elective.

Marketing MS

Program Director: David Forlani
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E-mail: David.Forlani@ucdenver.edu

Faculty

Professors:

Lawrence Cunningham, DBA, University of Tennessee
Susan Keaveney, PhD, University of Colorado
Clifford Young, PhD, University of Utah

Assistant Professors:

David Forlani, PhD, University of Minnesota
Vick Lane, PhD, University of Washington
Madhavan Parthasarathy, PhD, University of Nebraska

Senior Instructor:

Mary Lee Stansifer, PhD, Northwestern University

Instructors:

Peter Miller, MA, Farleigh Dickenson University

The MS in marketing degree is designed to provide the skill sets necessary for you to succeed in middle (e.g., brand manager, advertising account executive) and upper level (e.g., CMO) positions in marketing and for those who interface with an organization's markets (e.g., customer service or operations).

Your MS in marketing degree from the University of Colorado Denver consists of 30 hours:

- 18 semester hours of marketing core courses
- 12 semester hours of graduate electives

We highly recommend that one of the electives include a marketing-related internship, especially for those making a career change or without prior experience in marketing. Further, as has been our policy, if you feel that you would benefit by substituting a one or two graduate electives for a marketing elective, the marketing program director will help to work out a plan designed to meet your specific career needs. You must complete the following 18 hours of marketing core courses and then you can choose from two paths to complete the remaining 12 hours. You can select the "build your own MS marketing degree" option or one of the nine specializations.

Graduate Core in Marketing

Required Courses

BUSN 6560 - Marketing Management

Summer 2010 Registration **BUSN 6560**

Focuses on the formulation and implementation of a marketing plan in the context of the firm's strengths, overall strategy and competitive environment. Emphasis is on understanding the marketing environment and on decision making skills regarding market selection, pricing, promotion, product configuration and management of distribution channels. **Semester Hours:** 3to 3**When Offered:** *FASPRSUM*
Registration is changing. Visit our website for details ucdenver.edu/registration.

MKTG 6010 - Marketing Strategy, Evaluation and Development

Summer 2010 Registration **MKTG 6010**

Focuses on marketing strategy and marketing planning. Addresses the formulation and implementation of marketing plans within the context of the overall strategies and objectives of both profit and not-for-profit organizations. There is heavy emphasis on group projects and presentations. Note: This course is intended to be taken near the end of your program. Prereq: BUSN 6560. **Semester Hours:** 3to 3**When Offered:** *FALL SPR*
Registration is changing. Visit our website for details ucdenver.edu/registration.

MKTG 6020 - International Marketing

Summer 2010 Registration **MKTG 6020**

Explores problems, practices, and strategies involved in marketing goods and services internationally. Emphasized analysis of uncontrollable environmental forces, including cultures, governments, legal systems, and economic conditions, as they affect international marketing planning. Prereq: BUSN 6560. Note: students cannot receive credit for both MKTG 6020 and INTB 6026. Cross-listed with INTB 6026. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MKTG 6050 - Marketing Research

Summer 2010 Registration **MKTG 6050**

The objectives relate to effective marketing information management. Objectives include: (1) developing an understanding of the techniques and procedures that can be used to generate timely and relevant marketing information; (2) gaining experience in developing and analyzing information that is decision oriented; and (3) gaining experience in making recommendations and decisions based on relevant and timely information. Computer analysis and projects are employed. **Semester Hours:** 3to

3When Offered: FALL SPR

Registration is changing. Visit our website for details ucdenver.edu/registration.

MKTG 6060 - Buyer Behavior

Summer 2010 Registration **MKTG 6060**

Why do consumers buy? How can marketing activities influence buyer behavior? Answers to these questions are key to marketing success & business fortune. In this course, we explore how to understand the heart & soul of consumers & examine the strategic implications of consumer psychology. Course participants conduct a market segmentation project that identifies & dissects various buyer groups within a chosen market. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MKTG 6200 - Marketing Dashboards & Scorecards

Summer 2010 Registration **MKTG 6200**

Performance measurement systems help companies monitor their progress and stay on track toward their stated goals and objectives. Some performance measures, such as financial or operations data, can be readily provided by internal information systems. In contrast, marketing performance measures depend upon the activities of skilled marketing researchers to gather external market-based information about the market, customers, and competitors. This hands-on course provides students with a tool-kit for gathering market performance metrics for companies of all sizes, for-profit and not-for-profit, manufacturers or service providers. The course also teaches students how to use tools such as dashboards and scorecards to apply market-performance measures to the firm's strategies and objectives. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Marketing Electives

Build Your Own MS Marketing Degree with 12 semester hours of MKTG electives

Choose any four MKTG electives, such as:

MKTG 5939 - Internship/Cooperative Education

Summer 2010 Registration **MKTG 5939**

Supervised experiences involving the applications of concepts and skills in an employment situation. Prereq: 21 semester hours and 3.5 GPA. **Semester Hours:** 1to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MKTG 6030 - Sales and Sales Force Management

Summer 2010 Registration **MKTG 6030**

Focuses on issues in personal selling and managing the field sales force. Deals with organization sales analysis, forecasting, budgeting and operating, with particular emphasis on the selling task, recruiting, selection, training, compensation, supervision and motivation. Prereq: BUSN 6560. **Semester Hours:** 3to 3**When Offered:** *SPRING* Registration is changing. Visit our website for details ucdenver.edu/registration.

MKTG 6040 - Services Marketing

Summer 2010 Registration **MKTG 6040**

Service industries such as health care, finance, information, entertainment, retailing, government, and professional services comprise 80% of the total employment and GDP of the US. Manufacturing firms are increasingly look to value-added services to improve their bottom lines. Yet customer satisfaction with services has been consistently lower than with goods. This course teaches students how to design and deliver high quality services, improve customer satisfaction, and thereby increase revenues and profitability. It also addresses how small, medium, and large firms can develop marketing plans and strategies in the new service environment. A variety of teaching methods may be used to demonstrate these concepts, such as cases, projects, field experiences, and/or guest speakers. **Semester Hours:** 3to 3**When Offered:** *FALL SPR* Registration is changing. Visit our website for details ucdenver.edu/registration.

MKTG 6070 - Integrated Marketing Communications and Brand Identity

Summer 2010 Registration **MKTG 6070**

A brand's identity has a substantial influence on an organization's financial wealth. But brand identity is not simply the result of a great product or a creative ad. Utilizing many real examples, historic approaches, and current trends, this course explores how integrated marketing communications help build a brand identity that reverberates with consumers. Participants create an integrated marketing communications campaign. Prereq: BUSN 6560. **Semester Hours:** 3to 3 Registration is changing. Visit our website for details ucdenver.edu/registration.

MKTG 6080 - Marketing in Emerging Markets

Summer 2010 Registration **MKTG 6080**

Explores problems, practices and strategies involved in marketing goods and services in emerging markets. Emphasizes analysis of uncontrollable environmental forces, including cultures, government, legal, systems and economic conditions as they affect marketing planning. Prereq: BUSN 6560. Note: students cannot receive credit for both

MKTG 6080 and INTB 6082. Cross-listed with INTB 6082. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MKTG 6090 - Customer Relationship Management

Summer 2010 Registration **MKTG 6090**

Involves the management of customer relationships to maximize customer service and its associated benefits at minimal cost. Includes services marketing concepts and techniques, IT applications, and software. Designed to acquaint students with practices and issues in state-of-the-art customer relationship management systems in an array of different types of organizations. The course initially focuses on the nature of customer relationship management (CRM) the interaction between strategic management planning, corporate culture and CRM. Other topics examined include successful models of CRM, managing the employee or CRM interface, marketing research, and CRM, and customer trust, loyalty, CRM customer service levels, customer service levels, customer profitability or metrics, selecting and integrating CRM software, CRM integration and timing of CRM roll-out. Prereq: BUSN 6560. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MKTG 6091 - Strategic Product Marketing

Summer 2010 Registration **MKTG 6091**

Familiarizes students with key theories and practices regarding products. Successful development of a new product, or extending the life cycle of an existing product. Outlines and necessitates the understanding of product development, key concepts related to successful product management over the course of its life cycle including the way the product function adds synergy to other marketing activities and, in turn, benefits from them. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MKTG 6092 - Internet Marketing

Summer 2010 Registration **MKTG 6092**

Explores how the marketing function has irreversibly changed as a result of the internet and to lay out basic marketing strategies for successful online marketing. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MKTG 6094 - Marketing Issues in the Chinese Environment

Summer 2010 Registration **MKTG 6094**

This course assesses numerous marketing and marketing related topics in the Chinese environment with the objective of helping the graduate student develop managerial and marketing expertise. In specific, the course pinpoints key developments in the Chinese

business environment, develops expertise in conducting market opportunity analysis, assesses market entry conditions and strategies and applies marketing mix strategies in the context of the Chinese environment. Note: It is recommended for students to take BUSN 6560 or INTB 6000 prior to this course. Cross-listed with INTB 6094. **Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MKTG 6120 - Non-Profit and Social Marketing

Summer 2010 Registration **MKTG 6120**

In this course, students will examine the role and application of marketing processes in non-profit organizations, such as those addressing social issues and causes. Using case studies and projects, students will consider the non-profit sector's multiple marketing objectives, which include aiming to change behavior, developing donor relationships, and creating partnerships with for-profit organizations. Students will consider these perspectives while applying marketing concepts such as segmentation, positioning, branding, and the marketing mix. Prereq: BUSN 6560. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MKTG 6700 - Marketing Travel Study

Summer 2010 Registration **MKTG 6700**

This is a 2-week travel course, designed to focus on the marketing of the specific country we visit. In the past the travel course has been to Spain and Costa Rica, but the country of destination may be different every time (usually offered every other year). While in the country, students will visit companies (such as advertising agencies, marketing research firms, local grocery stores, marketing departments of multinational corporations, etc.), have lectures/discussions on marketing in that country and work on a marketing plan for a local company or not-for-profit organization. Prereq: BUSN 6560. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 30 Hours

...or complete one of the following marketing specializations (listed alphabetically).

Marketing Specializations

The specializations are areas of focus that will appeal to those who have specific interests or are looking to apply their marketing acumen in particular contexts (e.g., interface with engineering or work in a multinational or nonprofit environment). A 3-

semester-hour internship can be substituted for an elective in any area of specialization with the approval of the marketing program director.

Brand Management and Marketing Communications

Are you interested in a career in advertising, promotions or public relations? How about furthering your career in marketing management? Advertising, promotion and public relations managers are creative, highly-motivated individuals who are flexible yet can meet a deadline. They need good verbal and written communication skills and the ability to work well with people. Similar talents are needed by those involved with brand management. This task is central to all marketers, especially those involved with perceptual positioning and the deliverance of positions in a target market (e.g., those working in any phase of market communication and R&D) The U.S. Bureau of Labor Statistics reports that, because of the high visibility of these positions, these managers are often prime candidates for top C-level positions. The job outlook remains promising but competition will be keen, and the best opportunities will go to those with an MS in marketing or an MS marketing /MBA dual degree. (Don't take our word for it, see <http://www.bls.gov/oco/ocos020.htm>).

Required:

MKTG 6070 - Integrated Marketing Communications and Brand Identity

Summer 2010 Registration **MKTG 6070**

A brand's identity has a substantial influence on an organization's financial wealth. But brand identity is not simply the result of a great product or a creative ad. Utilizing many real examples, historic approaches, and current trends, this course explores how integrated marketing communications help build a brand identity that reverberates with consumers. Participants create an integrated marketing communications campaign.

Prereq: BUSN 6560. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Choose three of the following courses:

MKTG 6030 - Sales and Sales Force Management

Summer 2010 Registration **MKTG 6030**

Focuses on issues in personal selling and managing the field sales force. Deals with organization sales analysis, forecasting, budgeting and operating, with particular emphasis on the selling task, recruiting, selection, training, compensation, supervision and motivation. Prereq: BUSN 6560. **Semester Hours:** 3to 3 **When Offered:** *SPRING*

Registration is changing. Visit our website for details ucdenver.edu/registration.

MKTG 6040 - Services Marketing

Summer 2010 Registration **MKTG 6040**

Service industries such as health care, finance, information, entertainment, retailing, government, and professional services comprise 80% of the total employment and GDP of the US. Manufacturing firms are increasingly look to value-added services to improve their bottom lines. Yet customer satisfaction with services has been consistently lower than with goods. This course teaches students how to design and deliver high quality services, improve customer satisfaction, and thereby increase revenues and profitability. It also addresses how small, medium, and large firms can develop marketing plans and strategies in the new service environment. A variety of teaching methods may be used to demonstrate these concepts, such as cases, projects, field experiences, and/or guest speakers. **Semester Hours:** 3to 3**When Offered:** FALL SPR

Registration is changing. Visit our website for details ucdenver.edu/registration.

MKTG 6091 - Strategic Product Marketing

Summer 2010 Registration **MKTG 6091**

Familiarizes students with key theories and practices regarding products. Successful development of a new product, or extending the life cycle of an existing product. Outlines and necessitates the understanding of product development, key concepts related to successful product management over the course of its life cycle including the way the product function adds synergy to other marketing activities and, in turn, benefits from them. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MKTG 6092 - Internet Marketing

Summer 2010 Registration **MKTG 6092**

Explores how the marketing function has irreversibly changed as a result of the internet and to lay out basic marketing strategies for successful online marketing. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

BUSN 6530 - Data Analysis for Managers

Summer 2010 Registration **BUSN 6530**

Provides an overview of techniques for data analysis, including multiple regression, sampling theory and applications of probabilistic inference from sample data. The emphasis is upon the applications of these techniques to management problems. Students are required to analyze data sets, present their analyses in written or oral form and defend their conclusions. Note: Students cannot receive credit for both BUSN 6530

and FNCE 6290. **Semester Hours:** 3to 3**When Offered:** *FASPRSUM*
Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 5635 - Principles of Public Relations

Summer 2010 Registration **CMMU 5635**

Introduces theory and practice in the field of public relations, including topics such as effects upon society, public opinion, target audiences, adaptation to the media, uses, laws and ethics. Prereq: Undergraduates with senior standing may enroll with permission of instructor. Cross-listed with COMM 4635. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 5640 - Advanced Public Relations

Summer 2010 Registration **CMMU 5640**

Examines key public relations practices in private, not-for-profit and public sectors. Strategic planning processes, research methods, evaluation, reports, and collateral development are addressed, with an emphasis on the intersection of theory and practice. Prereq: COMM 4635 or COMM 5635. Undergraduates with senior standing may enroll with permission of instructor. Cross-listed with COMM 4640. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 6240 - Website Development Practice and Technologies

Summer 2010 Registration **ISMG 6240**

Presents a broad coverage of design principles and techniques to develop effective web sites. The course emphasizes: (1) understanding the principles of web page and web site design and the process of publishing web pages, (2) developing client-side scripts for use in web sites, (3) using server-side programs or scripts to develop dynamic web sites using databases, and (4) understanding technologies for managing large web sites including XML schemas, content management systems and web services. Prereq: ISMG 6080. **Semester Hours:** 3to 3**When Offered:** *FALL*
Registration is changing. Visit our website for details ucdenver.edu/registration.

Global Marketing

One of the growing themes of the 21st century economy is the growth of world trade. There is continuing demand for individuals who understand the how to conduct marketing across many different international environments as well as rapidly growing areas such as China and the emerging markets. This specialization prepares you to effectively compete and succeed in this environment.

Required (select one of the following courses):

MKTG 6080 - Marketing in Emerging Markets

Summer 2010 Registration **MKTG 6080**

Explores problems, practices and strategies involved in marketing goods and services in emerging markets. Emphasizes analysis of uncontrollable environmental forces, including cultures, government, legal, systems and economic conditions as they affect marketing planning. Prereq: BUSN 6560. Note: students cannot receive credit for both MKTG 6080 and INTB 6082. Cross-listed with INTB 6082. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MKTG 6094 - Marketing Issues in the Chinese Environment

Summer 2010 Registration **MKTG 6094**

This course assesses numerous marketing and marketing related topics in the Chinese environment with the objective of helping the graduate student develop managerial and marketing expertise. In specific, the course pinpoints key developments in the Chinese business environment, develops expertise in conducting market opportunity analysis, assesses market entry conditions and strategies and applies marketing mix strategies in the context of the Chinese environment. Note: It is recommended for students to take BUSN 6560 or INTB 6000 prior to this course. Cross-listed with INTB 6094. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

Choose three of the following courses:

ENTP 6826 - International Entrepreneurship

Summer 2010 Registration **ENTP 6826**

Provides the student with an overview of key trends and developments in international business. Familiarize the student with selected theories and concepts of international business and how it affects entrepreneurial functions, including finance, marketing, accounting, organization design and management. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

INTB 6020 - Cross-Cultural Management

Summer 2010 Registration **INTB 6020**

Focuses on the management of diverse socio-cultural and political norms and values in the global marketplace. The goal of this course is to develop skills in managing impacts of such values and norms on the effectiveness of international business operations and managerial activities. Prereq: INTB 6000 or permission of instructor. **Semester Hours:**

3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

INTB 6022 - International Business Negotiations

Summer 2010 Registration **INTB 6022**

Examines the international dimensions of business negotiations. It addresses the impact of the cultural, legal, political environments in the negotiation process, and examines similarities and differences in negotiation styles and approaches across borders. (This course qualifies as an international elective for the MS in International Business program.) **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

INTB 6080 - Global Competition

Summer 2010 Registration **INTB 6080**

Focuses on the dynamics of the interface between international business operations and their market environments. It addresses the changing structure of international competitive environments and its implications for companies engaged in international business. It examines various approaches to and issues in structuring international business deals in dynamic global competitive environments. (This course qualifies as an international elective for the MS in International Business program.) Prereq: INTB 6000 or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

INTB 6200 - International Business Policy

Summer 2010 Registration **INTB 6200**

The objective of this course is to develop competence relevant to strategy formulation and implementation in a multi-national enterprise, and in an international context. Provides theoretical knowledge, skills, and sensitivities that help deal effectively with the strategic and managerial problems of managing in a global environment. Prereq: INTB 6000 and 18 graduate credit hours. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MKTG 6700 - Marketing Travel Study

Summer 2010 Registration **MKTG 6700**

This is a 2-week travel course, designed to focus on the marketing of the specific country we visit. In the past the travel course has been to Spain and Costa Rica, but the country of destination may be different every time (usually offered every other year). While in the country, students will visit companies (such as advertising agencies, marketing research firms, local grocery stores, marketing departments of multinational corporations, etc.), have lectures/discussions on marketing in that country and work on a

marketing plan for a local company or not-for-profit organization. Prereq: BUSN 6560. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

High-Tech/Entrepreneurial Marketing

The American economy was built on a spirit of innovation, hard work and entrepreneurship, and this is surely going to be the path that assures continued American dominance in the technology and business development fields. Most smart innovators know that, in addition to the financial and managerial aspects of a business, it is the marketing function that often makes the difference between success and failure. Whether your interest is in corporate intrapreneurship and the development of high-technology oriented innovations or individual entrepreneurship and the development of a small business with minimal funds, knowing how to create and implement appropriate marketing strategies is fundamental to achieving your goals. This specialization allows you to focus on the type of new business creation path that best suits your aspirations while greatly enhancing your endeavor's probability of success. If you aspire to be the next Bill Gates, this is a "must take" degree path for you.

Required:

MKTG 6091 - Strategic Product Marketing

Summer 2010 Registration **MKTG 6091**

Familiarizes students with key theories and practices regarding products. Successful development of a new product, or extending the life cycle of an existing product. Outlines and necessitates the understanding of product development, key concepts related to successful product management over the course of its life cycle including the way the product function adds synergy to other marketing activities and, in turn, benefits from them. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENTP 6842 - New Concept Development

Summer 2010 Registration **ENTP 6842**

Designed to help entrepreneurs address questions related to assessing the viability of new business opportunities. Using marketing theory, provides tools for understanding and evaluating the attractiveness of industries and potential receptiveness of markets. Both Individual and group projects teach students to identify potential new business opportunities and to assess the viability in various industries and markets. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Choose two of the following courses:

MKTG 6030 - Sales and Sales Force Management

Summer 2010 Registration **MKTG 6030**

Focuses on issues in personal selling and managing the field sales force. Deals with organization sales analysis, forecasting, budgeting and operating, with particular emphasis on the selling task, recruiting, selection, training, compensation, supervision and motivation. Prereq: BUSN 6560. **Semester Hours:** 3to 3**When Offered:** *SPRING*
Registration is changing. Visit our website for details ucdenver.edu/registration.

MKTG 6040 - Services Marketing

Summer 2010 Registration **MKTG 6040**

Service industries such as health care, finance, information, entertainment, retailing, government, and professional services comprise 80% of the total employment and GDP of the US. Manufacturing firms are increasingly look to value-added services to improve their bottom lines. Yet customer satisfaction with services has been consistently lower than with goods. This course teaches students how to design and deliver high quality services, improve customer satisfaction, and thereby increase revenues and profitability. It also addresses how small, medium, and large firms can develop marketing plans and strategies in the new service environment. A variety of teaching methods may be used to demonstrate these concepts, such as cases, projects, field experiences, and/or guest speakers. **Semester Hours:** 3to 3**When Offered:** *FALL SPR*
Registration is changing. Visit our website for details ucdenver.edu/registration.

MKTG 6070 - Integrated Marketing Communications and Brand Identity

Summer 2010 Registration **MKTG 6070**

A brand's identity has a substantial influence on an organization's financial wealth. But brand identity is not simply the result of a great product or a creative ad. Utilizing many real examples, historic approaches, and current trends, this course explores how integrated marketing communications help build a brand identity that reverberates with consumers. Participants create an integrated marketing communications campaign. Prereq: BUSN 6560. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MKTG 6092 - Internet Marketing

Summer 2010 Registration **MKTG 6092**

Explores how the marketing function has irreversibly changed as a result of the internet and to lay out basic marketing strategies for successful online marketing. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 5285 - Communication Processes in Technology Transfer

Summer 2010 Registration **COMM 5285**

Surveys research addressing technology transfer processes. Students examine and critique models of technology transfers and the role of individuals, artifacts, and small teams in technology transfers. Prereq: Undergraduates with senior standing may enroll with permission of instructor. Cross-listed with COMM 4285. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ENTP 6000 - Fundamentals of Entrepreneurship

Summer 2010 Registration **ENTP 6000**

Focuses on the concepts, skills, know-how, attitudes, information, and alternatives that are relevant for start-up and early-stage entrepreneurs, entrepreneurial managers, and their stakeholders. Speakers, exercises, and lectures focus on the critical role of opportunity creation and recognition, and the entrepreneur as the principal success factor in new entrepreneurial formation and building. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ENTP 6020 - The Business Plan

Summer 2010 Registration **ENTP 6020**

Business plan development which incorporates all key ingredients necessary for various users. Includes the ins and outs of business plans for new ventures through environmental scans of new business opportunities, case studies, by sharing the experience of entrepreneurs and investors that have been through the process and by writing a business plan, either individually or with a team of other students. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ENTP 6826 - International Entrepreneurship

Summer 2010 Registration **ENTP 6826**

Provides the student with an overview of key trends and developments in international business. Familiarize the student with selected theories and concepts of international business and how it affects entrepreneurial functions, including finance, marketing, accounting, organization design and management. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ENTP 6860 - Business Planning for Social Entrepreneurs

Summer 2010 Registration **ENTP 6860**

Strategic planning is a key process both in new and existing organizations. The plan is a road map for achieving your organizational goals and is a vehicle for thinking about,

discussing, researching and analyzing your strategies for sustainability. It is a living document that helps you plan for the future, measure your achievements, manage your risk and stay focused. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Internet Marketing

Are you interested in a degree that blends Web development and application strategies with marketing? This, then, is the specialization for you. This specialization covers all aspects of Internet marketing including the functions associated with Web sites for marketing communication and customer support, one-to-one communication to many different receiving devices, marketing via social networks, consumer behavior insights based on offline and online data combination, inventory optimization through CRM-SCM integration, and a focus on ROI and associated performance metrics. With Internet marketing poised to take off globally, especially in developing countries where consumers may not have access to the latest products in local stores, this is indeed the wave of the future.

Required:

MKTG 6040 - Services Marketing

Summer 2010 Registration **MKTG 6040**

Service industries such as health care, finance, information, entertainment, retailing, government, and professional services comprise 80% of the total employment and GDP of the US. Manufacturing firms are increasingly look to value-added services to improve their bottom lines. Yet customer satisfaction with services has been consistently lower than with goods. This course teaches students how to design and deliver high quality services, improve customer satisfaction, and thereby increase revenues and profitability. It also addresses how small, medium, and large firms can develop marketing plans and strategies in the new service environment. A variety of teaching methods may be used to demonstrate these concepts, such as cases, projects, field experiences, and/or guest speakers. **Semester Hours:** 3to 3 **When Offered:** FALL SPR

Registration is changing. Visit our website for details ucdenver.edu/registration.

MKTG 6092 - Internet Marketing

Summer 2010 Registration **MKTG 6092**

Explores how the marketing function has irreversibly changed as a result of the internet and to lay out basic marketing strategies for successful online marketing. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Choose two of the following courses:

MKTG 6070 - Integrated Marketing Communications and Brand Identity

Summer 2010 Registration **MKTG 6070**

A brand's identity has a substantial influence on an organization's financial wealth. But brand identity is not simply the result of a great product or a creative ad. Utilizing many real examples, historic approaches, and current trends, this course explores how integrated marketing communications help build a brand identity that reverberates with consumers. Participants create an integrated marketing communications campaign.

Prereq: BUSN 6560. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MKTG 6090 - Customer Relationship Management

Summer 2010 Registration **MKTG 6090**

Involves the management of customer relationships to maximize customer service and its associated benefits at minimal cost. Includes services marketing concepts and techniques, IT applications, and software. Designed to acquaint students with practices and issues in state-of-the-art customer relationship management systems in an array of different types of organizations. The course initially focuses on the nature of customer relationship management (CRM) the interaction between strategic management planning, corporate culture and CRM. Other topics examined include successful models of CRM, managing the employee or CRM interface, marketing research, and CRM, and customer trust, loyalty, CRM customer service levels, customer service levels, customer profitability or metrics, selecting and integrating CRM software, CRM integration and timing of CRM roll-out. Prereq: BUSN 6560. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

BUSN 6828 - Business Applications of Data Mining

Summer 2010 Registration **BUSN 6828**

Addresses statistical approaches to the very large data sets increasingly common in business applications such as internet-based business, fraud detection, credit scoring and market segmentation. Topics include limitations of classical statistical when applied to large data sets, alternative approaches and applications of key data mining algorithms such as logistic regression, decision trees and cluster analysis. Emphasis is placed on proper choice of method, interpretation of the results and understanding of the strengths and limitations of the methods. Students are expected to analyze and report on a variety of data sets drawn from business applications areas. Note: cannot receive credit for both BUSN 6828 and DSCI 6828. Prereq: BUSN 6530 or permission of instructor. Cross-listed with DSCI 6828. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

or

DSCI 6828 - Business Applications of Data Mining

Summer 2010 Registration **DSCI 6828**

Addresses statistical approaches to the very large data sets increasingly common in business applications such as internet-based business, fraud detection, credit scoring and market segmentation. Topics include limitations of classical statistical when applied to large data sets, alternative approaches and applications of key data mining algorithms such as logistic regression, decision trees and cluster analysis. Emphasis is placed on proper choice of method, interpretation of the results and understanding of the strengths and limitations of the methods. Students are expected to analyze and report on a variety of data sets drawn from business application areas. Note: Cannot receive credit for both BUSN 6828 and DSCI 6828. Prereq: BUSN 6530 or permission of instructor. Cross-listed with BUSN 6828. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 6080 - Database Management Systems

Summer 2010 Registration **ISMG 6080**

The success of today's business often hinges on the ability to utilize critical information to make the right decisions quickly and efficiently. Transforming mountains of data into critical information to improve decision making is a skill every business decision maker must possess. This focus course covers the database design topics with a focus on enabling business decision making. Detailed topics include collecting, capturing, querying and manipulating data (using SQL and QBE) for simple to medium complex business applications. Commercial database products (e.g. ORACLE and ACCESS) are utilized to demonstrate the design of database applications in management, marketing, finance, accounting, and other business areas. Students will be able to design and implement simple to medium complex database applications after successful completion of this course. **Semester Hours:** 3to 3 **When Offered:** FALL

Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 6240 - Website Development Practice and Technologies

Summer 2010 Registration **ISMG 6240**

Presents a broad coverage of design principles and techniques to develop effective web sites. The course emphasizes: (1) understanding the principles of web page and web site design and the process of publishing web pages, (2) developing client-side scripts for use in web sites, (3) using server-side programs or scripts to develop dynamic web sites using databases, and (4) understanding technologies for managing large web sites including XML schemas, content management systems and web services. Prereq: ISMG 6080. **Semester Hours:** 3to 3 **When Offered:** FALL

Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 6430 - Information Systems Security and Privacy

Summer 2010 Registration **ISMG 6430**

Designed to develop knowledge and skills for security of information and information systems within organizations. Focuses on concepts and methods associated with planning, designing, implementing, managing, and auditing security at all levels and on all systems platforms, including enterprise systems. This course presents techniques for assessing risk associated with accidental and intentional breaches of security as well as disaster recovery planning. Prereq: ISMG 6180 or BUSN 6610 (6810). **Semester Hours:** 3to 3**When Offered:** *SPRING*

Registration is changing. Visit our website for details ucdenver.edu/registration.

Marketing and Business Intelligence

A great increase in ERP, CRM, HRMS and SCM applications over the last decade has created a need for specialists who can manage the many sources of information critical for business growth. Further, increased competition due to globalization has made it critical to have effective and faster decision making across all functions, especially the marketing function, where smart analysis and interpretation of enterprise data is often paramount in the formulation of competitive marketing strategy. If you are seeking a fast-growing and fast-paced area of specialization, this may well be the degree path for you.

Required:

MKTG 6090 - Customer Relationship Management

Summer 2010 Registration **MKTG 6090**

Involves the management of customer relationships to maximize customer service and its associated benefits at minimal cost. Includes services marketing concepts and techniques, IT applications, and software. Designed to acquaint students with practices and issues in state-of-the-art customer relationship management systems in an array of different types of organizations. The course initially focuses on the nature of customer relationship management (CRM) the interaction between strategic management planning, corporate culture and CRM. Other topics examined include successful models of CRM, managing the employee or CRM interface, marketing research, and CRM, and customer trust, loyalty, CRM customer service levels, customer service levels, customer profitability or metrics, selecting and integrating CRM software, CRM integration and timing of CRM roll-out. Prereq: BUSN 6560. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 6080 - Database Management Systems

Summer 2010 Registration **ISMG 6080**

The success of today's business often hinges on the ability to utilize critical information to make the right decisions quickly and efficiently. Transforming mountains of data into critical information to improve decision making is a skill every business decision maker must possess. This focus course covers the database design topics with a focus on enabling business decision making. Detailed topics include collecting, capturing, querying and manipulating data (using SQL and QBE) for simple to medium complex business applications. Commercial database products (e.g. ORACLE and ACCESS) are utilized to demonstrate the design of database applications in management, marketing, finance, accounting, and other business areas. Students will be able to design and implement simple to medium complex database applications after successful completion of this course. **Semester Hours:** 3to 3**When Offered:** *FALL*
Registration is changing. Visit our website for details ucdenver.edu/registration.

Choose one of the following courses:

ISMG 6480 - Data Warehouse and Administration

Summer 2010 Registration **ISMG 6480**

Management of large, complex data warehouses and operational databases involves technical skills and background needed by information systems professionals as well as tactical and strategic issues faced by information technology managers. This course provides conceptual knowledge, practical skills, and policy background for prospective information systems professionals and information technology managers. The course covers business aspects, conceptual background, and product material about management of data warehouses and operational databases. Assignments and projects involve Oracle skills for database administration and tactical or strategic issues faced by information technology management. Prereq: ISMG 6080. **Semester Hours:** 3to 3**When Offered:** *SPRING*

Registration is changing. Visit our website for details ucdenver.edu/registration.

BUSN 6828 - Business Applications of Data Mining

Summer 2010 Registration **BUSN 6828**

Addresses statistical approaches to the very large data sets increasingly common in business applications such as internet-based business, fraud detection, credit scoring and market segmentation. Topics include limitations of classical statistical when applied to large data sets, alternative approaches and applications of key data mining algorithms such as logistic regression, decision trees and cluster analysis. Emphasis is placed on proper choice of method, interpretation of the results and understanding of the strengths and limitations of the methods. Students are expected to analyze and report on a variety of data sets drawn from business applications areas. Note: cannot receive credit for both BUSN 6828 and DSCI 6828. Prereq: BUSN 6530 or permission of instructor. Cross-

listed with DSCI 6828. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

or

DSCI 6828 - Business Applications of Data Mining

Summer 2010 Registration **DSCI 6828**

Addresses statistical approaches to the very large data sets increasingly common in business applications such as internet-based business, fraud detection, credit scoring and market segmentation. Topics include limitations of classical statistical when applied to large data sets, alternative approaches and applications of key data mining algorithms such as logistic regression, decision trees and cluster analysis. Emphasis is placed on proper choice of method, interpretation of the results and understanding of the strengths and limitations of the methods. Students are expected to analyze and report on a variety of data sets drawn from business application areas. Note: Cannot receive credit for both BUSN 6828 and DSCI 6828. Prereq: BUSN 6530 or permission of instructor. Cross-listed with BUSN 6828. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Marketing for Sustainability

The world has changed. More than ever, companies around the globe need to introduce smart, sustainable brands to lead the way into the future. The strong core of MS marketing courses will give you the skills to become an effective marketing manager, while the specialized set of sustainability courses will give you the knowledge to work toward a better tomorrow. The sustainability courses will focus on the triad of economic, environmental and social sustainable development.

Required:

MKTG 6040 - Services Marketing

Summer 2010 Registration **MKTG 6040**

Service industries such as health care, finance, information, entertainment, retailing, government, and professional services comprise 80% of the total employment and GDP of the US. Manufacturing firms are increasingly look to value-added services to improve their bottom lines. Yet customer satisfaction with services has been consistently lower than with goods. This course teaches students how to design and deliver high quality services, improve customer satisfaction, and thereby increase revenues and profitability. It also addresses how small, medium, and large firms can develop marketing plans and strategies in the new service environment. A variety of teaching methods may be used to demonstrate these concepts, such as cases, projects, field experiences, and/or guest

speakers. **Semester Hours:** 3to 3 **When Offered:** FALL SPR

Registration is changing. Visit our website for details ucdenver.edu/registration.

MKTG 6120 - Non-Profit and Social Marketing

Summer 2010 Registration **MKTG 6120**

In this course, students will examine the role and application of marketing processes in non-profit organizations, such as those addressing social issues and causes. Using case studies and projects, students will consider the non-profit sector's multiple marketing objectives, which include aiming to change behavior, developing donor relationships, and creating partnerships with for-profit organizations. Students will consider these perspectives while applying marketing concepts such as segmentation, positioning, branding, and the marketing mix. Prereq: BUSN 6560. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

Choose two of the following courses:

BUSN 6830 - Business and the Natural Environment

Summer 2010 Registration **BUSN 6830**

Class considers the impact of economic activity on the natural environment and the regulatory, market and corporate voluntary responses to reducing this impact. Topics include externalities, life cycle assessment, environmental accounting, corporate environmental reporting, ISP 14000 certification and sustainability. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

BUSN 6850 - Accounting and Finance for Sustainability

Summer 2010 Registration **BUSN 6850**

Helping companies and communities become more socially and environmentally sustainable requires information and investment. This class introduces internal accounting techniques that aid companies in becoming more eco-efficient and external reporting to help investors value a company along social and environmental dimensions. How and when to report potential environmental liabilities and different models of sustainability reporting are also discussed. At the national level we examine alternative measures of GDP that better represent social and environmental aspects of the country. Markets can be powerful tools for change. We look at emissions trading, microfinance and socially responsible investing. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENTP 6858 - Innovation in the Social Sector

Summer 2010 Registration **ENTP 6858**

This course will introduce you to the context, models, trends, opportunities and challenges in social entrepreneurship. Provide you with the framework and tools to develop an opportunity analysis for a social venture of your choice. Engage you in learning community and collaboratively develop a deeper understanding of this emerging field. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MGMT 6821 - Managing for Sustainability

Summer 2010 Registration **MGMT 6821**

This course will consider how companies are using social responsibility as a competitive advantage. The so-called green revolution is calling for organizations to take on increasing responsibility for environmental conservation, employee well being, and community development. This course considers how organizations can work with various stockholders (employees, customers, communities, society-at-large) to develop and promote mutually beneficial products and solutions to key social needs and concerns. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MGMT 6822 - Business Ethics and Corporate Social Responsibility

Summer 2010 Registration **MGMT 6822**

Covers business ethics and corporate social responsibility in the global contexts of employment, marketing, product liability, the environment and other areas. Students compare ethical theories, including utilitarianism, Kantian, Rawlsian, stockholder, stakeholder and social contract and apply some or all of these theories to actual and hypothetical case studies. The doctrine of corporate social responsibility is defined and explored and diverging views of corporate social responsibility are discussed. Examples of how corporate social responsibility can increase a company's goodwill and net income are analyzed. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Marketing in Nonprofit Organizations

Are you someone who would rather help people, communities and the environment rather than focus on turning a profit? Many of our alumni have followed career paths with nonprofit organizations. They tell us that a strong core in marketing combined with specialized knowledge of the unique needs of not-for-profit organizations helped them to succeed.

Required:

MKTG 6040 - Services Marketing

Summer 2010 Registration **MKTG 6040**

Service industries such as health care, finance, information, entertainment, retailing, government, and professional services comprise 80% of the total employment and GDP of the US. Manufacturing firms are increasingly looking to value-added services to improve their bottom lines. Yet customer satisfaction with services has been consistently lower than with goods. This course teaches students how to design and deliver high quality services, improve customer satisfaction, and thereby increase revenues and profitability. It also addresses how small, medium, and large firms can develop marketing plans and strategies in the new service environment. A variety of teaching methods may be used to demonstrate these concepts, such as cases, projects, field experiences, and/or guest speakers. **Semester Hours:** 3 to 3 **When Offered:** FALL SPR

Registration is changing. Visit our website for details ucdenver.edu/registration.

MKTG 6120 - Non-Profit and Social Marketing

Summer 2010 Registration **MKTG 6120**

In this course, students will examine the role and application of marketing processes in non-profit organizations, such as those addressing social issues and causes. Using case studies and projects, students will consider the non-profit sector's multiple marketing objectives, which include aiming to change behavior, developing donor relationships, and creating partnerships with for-profit organizations. Students will consider these perspectives while applying marketing concepts such as segmentation, positioning, branding, and the marketing mix. Prereq: BUSN 6560. **Semester Hours:** 3 to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Choose two of the following courses:

BUSN 6550 - Analyzing and Interpreting Accounting Information

Summer 2010 Registration **BUSN 6550**

Emphasizes the use of accounting statements and data in making business decisions. External financial accounting information and concepts are used for investment and credit decisions. Internal managerial accounting information and concepts are used for product costing, cost analysis and management control. **Semester Hours:** 3 to 3 **When Offered:** FASPRSUM

Registration is changing. Visit our website for details ucdenver.edu/registration.

BUSN 6822 - Services Operations

Summer 2010 Registration **BUSN 6822**

Examines the unique issues involved in the management of service operations.

Operations Management principles specific to service industries are given in depth coverage. In addition, simulation is introduced as a technique for studying service industries. Note: cannot receive credit for both BUSN 6822 and DSCI 6822. Prereq: BUSN 6530 or permission of instructor. Cross-listed with DSCI 6822. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

or

DSCI 6822 - Services Operations

Summer 2010 Registration **DSCI 6822**

Examines the unique issues involved in the management of service operations. Operations management principles specific to service industries are given in-depth. In addition, simulation is introduced as a technique for studying service industries. Note: Cannot receive credit for both BUSN 6822 and DSCI 6822. Prereq: BUSN 6530 or permission of instructor. Cross-listed with BUSN 6822 **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ENTP 6858 - Innovation in the Social Sector

Summer 2010 Registration **ENTP 6858**

This course will introduce you to the context, models, trends, opportunities and challenges in social entrepreneurship. Provide you with the framework and tools to develop an opportunity analysis for a social venture of your choice. Engage you in learning community and collaboratively develop a deeper understanding of this emerging field. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ENTP 6860 - Business Planning for Social Entrepreneurs

Summer 2010 Registration **ENTP 6860**

Strategic planning is a key process both in new and existing organizations. The plan is a road map for achieving your organizational goals and is a vehicle for thinking about, discussing, researching and analyzing your strategies for sustainability. It is a living document that helps you plan for the future, measure your achievements, manage your risk and stay focused. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MGMT 6822 - Business Ethics and Corporate Social Responsibility

Summer 2010 Registration **MGMT 6822**

Covers business ethics and corporate social responsibility in the global contexts of employment, marketing, product liability, the environment and other areas. Students compare ethical theories, including utilitarianism, Kantian, Rawlsian, stockholder,

stakeholder and social contract and apply some or all of these theories to actual and hypothetical case studies. The doctrine of corporate social responsibility is defined and explored and diverging views of corporate social responsibility are discussed. Examples of how corporate social responsibility can increase a company's goodwill and net income are analyzed. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MKTG 6030 - Sales and Sales Force Management

Summer 2010 Registration **MKTG 6030**

Focuses on issues in personal selling and managing the field sales force. Deals with organization sales analysis, forecasting, budgeting and operating, with particular emphasis on the selling task, recruiting, selection, training, compensation, supervision and motivation. Prereq: BUSN 6560. **Semester Hours:** 3to 3 **When Offered:** *SPRING*
Registration is changing. Visit our website for details ucdenver.edu/registration.

MKTG 6070 - Integrated Marketing Communications and Brand Identity

Summer 2010 Registration **MKTG 6070**

A brand's identity has a substantial influence on an organization's financial wealth. But brand identity is not simply the result of a great product or a creative ad. Utilizing many real examples, historic approaches, and current trends, this course explores how integrated marketing communications help build a brand identity that reverberates with consumers. Participants create an integrated marketing communications campaign. Prereq: BUSN 6560. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

Marketing Research

Marketing and survey researchers gather information about what people think, measure customer satisfaction and repurchase intentions, help companies decide what goods and services to offer and at what price, and detect up-and-coming trends. Marketing researchers need good quantitative skills, strong analytical skills and a good understanding of marketing and buyer behavior. Many of our alumni got their starts in marketing research positions. According to the U.S. Bureau of Labor Statistics, employment is expected to grow faster than average with the best job opportunities for those with an MS marketing degree (Don't just take our word for it; check out <http://www.bls.gov/oco/ocos013.htm>).

Required:

MKTG 6040 - Services Marketing

Summer 2010 Registration **MKTG 6040**

Service industries such as health care, finance, information, entertainment, retailing, government, and professional services comprise 80% of the total employment and GDP of the US. Manufacturing firms are increasingly look to value-added services to improve their bottom lines. Yet customer satisfaction with services has been consistently lower than with goods. This course teaches students how to design and deliver high quality services, improve customer satisfaction, and thereby increase revenues and profitability. It also addresses how small, medium, and large firms can develop marketing plans and strategies in the new service environment. A variety of teaching methods may be used to demonstrate these concepts, such as cases, projects, field experiences, and/or guest speakers. **Semester Hours:** 3to 3**When Offered:** FALL SPR

Registration is changing. Visit our website for details ucdenver.edu/registration.

MKTG 6090 - Customer Relationship Management

Summer 2010 Registration **MKTG 6090**

Involves the management of customer relationships to maximize customer service and its associated benefits at minimal cost. Includes services marketing concepts and techniques, IT applications, and software. Designed to acquaint students with practices and issues in state-of-the-art customer relationship management systems in an array of different types of organizations. The course initially focuses on the nature of customer relationship management (CRM) the interaction between strategic management planning, corporate culture and CRM. Other topics examined include successful models of CRM, managing the employee or CRM interface, marketing research, and CRM, and customer trust, loyalty, CRM customer service levels, customer service levels, customer profitability or metrics, selecting and integrating CRM software, CRM integration and timing of CRM roll-out. Prereq: BUSN 6560. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Choose two of the following courses:

BUSN 6530 - Data Analysis for Managers

Summer 2010 Registration **BUSN 6530**

Provides an overview of techniques for data analysis, including multiple regression, sampling theory and applications of probabilistic inference from sample data. The emphasis is upon the applications of these techniques to management problems. Students are required to analyze data sets, present their analyses in written or oral form and defend their conclusions. Note: Students cannot receive credit for both BUSN 6530 and FNCE 6290. **Semester Hours:** 3to 3**When Offered:** FASPRSUM

Registration is changing. Visit our website for details ucdenver.edu/registration.

DSCI 6480 - Simulation Modeling

Summer 2010 Registration **DSCI 6480**

Students learn to model and analyze complex dynamic systems using state-of-the-art software such as Arena. Illustrative application areas include production systems, service systems, distribution systems and health care systems. Topics include creating reliable simulation models, analyzing the input and output from the model and managing simulation projects. A substantial part of the course will be devoted to projects where students define, model and analyze a significant system of their choosing. Note: Cannot receive credit for both DSCI 6480 and BUSN 6834. Prereq: Permission of instructor. Cross-listed with BUSN 6834. **Semester Hours:** 3 to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

BUSN 6828 - Business Applications of Data Mining

Summer 2010 Registration **BUSN 6828**

Addresses statistical approaches to the very large data sets increasingly common in business applications such as internet-based business, fraud detection, credit scoring and market segmentation. Topics include limitations of classical statistical when applied to large data sets, alternative approaches and applications of key data mining algorithms such as logistic regression, decision trees and cluster analysis. Emphasis is placed on proper choice of method, interpretation of the results and understanding of the strengths and limitations of the methods. Students are expected to analyze and report on a variety of data sets drawn from business applications areas. Note: cannot receive credit for both BUSN 6828 and DSCI 6828. Prereq: BUSN 6530 or permission of instructor. Cross-listed with DSCI 6828. **Semester Hours:** 3 to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

or

DSCI 6828 - Business Applications of Data Mining

Summer 2010 Registration **DSCI 6828**

Addresses statistical approaches to the very large data sets increasingly common in business applications such as internet-based business, fraud detection, credit scoring and market segmentation. Topics include limitations of classical statistical when applied to large data sets, alternative approaches and applications of key data mining algorithms such as logistic regression, decision trees and cluster analysis. Emphasis is placed on proper choice of method, interpretation of the results and understanding of the strengths and limitations of the methods. Students are expected to analyze and report on a variety of data sets drawn from business application areas. Note: Cannot receive credit for both BUSN 6828 and DSCI 6828. Prereq: BUSN 6530 or permission of instructor. Cross-listed with BUSN 6828. **Semester Hours:** 3 to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MKTG 6070 - Integrated Marketing Communications and Brand Identity

Summer 2010 Registration **MKTG 6070**

A brand's identity has a substantial influence on an organization's financial wealth. But brand identity is not simply the result of a great product or a creative ad. Utilizing many real examples, historic approaches, and current trends, this course explores how integrated marketing communications help build a brand identity that reverberates with consumers. Participants create an integrated marketing communications campaign.

Prereq: BUSN 6560. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Sports and Entertainment Marketing

The sports business industry is one of the largest and fastest growing in the United States. Add to that the burgeoning music, film, theater, television, cable and other entertainment industries and you've got virtually limitless choices. Every one of those industries needs good marketers. The strong core of marketing courses in the MS marketing program will give you the skills you need to hit the ground running with the specialized courses to teach you how to tailor your skills to the unique needs of the sports and entertainment industries.

Required:

MKTG 6040 - Services Marketing

Summer 2010 Registration **MKTG 6040**

Service industries such as health care, finance, information, entertainment, retailing, government, and professional services comprise 80% of the total employment and GDP of the US. Manufacturing firms are increasingly look to value-added services to improve their bottom lines. Yet customer satisfaction with services has been consistently lower than with goods. This course teaches students how to design and deliver high quality services, improve customer satisfaction, and thereby increase revenues and profitability. It also addresses how small, medium, and large firms can develop marketing plans and strategies in the new service environment. A variety of teaching methods may be used to demonstrate these concepts, such as cases, projects, field experiences, and/or guest speakers. **Semester Hours:** 3to 3 **When Offered:** FALL SPR

Registration is changing. Visit our website for details ucdenver.edu/registration.

MKTG 6820 - Sports & Entertainment Marketing

Summer 2010 Registration **MKTG 6820**

This course focuses on techniques for formulating marketing plans for various types of sports organizations. The course deals with marketing issues particularly germane to sports organizations such as: fans as consumers, fan loyalty, sports pricing, servicescapes, player development and sports sponsorships. This course includes lectures, guest speakers, cases, examinations and student group projects. **Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Choose two of the following courses:

BUSN 6860 - Finance in the Sports Entertainment Industries

Summer 2010 Registration **BUSN 6860**

This course explores the problems and solutions of financing in sports and entertainment business. It focuses on stadium/venue financing, sports team valuation, entertainment event guarantee estimation, player/artist salary issues and managing disparate revenue streams. The course utilizes speakers, articles, problem sets and cases. **Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MGMT 6832 - Law and Negotiation in the Sports/ Entertainment Industries

Summer 2010 Registration **MGMT 6832**

Provides an overview of major legal issues in the sports and entertainment industries. Students develop the skills required to negotiate contracts in these industries. Topics include contracts with athletes (agency, player and sponsorship), stadium financing and sports franchises, labor law and collective bargaining agreements, entertainment contracts in the music, film and live theater fields and copyright, trademark and tort law principles in the sports and entertainment industries. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MGMT 6830 - Sports and Entertainment Management

Summer 2010 Registration **MGMT 6830**

This course is designed as a speaker series of sports and entertainment industry elite focusing on: industry trends, strategic planning, managing revenue streams, managing media, managing for effectiveness, managing post-merger integration, leadership and leading change. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MKTG 6070 - Integrated Marketing Communications and Brand Identity

Summer 2010 Registration **MKTG 6070**

A brand's identity has a substantial influence on an organization's financial wealth. But brand identity is not simply the result of a great product or a creative ad. Utilizing many real examples, historic approaches, and current trends, this course explores how integrated marketing communications help build a brand identity that reverberates with consumers. Participants create an integrated marketing communications campaign.

Prereq: BUSN 6560. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Master in Business Administration for Executives, MBA

Program Director: W. Scott Guthrie

Telephone: 303-623-1888 or 1-800-228-5778

The executive MBA program provides executive-level students with a broad, rigorous 21-month academic experience leading to the master of business administration degree. The program is designed for persons who hold managerial positions in the private and public sectors. It builds upon the knowledge and experience of these executives with a sophisticated, challenging curriculum that can be pursued simultaneously without career interruption.

The executive MBA program emphasizes strategic leadership; the organization in a complex, international environment; and the applied tools of management. Courses are taught through a variety of methods. Case studies, lectures and computer simulation are combined with research projects and other teaching methods to provide students with tools useful in their present positions and applicable to more advanced responsibilities as they progress in their management careers.

Each new session of the executive MBA program begins the last week of August. Classes meet for a full day, once a week, on alternating Fridays and Saturdays, making it possible for those who live outside the Denver area to participate.

Two courses are taken simultaneously throughout the program. The program is supplemented by an intensive orientation at the beginning and a two-day seminar at the conclusion of the first academic year. A second-year seminar is held at an international business center outside of North America.

Mechanical Engineering MEng

► Graduate School Rules apply to this program

The master's of engineering (MEng) is an interdisciplinary degree program designed to meet the needs of those practicing engineers who wish to follow an integrated program of studies in engineering and allied subjects related to the individual student's professional work. Students can combine advanced engineering course work with graduate-level non-engineering courses such as business administration, environmental sciences, social sciences, biological sciences or public administration.

Prospective students are required to present a well-defined objective in order to be admitted to the program. In consultation with faculty advisors, an academic program is developed to meet this objective.

An advisory committee will be appointed for each student by the department. The advisory committee that guides the student is responsible for approving the individual's degree program and admission to candidacy, and approves the student's written report and the awarding of the degree.

The requirements for admission are the same as those for the MS degree awarded through the College of Engineering and Applied Science. A minimum of 30 semester hours of academic work are required for the MEng degree. At least 15 of these hours must be at the 5000 level or above in mechanical engineering. A maximum of 12 semester hours may be taken outside of engineering. In addition to course work, a written report is required in the MEng program as a final project (3 semester hours). The report may be related to the student's professional work. The report will be of the same general quality as that required for the master of science thesis and must be defended orally. It may be based on work done for credit under independent study.

Mechanical Engineering MS

► Graduate School Rules apply to this program

For the master of science (MS) degree in mechanical engineering, students may choose between two plans with each plan totaling 30 semester hours. Students following Plan I (thesis option) take 24 semester hours of formal course work plus 6 semester hours of thesis work. Students following Plan II (project option) take 27 semester hours of formal course work plus a 3 semester hour final project requiring a report. Students following Plan I or Plan II must submit a proposal to their examination committee prior to the semester in which they register for their thesis or project semester hours, and the examination committee must approve the proposal for the thesis or project.

Students in either plan may choose one of three options. In the first two options, the student may choose to specialize in either thermal science or mechanics. The third option is the general mechanical engineering option.

The **thermal science option** requires 12 semester hours of course work in analytical methods, numerical methods, fluid mechanics and thermodynamics. The student then selects 9 semester hours of course work in approved electives from a selection of thermal science electives.

The **mechanics option** requires 12 semester hours of course work in analytical methods, numerical methods, elasticity and dynamics. The student then selects 9 semester hours of course work in approved electives from a selection of mechanics electives. For students following Plan I, both the thermal science and mechanics options

allow the student to pick one approved 3-semester-hour elective not necessarily in the chosen specialty. For students following Plan II, both the thermal science and mechanics options allow the student to pick two approved 3-semester hour electives not necessarily in the chosen specialty.

The **general mechanical engineering option** requires the student to take 18 semester hours of required course work in analytical methods, numerical methods, fluid mechanics, thermodynamics, elasticity and dynamics. For students following Plan I, the general mechanical engineering option allows the student to pick two approved 3-semester hour electives. For students following Plan II, the general mechanical engineering option allows the student to pick three approved 3-semester hour electives.

Media Forensics Emphasis, Recording Arts MS

► Graduate School Rules apply to this program

Program Overview

This unique degree program prepares students from various backgrounds for work in the field of forensic audio and video analysis utilizing the state-of-the-art methods and technology necessary to fight crime in the digital age. Housed within the National Center for Media Forensics (NCMF), this program is unique in that it represents the **only graduate level education in audio and video forensics in the country**.

Students from all disciplines (media production, electrical engineering, general forensics, etc.) are encouraged to apply, as this program enhances scientific inquiry while guiding students through a three-semester cohort curriculum. Classes feature faculty from around the country and emerging avenues of exploration and related legal topics needed in report preparation for expert witness testimony. Digital media evidence acquisition through computer forensics applications will be emphasized in an environment that fosters creativity and individual skills. The capstone of this program will be a research thesis of the student's choosing under the advisement of the director and associate director of the center as well as an advisory board of forensic professionals from around the world. The thesis will be a topic of exploration throughout the program and will serve to enhance a graduate's specialty as they enter the work force in private forensic practice, corporate research and development, academic research and teaching, or crime labs on the local, state or federal levels.

Note: the application process, requirements and deadlines for the master of science in recording arts emphasis in media forensics will differ from those listed for the traditional

MSRA program. Please refer to the National Center for Media Forensics Web site for up-to-date information regarding application process, requirements and deadlines.

Curriculum

The master of science in recording arts emphasis in media forensics comprises 34 semester hours of credit: 30 hours are required courses and 4 hours are thesis. Courses must be completed with a B/3.0 or higher to count toward degree progress. Students are admitted to the program in the fall as a cohort and must follow the curriculum in sequence. Students who do not complete the program in sequence must reapply.

Curriculum and application requirements for the MSRA-MF program are under development and subject to change. Please refer to the National Center for Media Forensics Web site for up-to-date information regarding curriculum and application requirements for the emphasis in media forensics.

New Directions, Political Science MA

Director: Kathryn Cheever

Telephone: 303-556-5950

E-mail: kathryn.cheever@ucdenver.edu

An alternative track of the political science MA program (Plan II) is offered off-campus through the Center for New Directions in Politics and Public Policy at Chaparral in Douglas County and on the Fort Lewis College campus in Durango. This politics and public policy track presents courses in an intensive weekend format. The emphasis on politics and the policy-making process relates to the ability of leaders to mobilize resources and achieve constituent goals consistent with the public interest. In this context, politics entails communication, and effective politics requires communication. In short, this emphasis on political awareness seeks to help participants utilize the political process as the “art of making what appears to be impossible, possible.”

Degree Requirements

Students must complete a total of 33 graduate credit hours to complete the MA degree. All classes are offered in a weekend format which consists of two or three weekend sessions for a given course spread out over a two month period. In most cases, a student will complete all of the weekend sessions of one course before starting the weekend sessions for the next course.

Core Courses

PSCI 5014 - Seminar: American Politics

Summer 2010 Registration P SC 5014

Foundations of U.S. politics and contemporary political issues. Federal/state/community relations. Relationship among the three branches of the Federal government. Colorado controversies arising under the U.S. Constitution. Cross-listed with PSCI 4094. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 5085 - Comparative Public Policy

Summer 2010 Registration P SC 5085

Comparison of public policy making in such areas as health care, environment, family assistance, and employment in the United States and at least two other countries.

Prereq: Graduate standing or permission of instructor. Cross-listed with PSCI 4085. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 5324 - Politics, Public Policy and Leadership

Summer 2010 Registration P SC 5324

Role of politics in public and nonprofit sectors. Theories of administration and policy-making, emphasizing the role of leadership in public outcomes. Hands-on approach to case studies and use of students' policy experiences in practical application of theories. Cross-listed with PSCI 4324. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 5457 - Seminar: American Political Thought

Summer 2010 Registration P SC 5457

An intensive research in and presentation of competing ideas in the development of American political thought and practice, beginning with those of the Iroquois Confederacy and the founders of the United States Constitution. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 5468 - Research Methods in Political Science

Summer 2010 Registration P SC 5468

Analysis and evaluation of research methods, techniques, and empirical materials in political science application to Internet research. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 15 Hours

Electives

In addition to the required core courses, students must take 15 credit hours of political science electives.

[*NOTE:* Previously earned graduate credit may be submitted for approval to satisfy up to nine hours of the supportive elective requirement. The elective courses offered may change from time to time based on needs, interests and other factors.]

Below are examples of electives taken by New Directions students:

PSCI 5007 - Beyond Political Correctness

Summer 2010 Registration P SC 5007

Explores and critiques "political correctness" defined as "ideological narrowing, intolerance and silencing of dissent." Analysis of origins, dynamics and consequences of PC with emphasis on its advantages and disadvantages for practitioners. Foundational works, illustrative cases and contemporary voices. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 5009 - Politics of the Budgetary Process

Summer 2010 Registration P SC 5009

Explores budgeting and financial management in the public and nonprofit sectors. An overview of public sector and nonprofit fiscal management is provided, along with thorough exploration of the political influences that affect financial decision-making. Note: Offered as a special topics course in an intensive three-weekend format, which is reflected in the syllabus. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 5024 - State Politics: Focus on Colorado

Summer 2010 Registration P SC 5024

Analysis of unique aspects of Colorado government and politics. Political comparison of Colorado with other states. Preparation and discussion of research papers. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 5084 - Local Government and Administration

Summer 2010 Registration P SC 5084

Policy and administrative challenges faced by local government in the 21st Century. Emphasis on cities under federalism, alternative forms of city governance, and new challenges from increasingly diverse constituents. Issues of poverty, public safety, health, transportation, environment, corruption and accountability. Cross-listed with PSCI

4084.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 5274 - Conflict Resolution and Public Consent Building

Summer 2010 Registration P SC 5274

Alternative strategies for resolving or mediating conflicts facing public or nonprofit organizations and for building public consent, with emphasis on personal, interpersonal, organizational, interest-group, cross-cultural, and roots of conflict and bases for consent. Cross-listed with PSCI 4274.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 5354 - Seminar: Environmental Politics and Policy

Summer 2010 Registration P SC 5354

Consideration of competing models of the policy process in natural-resources decision making. Focus on selected case studies. Impact of environmental and pro-growth forces on the political process.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 5374 - Public Priorities for the 21st Century

Summer 2010 Registration P SC 5374

Identification of and planning for social, political, and economic trends in American society likely to transform governmental, nonprofit and private entities. Rigorous examination of and debate on competing priorities such as liberty, security, welfare, equality, diversity, growth and ecology. Cross-listed with PSCI 4374.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 5414 - Organizational Change Agents

Summer 2010 Registration P SC 5414

Explores of strategies for changing public and nonprofit organizations and of ways leadership abilities can be used for this purpose. Analysis of obstacles to organizational change and of methods for overcoming them. Principles of change applied to real-life contexts. Cross-listed with PSCI 4414.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 5644 - Ethical Responsibilities of Leaders

Summer 2010 Registration P SC 5644

Explores concepts of ethical decision making within the context of public leadership in both the public and non-profit sectors. Universal and individual ethical standards are

examined. Cross-listed with PSCI 4644. **Semester Hours:** 3 to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 15 Hours

Project Requirement

All students are required to complete a 3-credit master's project under the direction of a faculty advisor. Registration is done using the Special Processing form, rather than online.

PSCI 5960 - Master's Project

Summer 2010 Registration **P SCI 5960**

Semester Hours: 1 to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 3 Hours

Major Total: 33 Hours

Common Course Outcomes

In addition to clearly stated subject outcomes, all courses will have a common set of outcomes related to the following areas which are considered critical in developing leadership capacities necessary to address the changing public priorities for the 21st century:

- Creativity and innovation
- Changing public priorities
- Political and social diversity
- Ethical accountability
- Deductive and inductive reasoning
- Applied use of appropriate technology
- Strategic planning and decision making
- Resolution of conflicts and public consent building
- Individual, organizational and cultural communication effectiveness

Course Format

All courses will be offered in a weekend format that consists of two or three weekend sessions for a given course spread out over a two-month period. Three-weekend

classes are held from 9:00 am to 4:00 pm on both Saturday and Sunday of each weekend session. Two-weekend classes meet from 5:00 until 9:00 p.m. on Friday evening and from 8:30 a.m. until 4:30 p.m. on Saturday and Sunday. In most cases, a student will complete all of the two or three weekend sessions of one course before starting the weekend sessions for the next course. There is typically a 2-3 week break between semesters.

Location

All of the courses for the Denver-based programs are currently offered at the University Center at Chaparral, 20 miles south of downtown Denver. The University Center is located next to the Chaparral High School, just north of Lincoln Avenue at Chambers Road in Douglas County (15653 Brookstone Drive).

Courses for the Durango-based program are currently offered on the campus of Fort Lewis College.

Political Science MA

- Graduate School Rules apply to this program

The political science department offers a master of arts (MA) degree in political science with an emphasis on building academic and practical skills in key areas of the discipline. Research and teaching in the department centers on the major fields of American politics, comparative politics, international relations, political theory and public policy; however, the department also offers more specialized training in human rights, legal studies, gender politics, race and ethnic politics, European studies, indigenous politics and urban politics. Students pursuing the MA have the option of completing the traditional track or an alternative track centered on the study on politics, public policy and leadership. Students completing the program have gone on to PhD programs across the country and work in a variety of areas, including; state and local elected office, government service, directors of community-based organizations and nongovernmental organizations, legislative analysts, UN affiliates, lobbyists, teachers, media analysis and political consulting.

Requirements for Admission

Students applying for admission to the MA program in political science should present at least 18 semester hours of previous academic work in political science, at least 9 hours of which should be at the upper-division or graduate level. The department may make exceptions to these requirements in unusual cases (for instance, if course work in related fields such as psychology, economics and history compensates for the deficiencies in political science). Applicants should present an undergraduate GPA of at

least 3.0 to be considered; however, the department typically admits students with a GPA of 3.2 or higher. In their applications, students must submit transcripts and letters of recommendation (from academic sources) as specified by the Graduate School. In addition, applicants must submit a statement of academic objectives and an academic writing sample. Standardized test scores are not required of applicants, but will be considered if submitted.

In order to take graduate courses in political science, students must either be admitted to the MA program or secure permission as a nondegree student. Nondegree students may take up to 12 semester hours of graduate course work; however, they must first secure permission from the department graduate advisor to enroll in all graduate course work.

Degree Requirements

In addition to the requirements for admission and details of the program spelled out here, graduate students in political science must also abide by department rules and procedures specified in the Graduate Student Handbook. Failure to meet these policies may result in a student being dropped from the program.

Under the MA program in political science, two degree plans are available:

- Plan I requires the completion of nine graduate courses (27 semester hours) and a 6-credit thesis
- Plan II requires the completion of ten graduate courses (30 semester hours) and a 3-credit project.

Course work in both plans completed under the traditional track offered on the Downtown Campus must include:

P SC 5000. The State of the Discipline

Additionally, at least one graduate seminar is required in each of the following areas: American politics, comparative politics or international relations, political theory and research methods.

Students will complete between 12 and 15 elective semester hours, depending on whether they are working under Plan I or II, which may be fulfilled through graduate course work in political science, related disciplines, independent study or internships. Ultimately, the total combination of independent study, graduate course work in related disciplines and internship cannot exceed 9 semester hours. With either plan, students are required to complete a minimum of 16 semester hours with the political science department at the University of Colorado Denver, and maintain a minimum *B* (3.0) overall GPA or better. Students who are on probation must meet regularly with the

graduate advisor and must secure approval from the advisor for all course work while on probation.

Plan II is available both under the traditional MA track offered on the Denver campus, as well as through an alternative track offered off-campus through the Center for New Directions in Politics and Public Policy. For details about this off-campus track in politics and public policy, see New Directions, MA in Political Science .

Psychology MA

- Graduate School Rules apply to this program

Objectives and Requirements

The two major objectives of the MA program are to prepare graduates for doctoral-level study in both PhD and PsyD programs and to train graduates to provide direct service, under supervision, in mental health agencies. Assessment training includes theory, diagnostic interviewing, intelligence testing and some personality testing with both children and adults. We introduce students to the theory and application of major models of psychotherapy and to psychopathology theory and research. We also emphasize the ethical principles that permeate clinical psychology and the application of these principles to problems in mental health practice, teaching and research. Finally, students become well versed in statistical methods. Students take the required courses during their first year in the program. During the second year, they choose to specialize by opting for a research-based thesis and/or an applied internship at a mental health agency. Students also demonstrate competency by defending a thesis or an internship competency project. Students can complete the program in slightly less than two years, and have up to five years to complete the program according to Graduate School Rules.

Admissions

The application deadline is February 1 for the following fall. You are responsible for making sure all materials are in on time. We do not consider late applications. International students should be sure to submit all materials at least two weeks before this deadline (by January 15) so that they arrive at our department on time. Below is condensed information; see the psychology department website for complete information.

Admission Requirements:

- BA or BS from an accredited college or university, with a minimum GPA of 3.5 based on all college course work. However, successful applicants over the past several years have typically held GPAs above 3.5, with an average GPA of 3.7.
- Undergraduate courses in: introductory psychology, psychological statistics and abnormal psychology. Additional courses in psychology are highly desirable; our admissions committee will also look favorably upon courses in the biological and physical sciences.
- Two official transcripts from each college and university attended.
- Graduate Record Exam (GRE) General Test (verbal, quantitative, analytical writing) is required for all applicants. The subject test in psychology is not required, but is strongly recommended for applicants who do not hold an undergraduate degree in psychology. Successful applicants in recent years have typically had GRE verbal plus quantitative scores above 1100. Take both exams at least six weeks before the February 1 deadline so that the scores arrive on time.
- Three letters of recommendation, at least two of which must be academic references, accompanied by the Request for Recommendation form. Recommendations and supplemental application materials are sent directly to the department. Each recommendation should be in a sealed envelope, signed along the back by the recommender.
- Application Forms I and II, with answers to Part II as informative as possible.
- Application fee of \$50 (\$75 for International Students). Specify "PSY M.A. CLN" on the memo line in the lower left corner of your check.

Financial Information

The University of Colorado Denver administers various forms of financial aid for graduate students: fellowships, scholarships and a number of awards from outside agencies. See the Office of Financial Aid for further information. Additionally, the psychology department offers teaching assistantships each year in such courses as introductory psychology, statistics, research methods and human development. Although we do not guarantee TA positions, we generally have been able to offer positions to most of our interested students.

Contingent upon the availability of grant money, faculty may also offer part-time research assistantships to qualified students. The typical RA position involves data collection and analysis, library research, etc. Some computer and statistical skills are usually required. RA positions are less available than TA positions, and they may arise on very short notice.

In-state tuition waivers and additional stipend monies may be available for doctoral students.

Please note: Neither teaching nor research assistantships confer in-state tuition status or include tuition waivers.

Degree Requirements

A total of 31 (for thesis students) or 33 (for internship students) semester hours are required for graduation: 25 for required courses and either six thesis hours or eight internship hours. Students must maintain a 3.0 grade point average.

Demonstration of competence

Upon completion of the 25 hours of course work (nine courses), students must demonstrate competence in several core areas (e.g., statistics and methods, ethics, assessment, psychotherapy, psychopathology) by completing a thesis or an internship competency project (ICP).

Internship or Thesis

Students have the option of completing a master's thesis and/or pursuing an internship. The thesis involves a research project that makes a significant contribution to the field. Topics pursued by students in our master's program have included body image in eating disorders, HIV infection and childhood abuse, humor as a moderator between social conflict and psychological distress, and ethical issues regarding informed consent for psychotherapy.

Students who are particularly interested in going on to PhD programs should strongly consider the thesis option, since most PhD programs prefer individuals who have prior research experience. Applicants who are interested in the thesis option and whose research interests/experience overlap with those of a faculty member should contact that faculty member directly.

Alternatively, students may begin work on an 800-hour internship following successful completion of their courses. Students select internships (subject to program approval) based on personal interests. The greater Denver area offers a rich variety of internship possibilities, and our students have worked at a variety of agencies, including community mental health centers, inpatient and residential treatment facilities, social services, hospitals, probation and diversion programs and university counseling centers.

At minimum, students must complete either an 800-hour internship or a thesis. Students also have the option to complete both or to do a thesis and a 400-hour internship.

Public Administration MPA

Program Director: Mary Guy, PhD

Faculty

Professors:

Kathleen Beatty, PhD, Washington State University
Lloyd Burton, PhD, University of California, Berkley
Peter deLeon, PhD, Pardee RAND Graduate School
Robert Gage, PhD, Indiana University
Mary Guy, PhD, University of South Carolina
Richard Stillman, PhD, Syracuse University
Paul Teske, PhD, Princeton University

Associate Professors:

Linda deLeon, PhD, University of California, Los Angeles
Angela Gover, PhD, University of Maryland
Tanya Heikkila, PhD, University of Arizona
Jody Fitzpatrick, PhD, University of Texas, Austin
Christine Martell, PhD, Indiana University
Jessica Sowa, PhD, Syracuse University
Paul Stretesky, PhD, Florida State University
Allan Wallis, PhD, City University Graduate Center

Assistant Professors:

Danielle Varda, PhD, University of Colorado Denver
Chris Weible, PhD, University of California-Davis

MPA, West Slope Director:

Fred Rainquet, PhD, University of Colorado

Wirth Chair:

Sen. Gary Hart (Ret.), JD, Yale University

Research Professor:

Stephen Block, PhD, University of Colorado

Clinical Professor:

Malcolm Goggin, PhD, Stanford University

Research Associate:

Robert Reichardt, PhD, Pardee RAND Graduate School

Kelly Hupfeld, JD, Northwestern University

Professors Emeritus:

John Buechner, PhD, University of Michigan

Dale Neugarten, PhD, University of Southern California

The master of public administration (MPA) is designed to provide graduate professional education for students who wish to prepare themselves for careers in public management or policy, in nonprofit organizations or in private corporations that interface with the other sectors. The program also offers to those already in public service an opportunity to pursue additional education as a means of furthering their careers.

MPA AND MCJ—General Information

Admission Requirements

1. A baccalaureate degree from a college or university of accredited standing, with a minimum GPA of 3.0. Two sets of official transcripts are required from all higher education institutions attended.
2. Three recommendations from qualified references. Recommendations may be from professors, employers and/or others acquainted with the prospective student's professional and/or academic work.
3. Applicants are required to take the GRE, the GMAT or the LSAT unless they meet the requirements for waiver. Standard graduate admission test scores are normally waived when the candidate already has a graduate degree in another

field from an accredited institution. Other applicants may have test scores waived if they have an undergraduate GPA of 3.0 or better *and* they have *significant* professional employment in management or policymaking positions for a minimum of 10 years or the equivalent.

4. A current resume highlighting professional accomplishments and community involvement.
5. International students whose first language is not English are required to take the TOEFL or IELTS. A score of 550 or higher on the paper-based exam or 213 or higher on the computer-based exam is required for the MPA or 525/197 for the MCJ.

All application material and test scores should be sent to SPA, University of Colorado Denver, Campus Box 142, P.O. Box 173364, Denver, CO 80217-3364.

SPA will process applications as they come in. Master-level applicants generally receive notification of their admission status three weeks after all materials have been received in the office. The preferred deadlines listed below allow students to receive best consideration for scholarships, financial aid and course selection. *Students who do not meet the preferred deadline may still submit application materials until approximately one month before the start of classes and will be considered on a space-available basis.*

<i>Semester</i>	<i>Preferred Application Deadline</i>	<i>Final Deadline*</i>
Fall	March 15	August 1
Spring	October 15	December 1
Summer	March 15	May 1

*Final deadline does not apply to international students who should contact the Office of International Admissions for deadline information.

Provisional Admission

Under special circumstances, a student may be admitted on provisional status for one semester. Students admitted on a provisional basis take two courses in their first semester. MPA students may select two of the following: PUAD 5001 , 5003 or 5004 . They may take no other courses during that semester. Based on their performance in these courses, a decision will be made concerning their admission into the program.

Nondegree Admissions

Students may register as nondegree students while developing their application packet. However, students are discouraged from taking many courses as a nondegree student if they hope to pursue a degree. **Nine semester hours taken in the program as a nondegree student may be applied to the master's degree programs with approval of an advisor.** Nondegree student application forms are available in the Office of Admissions or online.

Transfer of Credit to SPA

Up to 9 semester hours of appropriate graduate work from an accredited college or university may transfer, if such credit was not applied to a completed degree.

Limitation of Course Load

The normal course load for a full-time student is 9 semester hours. A student who is employed full time may not carry more than 9 hours unless an excess load has been approved in advance by the faculty advisor.

Financial Assistance

Students in the master's degree programs are eligible for several types of financial assistance. Educational loans require application to the Office of Financial Aid on the Downtown Campus and completion of the FAFSA. A number of students secure internships or other part-time positions with local, state and federal agencies in the Denver metropolitan area. Scholarship assistance is available on a limited basis.

The school receives announcements for fellowships from various government organizations and actively seeks additional funding for student support in the form of internship positions and research assistantships.

Persons interested in applying for financial assistance should inquire in the SPA office. The deadline for current students is March 15 for the fall term. Prospective students seeking scholarship funds should have complete scholarship applications on file at the SPA office by the preferred application deadline for the semester they are requesting funds.

The Internship Program

An internship for the MPA and MCJ programs is required for students who have not had significant public, nonprofit or private-sector experience. The purpose of the internship is to continue the linkage between theory and practice that is the philosophical basis of SPA. The internships generally involve part-time work. A maximum of three semester hours will be awarded for internship service. Great care is taken by the SPA to ensure

that the internship experience meets the intellectual needs of the student. Placements have included the Governor's Office, Colorado General Assembly, Denver Mayor's Office, City of Denver, Denver Police Department, Boulder Crime Lab, Western Governor's Association, the National Conference of State Legislatures, the Colorado Department of Public Health and Environment and the Denver Center for the Performing Arts.

Time Limit for Master's Degree

Master's degree students must complete all course work and degree requirements within six years of registration in their first course.

Degree Requirements

The minimum requirements for the basic MPA degree are outlined below. Occasionally, changes are made; students may graduate under the requirements that were in effect when they were admitted.

1. Graduate Course Work

All students must complete a minimum of 36 semester hours of graduate course work, with an average of B or better. No more than 6 semester hours of independent study can be applied toward the degree. Students who have not had professional work experience in the public or nonprofit sectors must complete an internship through an additional 3-semester-hour course described in No. 6 below, bringing their total semester-hour requirements to 39.

2. Complete the Following Core Courses

All MPA students (with the exception of those in the executive MPA option) must complete the following core courses or approved equivalents:

PUAD 5001 - Introduction to Public Administration and Public Service

Summer 2010 Registration **P AD 5001**

Examines the fundamental theories, structures, and processes of governance in the United States. Explores the constitutional foundations and functions of legislative, administrative, and legal institutions. Covers topics such as federalism, public-private relations, and comparative public administration. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 5002 - Organizational Management and Change

Summer 2010 Registration **P AD 5002**

This course provides coverage of those elements which, when combined, create a resilient learning organization. Topics include, but are not limited to, organization theory and design, managing human capital, group development and performance, inter- and intra-group communication, information management, and ethical decision making. These topics are presented within the framework of how to organize people to enhance the delivery of public services. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 5003 - Research and Analytic Methods

Summer 2010 Registration **P AD 5003**

Examines quantitative research methods used to answer questions and test hypotheses in public and non-profit settings. Methods covered include identifying and reviewing scholarly literature; formulating research questions; selecting appropriate design, data collection and sampling strategies; and analyzing data. Topics include causal and descriptive designs, interview and survey methods, and descriptive and inferential statistics such as chi square and regression. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 5004 - Economics and Public Finance

Summer 2010 Registration **P AD 5004**

Uses economics to explore public and private sector roles, and the allocation of resources in the public sector. Introduces the concepts of public goods, market failure and externalities. The effects of taxation and subsidies on consumer and firm behavior are analyzed. Also covers cost benefit analysis and national, state, and local budgeting methods. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 5005 - The Policy Process and Democracy

Summer 2010 Registration **P AD 5005**

Provides an introduction to theoretical and applied studies of the policy process. The policy process includes the manner in which (I) issues are conceptualized and brought to the government as problems needing action; (II) policies are designed and selected; and (III) the enacted policies are implemented, monitored, evaluated, and revised. The policy process also includes the study of politics, especially how government and non-government actors interact and exercise power in allocating societal benefits and burdens. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 5006 - Leadership and Professional Ethics

Summer 2010 Registration **P AD 5006**

Examines theories of leadership applied to the public and non-profit sectors and the skills and processes employed by effective leaders. The course also considers ethical theories as applied to problems in the public and non-profit sectors; emphasizes critical thinking to address value conflicts, notably in the context of a pluralistic society; and teaches moral reasoning as a practical professional skill. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 18 Hours

Students must receive a grade of *B-* or better in each core course. Students who earn a lower grade may repeat the course once to attempt to earn a *B-* or better.

3. Electives

All MPA students must complete 15 hours of electives. Courses in which a student earns a grade of less than a *C* will not be counted toward a degree.

4. Advanced Seminar Class

All MPA students, except those pursuing the thesis option, must complete the advanced seminar class during the last semester of their degree program. All core courses must be completed before beginning the advanced seminar.

PUAD 5361 - Advanced Seminar in Public Policy and Management

Summer 2010 Registration **P AD 5361**

In this seminar, students demonstrate their mastery of the knowledge and skills acquired in core courses, through the conduct of a client-based project. Students in a concentration must undertake a project related to that concentration. Students also make a juried oral presentation of the professional paper which reports project findings. This is the cumulative opportunity for students to apply concepts, theories, and research skills gained in the program to professional practice. (Successful completion of this course is an M.P.A. degree program requirement.) Cross-listed with PUAD 7361. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

5. Thesis Option

The thesis option is available in lieu of PAD 5361 for MPA students who have an interest in pursuing a topic in-depth or who are planning to pursue a career in research or academia. Students must receive approval from their faculty advisor or the MPA director

to pursue the thesis option. The thesis is a six credit course that normally spans two semesters.

6. Internships

Students who have limited experience (generally defined as less than one year of experience) in public, nonprofit or relevant private-sector service must enroll in P AD 6910, Field Study in Public Administration. The decision to require P AD 6910 for a particular student is made by the faculty admissions committee or the student's faculty advisor upon the student's acceptance to the MPA program. A minimum of 300 hours of supervised work and study is required to earn 3 semester hours of credit. This requirement raises the total semester hours needed to earn the MPA degree to 39.

MPA Options

Concentrations and Graduate Certificates

All SPA concentrations are a total of 15 semester hours and may either be taken as part of the MPA program or as a stand-alone graduate certificate.

A student *may* choose to select one of the concentrations described below or may complete the MPA without a specified concentration. Students completing a concentration take their electives in the area of their concentration, complete the advanced seminar project in the area of their concentration and are advised by faculty from the concentration. The concentrations and their particular required courses are:

Environmental Policy, Management and Law Concentration

Students take at least two of the three courses listed below:

PUAD 5631 - Seminar in Environmental Politics and Policy

Summer 2010 Registration **P AD 5631**

Examines the fundamental principles of politics and policy that shape strategies of environmental protection. Focuses on the role of institutional processes, government organizations and nongovernmental organizations in environmental politics and policy.

Cross-listed with PUAD 7631. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 5632 - Seminar in Environmental Management

Summer 2010 Registration **P AD 5632**

Examines the practical challenges facing environmental managers today, using a series

of case studies. Focuses on the role of institutional processes, government organizations and nongovernmental organizations in the practice of environmental management. Cross-listed with PUAD 7632. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 5633 - Seminar in Natural Resource and Environmental Health Law

Summer 2010 Registration P AD 5633

Administrative law aspects of environmental policy implementation and enforcement, the role of courts in both stimulating and limiting statutory reform, and regulatory innovation. Focus on the legal aspects of both natural resource allocation and management, and environmental protection. Alternatives to traditional processes for environmental dispute resolution. Cross-listed with PUAD 7633. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

Electives approved by advisor (3) (6-9 semester hours)

Total: 15 Hours

Local Government Concentration

Students take at least two of the three courses listed below:

PUAD 5625 - Local Government Management

Summer 2010 Registration P AD 5625

Relates the systems, processes, and principles of public management to the local government environment. Public management concepts such as strategic planning, bureaucracy, formal and informal organizational structures, human resource planning, management control, systems theory, and administrative behavior are explored within the context of local government. Cross-listed with PUAD 7625. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 5626 - Local Government Politics and Policy

Summer 2010 Registration P AD 5626

Examines local government from the perspective of politics and public policy making. The course focuses on local government political structures, policy analysis and formulation, political forces in administrative decision making, and the relationships between professional administrators and elected officials. Cross-listed with PUAD 7626. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 5628 - Urban Social Problems

Summer 2010 Registration **P AD 5628**

Examines local government from the perspective of sociology and group dynamics. Course could include some or all of the following subjects: neighborhoods and community groups, class and race relations, community crime, social service issues, immigration, the underclass in American society, and related urban social problems.

Cross-listed with PUAD 7628. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Electives approved by advisor (3) (6-9 semester hours)

Total: 15 Hours

Domestic Violence Concentration

Students take four specified courses and one elective.

PUAD 5110 - Seminar in Nonprofit Management

Summer 2010 Registration **P AD 5110**

This course provides an overview of the principles and concepts that are unique to nonprofit management. Topics include executive management, funding diversity, human resource management, marketing, volunteer management and ethics. Students are also given an introduction to the history and the importance of the nonprofit sector. Cross-listed with PUAD 7110. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 5910 - Women and Violence: A Sociological Perspective

Summer 2010 Registration **P AD 5910**

This course is a sociological, feminist analysis of violence against women and girls that addresses the intersection of sexism and other forms of oppression such as racism, classism and heterosexism within historical, cultural, social and institutional contexts. Topics covered focus on overt and covert forms of sexual coercion, harassment and assault, battering and stalking. Cross-listed with PUAD 7910, CRJU 5910 and 7910. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 5920 - Psychology of Violence Against Women

Summer 2010 Registration **P AD 5920**

This class addresses the contributions and the limitations of current empirical and clinical psychological literatures about domestic violence. Topics covered include: distinguishing among mental health professionals regarding work with DV clients; the psychological impacts of domestic violence; services useful for responding to the needs of women and children; and an introduction to the psychology and treatment of

batterers. Cross-listed with PUAD 7920, CRJU 5920 and 7920. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 5930 - Battered Women and the Legal System

Summer 2010 Registration **P AD 5930**

This course provides a practical understanding of how the following relate to battered women and their children: (a) major developments in federal, state, tribal, administrative, statutory and case law; (b) the role and responses of law enforcement, judges, attorneys, victim assistance providers and other legal system agents; and (c) the role and process of victim advocacy. Cross-listed with PUAD 5930, CRJU 5930 and 7930. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Elective approved by advisor (1) (3 semester hours)

Total: 15 Hours

Emergency Management and Homeland Security Concentration

Students take two required courses as well as electives approved by advisor.

GEOG 5230 - Hazard Mitigation and Vulnerability Assessment

Summer 2010 Registration **GEOG 5230**

Examines hazard mitigation and its planning and policy implications, emphasizing how vulnerability assessments play an integral role. Students explore how mitigation minimizes the impacts from hazards and use GIS to conduct a local study. Prereq: GEOG 2202 or permission of instructor. Cross-listed with GEOG 4230. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 5650 - Disaster and Emergency Management Policies

Summer 2010 Registration **P AD 5650**

Examines policies for the management of hazards, emergencies and disasters. Focuses on a series of case studies concerning major disasters and on management principles drawn from those cases. Examines the role of institutional processes, government organizations and nongovernmental organizations in emergency management. Cross-listed with PUAD 7650. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Electives approved by advisor (3) (6-9 semester hours)

Total: 15 Hours

The emergency management and homeland security concentration requires the completion of three electives chosen from a preapproved, multidisciplinary list of courses relevant to emergency management. Students may choose electives in one of three tracks: policy and management; spatial analysis, planning and quantitative assessment; or public safety, homeland security and justice.

Nonprofit Organizations Concentration

Students take two required courses as well as nonprofit electives approved by advisor.

PUAD 5110 - Seminar in Nonprofit Management

Summer 2010 Registration **P AD 5110**

This course provides an overview of the principles and concepts that are unique to nonprofit management. Topics include executive management, funding diversity, human resource management, marketing, volunteer management and ethics. Students are also given an introduction to the history and the importance of the nonprofit sector. Cross-listed with PUAD 7110. **Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 5140 - Nonprofit Financial Management

Summer 2010 Registration **P AD 5140**

Financial management is one of the core competencies of effective nonprofit managers. Every nonprofit organization needs money to sustain or advance its mission. This course provides a grounding in financial management for the "non-accountant" by focusing on an array of knowledge and management skill areas necessary for allocating and controlling resources and for analyzing, reporting and protecting the fiscal health of the organization. Topics include key accounting principles, understanding and using financial statements, the budget development process, cash flow analysis, banking relationships, using the audit report, maximizing investment policy and strategy, and understanding the boundaries of tax exemption. Cross-listed with PUAD 7140. **Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

Other nonprofit courses (9 semester hours)

Total: 15 Hours

The Accelerated Cohort

The accelerated MPA is a fast-paced, full-time option that brings academically superior students together with a dedicated research and teaching faculty in the midst of the vibrant downtown Denver environment.

The accelerated option enables students to focus their energies in a concentrated program of study and earn a nationally accredited, 36-hour MPA in 12 months. (It is preferred that applicants have some knowledge of economics, statistics and political science.)

The cost for the accelerated option is the same for both in-state and out-of-state students, providing out-of-state students with substantial savings.

The students in the cohort enjoy a unique experience as they go through all classes in the MPA together, fostering a community of scholar-practitioners.

Students are admitted to the program in cohorts of approximately 20 participants. A new cohort starts each fall. The cohort format helps to increase the opportunity to become acquainted with other graduate students and increases the opportunities for interaction between program participants and faculty.

The Executive Option

The School of Public Affairs and the management development centers of the federal Office of Personnel Management have formed a partnership to offer an innovative course of study for selected senior level professionals in the public and nonprofit sectors.

The executive MPA option provides students with an opportunity to earn a master's degree targeted at improving their leadership competencies, while also offering significant flexibility in customizing coursework to fit students' individual needs and career objectives. In addition, the course formats—online courses and weekend or week-long intensive meetings—enable students to fit their study into the framework of busy lives.

The executive MPA option is intended to serve high-level managers and policy experts from public agencies—federal, state and local—as well as those from the nonprofit sector.

Program Design

The executive MPA option requires 30 semester hours of credit plus two required seminars at one of the management development centers of the federal Office of Personnel Management. One is in Aurora, Colorado; the other is outside Washington, D.C. The first required seminar is an assessment seminar. Students explore their own managerial and leadership styles, their personality types and their levels of competence in a variety of executive skills. A group of highly-skilled trainers and psychologists administers and interprets test results, and participants use this self-knowledge to plan their MPA degree.

Near the end of the program, students also participate in one of the management development centers' core leadership seminars. These seminars focus on developing competencies identified by the federal government as necessary for its highest-level managers, the senior executive service. The required Western Management Development Center courses should total six semester hours of graduate credit. More information is available online at www.leadership.opm.gov or by e-mail from WMDC Program Manager Bruce Kirschner at bhkirsch@opm.gov.

Executive students must take PUAD 5001, Introduction to Public Administration and Public Service, as one of their first courses. They then must select a minimum of three of the core courses listed below. Their advisor will assist in this selection. They must be able to demonstrate that they have gained competencies in the core courses they do not take through job experience and/or past course work.

Three of five are required:

PUAD 5002 - Organizational Management and Change

Summer 2010 Registration P AD 5002

This course provides coverage of those elements which, when combined, create a resilient learning organization. Topics include, but are not limited to, organization theory and design, managing human capital, group development and performance, inter- and intra-group communication, information management, and ethical decision making. These topics are presented within the framework of how to organize people to enhance the delivery of public services. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 5003 - Research and Analytic Methods

Summer 2010 Registration P AD 5003

Examines quantitative research methods used to answer questions and test hypotheses in public and non-profit settings. Methods covered include identifying and reviewing scholarly literature; formulating research questions; selecting appropriate design, data collection and sampling strategies; and analyzing data. Topics include causal and descriptive designs, interview and survey methods, and descriptive and inferential statistics such as chi square and regression. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 5004 - Economics and Public Finance

Summer 2010 Registration P AD 5004

Uses economics to explore public and private sector roles, and the allocation of resources in the public sector. Introduces the concepts of public goods, market failure and externalities. The effects of taxation and subsidies on consumer and firm behavior are analyzed. Also covers cost benefit analysis and national, state, and local budgeting

methods. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 5005 - The Policy Process and Democracy

Summer 2010 Registration **P AD 5005**

Provides an introduction to theoretical and applied studies of the policy process. The policy process includes the manner in which (I) issues are conceptualized and brought to the government as problems needing action; (II) policies are designed and selected; and (III) the enacted policies are implemented, monitored, evaluated, and revised. The policy process also includes the study of politics, especially how government and non-government actors interact and exercise power in allocating societal benefits and burdens. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 5006 - Leadership and Professional Ethics

Summer 2010 Registration **P AD 5006**

Examines theories of leadership applied to the public and non-profit sectors and the skills and processes employed by effective leaders. The course also considers ethical theories as applied to problems in the public and non-profit sectors; emphasizes critical thinking to address value conflicts, notably in the context of a pluralistic society; and teaches moral reasoning as a practical professional skill. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 9 Hours

These courses may be taken at one of SPA's sites in Denver, Colorado Springs or Grand Junction, or, for students who live outside of Colorado, online.

Students also take five elective courses (15 semester hours), which may be selected either from the offerings at the management development centers or from SPA. Both partners provide a wide variety of courses. At least 18 semester hours must be SPA course work.

At or very near the end of their program, students participate in PUAD 5361, Advanced Seminar. In this course, students engage in a self-designed professional project that integrates their new skills and knowledge. In addition, they reassess their professional competencies, charting the progress they have made during the program and designing a plan for future developmental experiences.

Online Option

SPA provides a unique opportunity for students who live at a distance from the university to obtain a MPA degree.

Designed to serve students who are looking for a high-quality education, but who need an alternative to traditional classroom instruction, students may elect to do one or all of their courses online. This option allows students to complete the entire degree at a distance or to choose to come to campus for some courses while using an interactive online format for others. For both in-state and out-of-state online students, tuition is comparable to the rate charged to in-state students for courses that meet in the classroom. The nonprofit organization concentration is available online, as well as a variety of other electives leading to a general MPA degree. Students in the executive option may also choose to do all SPA course work online.

Domestic Violence Cohort

The first graduate program of its kind in the nation, the University of Colorado Denver's MPA concentration in domestic violence focuses on the management and policies surrounding domestic violence, as well as grass-roots social justice work and best practices in this emerging field. Each fall, 10 to 20 students are accepted into the cohort program, allowing the participants to build a strong community of advocates and learners.

The program invites students from around the world to participate in a unique cohort program, which combines online courses with five intensive campus seminars spaced throughout the two-year program. Students may choose to take all courses in the classroom if they wish.

The cost of the domestic violence concentration courses is the same for in-state and out-of-state students. Nonresident students pursuing the MPA with a concentration in domestic violence may also qualify for reduced tuition through the Western Regional Graduate Program which covers 14 western states.

Western Slope Cohort

Public and nonprofit sector professionals living in Colorado's Western Slope have the opportunity to earn a MPA without traveling to the Front Range. SPA offers one MPA course each semester in Grand Junction at Mesa State College and supplements these offerings with online courses. Courses are designed to integrate the academic and applied experiences necessary to be an effective modern manager. The courses are offered in an intensive weekend format and emphasize the needs of small and rural communities.

Public History, MA in History

The MA program in history offers graduate-level major and minor fields in public history. Public history is a field of study that applies historical methods to the public sphere. This graduate major does not require a concentration, but students can choose to concentrate in museum studies or historic preservation. Public history majors can minor in any subspecialty the department currently offers. Students majoring in U.S., European or global history can also minor in public history.

Admission Requirements—See History MA

Degree Requirements

Required Introductory Course

HIST 6013 - Introduction to the Professional Study of History

Summer 2010 Registration **HIST 6013**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 3 Hours

Major Courses

HIST 5234 - Introduction to Public History

Summer 2010 Registration **HIST 5234**

An overview of history outside the academic setting. Students have the opportunity to learn about jobs through on-site visits and presentations made by people engaged in a wide variety of occupations in history other than teaching. Cross-listed with HIST

4234.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Concentration Requirement (optional)

Students who choose to concentrate in museum studies or historic preservation must take either

HIST 5231 - History in Museums

Summer 2010 Registration **HIST 5231**

This core course for the museum studies area of public history introduces students to

the theory and practice of museum operations. It covers the basics of museum administration, museum collection and preservation, and museum interpretation from both theoretical and practical points of view. Cross-listed with HIST 4231. **Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

HIST 5232 - Historic Preservation

Summer 2010 Registration **HIST 5232**

Introduces the history, methodology, and goals of historic preservation. Guest speakers, field trips, research projects, and book reports. Cross-listed with HIST 4232. **Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

Research Seminar (3 hours)

Research seminars focus on students' development of an original, primary research paper.

Major Electives (9-12 hours)

Electives are made up of courses in public history, which focus on methodology and practice and thesis or project credits. These courses include:

HIST 5133 - Management of Material Culture and Museum Collections

Summer 2010 Registration **HIST 5133**

This course provides in-depth knowledge of the rudiments of material culture documentation, preservation and management. While we have designed this class for those interested in working in history museums, this is also appropriate for those students who want to learn the place of artifacts in studying history. Cross-listed with HIST 4133. **Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 5228 - Western Art and Architecture

Summer 2010 Registration **HIST 5228**

Introduces Western art and architecture, emphasizing their historical context. Students are required to do book reports and a major research paper. Course includes walking tours and museum visits. Cross-listed with HIST 4228. **Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 5229 - Colorado Historic Places

Summer 2010 Registration **HIST 5229**

Introduces community architecture, folklore, and history for all students. Students learn how to survey, describe, and designate significant historical structures and districts.

Cross-listed with HIST 4229. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 5240 - National Parks History

Summer 2010 Registration **HIST 5240**

Introduces how the National Park Service uses history to identify, designate, preserve, and interpret America's most outstanding historic and natural history sites. After tours of NPS sites, students select from a wide range of projects. Note: Open to all students.

Cross-listed with HIST 4240. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 5242 - Oral History

Summer 2010 Registration **HIST 5242**

Trains public history students in the collection of oral history interviews. Students master core readings on the theory, practice, and ethics of oral history. Cross-listed with HIST 4242.

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 5243 - Public History Administration

Summer 2010 Registration **HIST 5243**

Introduces students to the skills, practice, and ethics of public history administration.

Cross-listed with HIST 4243. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 5244 - Interpretation of History in Museums: Exhibits and Education

Summer 2010 Registration **HIST 5244**

This course allows students to gain in-depth knowledge of historical interpretation through exhibits and education in a museum setting. This class is designed for those preparing to work in history museums but is also appropriate for teachers and others who want to learn how museum programs interpret history with artifacts and other historical materials.

Cross-listed with HIST 4244. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 5245 - Heritage Tourism

Summer 2010 Registration **HIST 5245**

History and historic sites have become big business in 21st century tourism. The

heritage tourism industry is explored in this introductory course for all interested students focusing on how academic history and historians can partner with tourism and recreation interests. Cross-listed with HIST 4245. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 6992 - Seminar: Colorado Studies

Summer 2010 Registration **HIST 6992**

This advanced interdisciplinary seminar on Colorado starts with a survey of the published literature. Students then select a research topic of their own and complete a publishable paper using primary sources. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

Additionally, special topics courses may be offered in such areas as historic reenactments, monuments and memory and recreating historic house interiors. Students who didn't take HIST 5231 or HIST 5232 as their concentration requirement may use these courses toward their elective requirements.

Total: 18 Hours

Minor Electives

Electives are made up of courses in the minor field, including readings courses, which address specific field historiographies, or research seminars.

Total: 12 Hours

Open Elective

Students may use the open elective to explore a course outside their major or minor or to do extra course work in one of their fields.

Total: 3 Hours

Total: 36 Hours

INDEPENDENT STUDIES AND/OR INTERNSHIPS

Candidates may register for up to 6 hours of internships or independent study, only one of which may be at the 6000-level. Only in exceptional circumstances will students be allowed to satisfy the research seminar requirement via independent study. *Any*

independent study at the 6000-level needs the permission of the graduate advisor.

Students interested in pursuing an independent study must find a faculty member willing to oversee their work, and they should expect the workload for an independent study to equal or exceed that required for other courses at the same level.

HIST 5840 - Independent Study: History

Summer 2010 Registration **HIST 5840**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 6840 - Independent Study: HIST

Summer 2010 Registration **HIST 6840**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 6939 - Cooperative Education

Summer 2010 Registration **HIST 6939**

Semester Hours: 1to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMPREHENSIVE EXAMINATIONS

All history MA candidates must pass a comprehensive examination in the major and minor fields after the completion of course work and before embarking on a thesis, curriculum project or public history project. The comprehensive exam evaluates students' knowledge of their course work and their reading lists for their major, minor and concentration. In answering their exam questions, students are expected to construct arguments and to show mastery of the historiographies, narratives and historical content in their fields. The comprehensive exam is administered and evaluated by a committee of the major advisor, the minor advisor and an outside reader from the history faculty.

Master's Degree Extended Research Options

The MA program in history offers a set of courses in which students can develop extended research interests. Students must select an advisor and develop a proposal for a specific research agenda in the semester before beginning work on a project.

REQUIRED PUBLIC HISTORY THESIS (HIST 6950) OR PROJECT (HIST 6952)

Students majoring in public history must complete either a thesis (6 semester hours) or a project (3 semester hours).

OPTIONAL ADVANCED HISTORY CURRICULUM DEVELOPMENT (HIST 6951)

Students who undertake their master's program when they are already teachers can choose to construct curriculum projects relevant to their teaching practice. See the separate section below on "Opportunities for Teachers and Teachers-in-Training."

HIST 6950 - Master's Thesis

Summer 2010 Registration **HIST 6950**

Semester Hours: 1to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 6951 - Masters Project: Advanced History Curriculum Development

Summer 2010 Registration **HIST 6951**

Students develop curricula for secondary-level history courses; must demonstrate thorough knowledge of subjects; understanding of historiographic and methodological problems; command of primary sources and their uses in teaching; and describe teaching strategies, methods, and assessments to be used in the curricula. Prereq:

Permission of instructor. **Semester Hours:** 1to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 6952 - Master's Project: Public History

Summer 2010 Registration **HIST 6952**

Public history majors may use three credits to complete a public history project. Projects can entail creating an exhibit, organizing a museum or archival collection, conducting a preservation survey, or similar activities. Students are required to prepare a paper describing the process and results of their project. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Thesis Requirements

Students writing theses are expected to develop an original research agenda resulting in an extended paper. Students work with their major field advisor, who will help guide them through the process of research and writing. Students are expected to take no less than two semesters (enrolled in HIST 6950) to complete their theses. Before registering for HIST 6950, students must have a thesis proposal and initial bibliography approved by their advisor. The first semester of the thesis course is organized as a seminar in which students meet regularly with a department member and other thesis writers.

A thesis is evaluated by a committee of three, including the major advisor and two other faculty members chosen by the student in consultation with the major advisor. Upon completion of the thesis, the student meets with the committee members, who ask questions about the research and conclusions which the student must defend. In many

instances, the committee will require further revisions, sometimes major in scope, before the thesis is accepted and cleared for submission to the Graduate School in fulfillment of degree requirements.

Project Requirements

In lieu of a thesis, public history majors may choose to enroll in one semester of HIST 6952 to complete a public history project. Projects, which are usually conducted in collaboration with a public history organization, can entail creating an exhibit, organizing a museum or archival collection, conducting a preservation survey, or similar activities. Students are required to prepare a paper describing the process and results of their project.

HIST 6952 - Master's Project: Public History

Summer 2010 Registration **HIST 6952**

Public history majors may use three credits to complete a public history project. Projects can entail creating an exhibit, organizing a museum or archival collection, conducting a preservation survey, or similar activities. Students are required to prepare a paper describing the process and results of their project. **Semester Hours:** 3 to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

Opportunities for Teachers and Teachers-in-Training

Curriculum Projects

Licensed teachers enrolled in the history graduate program may choose to complete a curriculum development project. Students arrange curriculum development projects with a sponsoring faculty member. Generally, students are expected to develop and submit a complete course curriculum plan for each 3-semester-hour project. Projects need to show evidence of familiarity with the relevant historiographies and primary sources. Students may apply the credits from HIST 6951 to either the major field or the minor field, depending on the project subjects. Curriculum plans must meet minimum criteria established by the history department in the document Advanced History Curriculum Development Projects.

HIST 6951 - Masters Project: Advanced History Curriculum Development

Summer 2010 Registration **HIST 6951**

Students develop curricula for secondary-level history courses; must demonstrate thorough knowledge of subjects; understanding of historiographic and methodological

problems; command of primary sources and their uses in teaching; and describe teaching strategies, methods, and assessments to be used in the curricula. Prereq: Permission of instructor. **Semester Hours:** 1to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

(3 or 6 semester hours in their major field, or 3 semester hours in their major and 3 semester hours in their minor)

Secondary Teacher Licensure

Students interested in becoming secondary history and social studies teachers may choose to earn both the MA in history and secondary teacher licensure.

We strongly encourage students to complete the School of Education & Human Development's teacher licensure program before enrolling in the history MA program; the history graduate program and the teacher licensure program require separate admission. Students complete 36 semester hours in history and 37 semester hours in the teacher licensure program. For the history degree, students take 18 semester hours in their major field, 12 semester hours in their minor field and 6 semester hours in curriculum and methods course work, which apply both to the teacher licensure program and the MA in history:

HIST 5464 - Problems and Methods in Teaching History and Social Studies I

Summer 2010 Registration **HIST 5464**

Introduces students to problems and methods in secondary education history and social studies teaching. This course focuses primarily on the teaching of history. Note: Open to students in the Initial Professional Teacher Education program or a relevant graduate program, and to practicing teachers. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-and-

HIST 5465 - Problems and Methods in Teaching History and Social Studies II

Summer 2010 Registration **HIST 5465**

Introduces students to problems and methods in secondary education history and social studies teaching. This course focuses broadly on the teaching of all the social studies fields, including history, economics, government, and geography. Note: Open to students in the Initial Professional Teacher Education program or a relevant graduate program, and to practicing teachers. Prereq: HIST 5464. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Certificate in Historic Preservation

The history department also offers a certificate in historic preservation in conjunction with the College of Architecture and Planning. History students pursuing the certificate should consult the historic preservation Web site for this program as well as their history advisor to determine appropriate course work.

Reading and Writing Option, MA Curriculum and Instruction

Literacy, Language and Culturally Responsive Teaching

MA Requirements for the Reading and Writing Option and Secondary English Education Option, plus Reading Teacher Endorsement and Certificate Programs

Office: Lawrence Street Center, 701

Telephone: 303-315-6300

Fax: 303-315-6311

E-mail: education@ucdenver.edu

Web sites: www.ucdenver.edu/education/literacy and
www.ucdenver.edu/education/englished

Reading and Writing

Secondary English

Early and Adolescent Literacy Certificates

Faculty

Information about faculty in this program is available online at www.ucdenver.edu/education/literacy.

The faculty of literacy, language and culturally responsive teaching (L2CRT) believe that effective teaching requires an awareness of and the ability to respond to individual differences. L2CRT faculty also emphasize the importance of teachers as scholars and reflective practitioners. In particular, teachers must understand how linguistic and cultural diversity affect their teaching. Two themes run throughout all program offerings. The first concerns the importance of recognizing a variety of literacies—"home" literacies, school literacy, "mainstream" literacy, first and second language literacies—

and to develop teaching practices that utilize an understanding of the complexity of literacy development across language contexts. The second theme involves the meaningful use of language and literacy to improve the quality of one's life. As an approach to teaching, this theme emphasizes the creation of diverse, rich environments in which learners experience oral and written language as part of authentic tasks, and where concern for the cultural and linguistic heritage of the students is evident.

Reading and Writing Option and Reading Teacher Endorsement

This master's program is designed for K-6 and 7-12 teachers. Those interested in elementary reading and writing should communicate with Professors Espinoza, Nathenson-Mejia or Taylor. Those interested in secondary and adult reading and writing should communicate with Professor Shanklin (see Web site for faculty contact information).

Reading is a credentialed program meeting the Colorado Department of Education requirements for reading teacher endorsement. Therefore, students who obtain a master's degree emphasizing reading education from UC Denver are certified to hold positions in public and private schools as special developmental and remedial reading teachers in K-6 or 7-12. This program is also valuable for elementary and secondary teachers who wish to enhance reading and writing instruction in their classrooms.

By placing emphasis on the reading, writing and oral and visual language development of culturally, linguistically and academically diverse student populations, this master's program is at the forefront of the field. Language is approached from a socio-psycholinguistic perspective that emphasizes the learner's construction of meaning rather than the learning of isolated skills. Importance is placed on using theory, inquiry and personal reflection to inform classroom practice. The program prepares teachers to become decision makers capable of developing learner-centered curricula where each student's reading and writing abilities are assessed to address developmental or special needs.

Curriculum

Course offerings lead to an MA degree in curriculum and instruction with an emphasis in reading and writing, as well as a reading teacher endorsement, at one of two levels: K-6 or 7-12.

Those who have completed UC Denver's graduate teacher education licensure program must earn an additional 27 semester hours to obtain the MA and endorsement. Those who completed licensure through other means must earn an additional 36 semester hours to obtain the MA and endorsement.

Teachers may add a reading teacher endorsement to an already-earned master's degree in education by taking those courses listed under the chosen endorsement level. (In the state of Colorado, the reading teacher endorsement cannot simply be added to a bachelor's degree.) Electives and core courses are not required. Two additional courses must be taken in other areas specified by the Colorado Department of Education. In many cases, previous master's degree courses will satisfy this requirement.

Requirements for Reading and Writing Program (Degree/Endorsement Options)						
	ELEMENTARY (K-6)			SECONDARY (7-12)		
Course	MA & CDE Endorsement	MA & CDE Endorsement (when added to UC Denver's graduate teacher education licensure program)	CDE Endorsement Only	MA & CDE Endorsement	MA & CDE Endorsement (when added to UC Denver's graduate teacher education licensure program)	CDE Endorsement Only
LALC 5020 - Workshop in Literacy and Language Teaching	Required		Required	Required	Required	Required
LALC 5810 - Workshop in Language Acquisition and Development	Required	Required	Required	Required	Required	Required
LALC 5910 -	Required	Required	Required	Required	Required	Required

Foundations of Language, Literacy and Culture						
LALC 5710 - Primary Literacy: Pre-3rd Grade	Required	Required	Required			
LALC 5720 - Writing: Process, Development, and Teaching Grades 3-12	Required	Required	Required	Required	Required	Required
LALC 5730 - Language and Literacy Across the Curriculum	Required		Required	Required		Required
Children's literature course, per advisor approval	Select one	Select one	Select one			
LALC 5740 - Adolescent Literature				Required	Required (waived if taken as part of English Licensure)	Required
LALC 6910 - Seminar and Practicum in Literacy and	Required	Required	Required			

Language, K-6						
LALC 6911 - Seminar and Practicum in Literacy and Language, 7-12+				Required	Required	Required
LALC 5055 - Linking Assessment and Instruction in Language and Literacy, Part I	Required	Required	Required	Required	Required	Required
LALC 6915 - Seminar and Practicum in Literacy Professional Development	Required	Required		Required	Required	Required
Core course in Research and Evaluation Methodology - see list below	Select one	5080		Select one	5080	
Interdisciplinary core course - see list below	Select one			Select one		

Graduate-level School of Education and Human Development elective				Select one		
Portfolio	Required	Required		Required	Required	
PLACE Exam	Required	Required	Required	Required	Required	Required
Total Semester Hours	36	27	27	36	27	27

Secondary English Education Option

The master's program in secondary English education is designed to enhance the preparation of middle and high school English/language arts teachers. Students complete course work in language development, assessment and field experiences. With the help of their advisor, they also select specific courses from the English Department or within the School of Education and Human Development that provide a well-rounded repertoire of knowledge and skills to fulfill the needs of an English educator. Special consideration is given to working with diverse ethnic populations. Students interested in English education should see Professor Shanklin (see Web site for faculty contact information).

Program Requirements

To earn a master of arts degree in curriculum and instruction with an emphasis in secondary English education, students must complete the following:

- 30 graduate semester hours in English education
- 6 graduate semester hours of core courses
- performance-based assessments that culminate in a portfolio finalized in the last semester of the program as fulfillment of the MA comprehensive exam requirement

Each student's course plan is developed in conjunction with his/her advisor. Please review www.ucdenver.edu/education/englished for recommended course sequence.

LALC 5055 - Linking Assessment and Instruction in Language and Literacy, Part I
Semester Hours: 3

LALC 5740 - Adolescent Literature Semester Hours: 3

LALC 5760 - Theory and Methods of English Education Semester Hours: 3

-OR-

LALC 5835 - Special Topics: Literacy and Language Semester Hours: 3

LALC 5810 - Workshop in Language Acquisition and Development Semester Hours: 3

LALC 5910 - Foundations of Language, Literacy and Culture Semester Hours: 3

LALC 6911 - Seminar and Practicum in Literacy and Language, 7-12+ Semester Hours:
3

Research and Evaluation Methodology core course (see list below).

Interdisciplinary core course (see list below).

Four electives, per advisor approval, from the English department and/or the School of Education & Human Development. The following are recommended:

LALC 5720 - Writing: Process, Development, and Teaching Grades 3-12 Semester
Hours: 3

-OR-

ENGL 5110 - Denver Writing Project Semester Hours: 3

Courses in working with English language learners and in instructional technology may also be helpful. For a technology course, please contact the professor about prerequisite knowledge.

Total: 36 semester hours

Program Requirements--When Added to UC Denver's Graduate Teacher Education Licensure Program

MA in curriculum and instruction with emphasis in secondary content leadership (English), when added to UC Denver's graduate teacher education licensure program:

- 18 graduate semester hours
- performance-based assessments that culminate in a portfolio finalized in the last semester of the program as fulfillment of the MA comprehensive exam requirement

Each student's course plan is developed in conjunction with his/her advisor. Please review www.ucdenver.edu/education/englished for recommended course sequence.

FNDS 5050 - Critical Issues in American Education Semester Hours: 3

-OR-

IPTE 5080 - Principles and Practice of Change Semester Hours: 3

-OR-

SPED 5300 - Collaborating In Schools and Communities Semester Hours: 3

RSEM 5080 - Research for Teachers Semester Hours: 3

Four electives, per advisor approval, from the English Department and/or the School of Education and Human Development. The following are recommended:

LALC 5720 - Writing: Process, Development, and Teaching Grades 3-12 Semester Hours: 3

-OR-

ENGL 5110 - Denver Writing Project Semester Hours: 3

Courses in working with English language learners and in instructional technology may also be helpful. For a technology course, please contact the professor about prerequisite knowledge.

Total: 18 semester hours

Core Courses

Research and Evaluation Methodology

RSEM 5000 - Orientation to Research and Measurement in Education Semester Hours: 3

RSEM 5050 - Assessment for Teachers Semester Hours: 3

RSEM 5080 - Research for Teachers Semester Hours: 3

RSEM 5100 - Basic Statistics Semester Hours: 3

RSEM 5200 - Introduction to Research Methods Semester Hours: 3

RSEM 5300 - Introduction to Measurement Semester Hours: 3

Interdisciplinary

EPSY 5100 - Advanced Child Growth and Development Semester Hours: 3

EPSY 5140 - Advanced Adolescent Growth and Development Semester Hours: 3

EPSY 5220 - Adult Learning and Education Semester Hours: 3

EPSY 6200 - Human Development Over the Life Span Semester Hours: 3

FNDS 5050 - Critical Issues in American Education Semester Hours: 3

FNDS 5420 - History and Philosophy of Education: Twentieth Century America
Semester Hours: 3

LALC 5140 - Multicultural Education Semester Hours: 3

LALC 5150 - Culture of the Classroom Semester Hours: 3

LALC 5160 - Historical and Legal Foundations of Bilingual Education Semester Hours: 3

LALC 5820 - Techniques in Teaching English as a Second Language Semester Hours: 3

Cumulative Portfolio

The MA portfolio counts as the comprehensive exam for the master's degree. The portfolio is an accumulation of the performance based assessments completed during program courses and reflects on the student's development over the course of the degree program. Reading and writing students must include confirmation of Reading Teacher PLACE exam registration in their portfolios. Information about the PLACE is online at www.place.nesinc.com.

Course Scheduling

During the fall and spring semesters, most university courses are offered in the late afternoon and evening and meet for three hours once a week over a 16-week semester. Some alternative course schedules are available, such as meeting on five Friday-evening/all-day Saturday combinations. In the summer semester, three- to eight-week sessions are offered, and courses may be in the morning, afternoon or evening. A current schedule of courses is available online at <http://courses.cudenver.edu>.

Planning

For practicing full-time teachers, we recommend taking one course each fall and spring semester, and up to two courses each summer. Plan carefully because courses are intended to build upon each other, and some courses are only offered once a year.

Active Status in the Graduate School

Students must complete their programs within seven years, maintaining a GPA of 3.0. Students typically take four courses each calendar year. Failure to enroll over three contiguous semesters will result in a requirement to resubmit part I of the application for admission and a letter of intent.

Early and Adolescent Literacy Certificates

The early literacy certificate and adolescent literacy certificate each include three graduate-level courses (for a total of 9 semester hours) and are conveniently offered entirely online. They are specifically designed to help licensed teachers develop the skills necessary to reach student readers. To find out more, please visit www.ucdenver.edu/education or email cpe@ucdenver.edu.

To learn about how these certificate credits may apply toward one of the above programs in reading and writing, contact education@ucdenver.edu.

Recording Arts MS

- Graduate School Rules apply to this program

Master of Science in Recording Arts (MSRA)

Program Overview

Recording Arts is a field that deals with all aspects of recorded music and sound including mixing, mastering, sequencing, calibration, reinforcement, media forensics and post-production. Our program refines student skills in sound recording, aesthetics, multitrack recording, digital signal processing, automated mixing, synchronization, stereo imaging and monitoring, media forensics and post-production.

In addition, our program recognizes and includes:

Study in the rapidly growing field of media forensics, which is audio and video for the legal field. The program includes study in tape authentication, audio and video enhancement, voice prints, analysis and witness testimony. See section below for MSRA emphasis in media forensics (MSRA-MF) program information.

The need for pedagogy degrees. Pedagogy is synonymous with teaching, and this program includes a survey of available resources for audio education. We offer an interdisciplinary approach by including physics, acoustics, engineering, music, broadcast, medicine, psychology, multimedia, theatre and film/video. The program emphasizes design and development of new methods and materials.

UC Denver's Master of Science in Recording Arts (MSRA) has the only pedagogy track in the nation, as well as the only college-level course in audio forensics. This graduate degree is designed to:

- prepare students for careers in audio application for the fields of mass communications, education, arts and the entertainment industries
- help professionals advance their careers
- help prepare the music educators of the future

Students may choose between a thesis (research) or non-thesis (portfolio) option.

Graduate courses constituting the core of this study will advance the artistic, pedagogical, technical and problem-solving abilities of the enrolled students. Elective courses will allow each student to develop an additional skills and knowledge in related areas including film, broadcasting, education, music business and the performing arts.

We encourage students from allied disciplines (music, physics, engineering, etc.) to apply. Students are not required to have their bachelor's in recording arts—the student's bachelor's degree can be from any discipline. They can qualify for the MSRA by having

the equivalent level preparation (e.g., work experience). Candidates without sufficient experience/training in recording arts may be required to take preparatory courses at the undergraduate level.

Emphasis in Media Forensics

Students can also earn a master of science in recording arts with an emphasis in media forensics. See the media forensics program page for specific requirements, as they differ from the general MSRA degree.

Application Components

The following is required of all students applying to the MSRA program, with the exception of International students. International students should consult the Office of International Affairs for specific information on application and admission requirements. Contact the Office of International Affairs for specific application forms, www.internationaladmissions.ucdenver.edu.

1. Graduate Admissions Application—Parts I and II

Students may request an application packet by calling 303-556-2279. Please be sure to provide your mailing address.

Students are required to complete the application for graduate admissions form.

Program of study—on the application, the code for all Master of Science in Recording Arts candidates is GR-RAMS. The degree is MS.

International students must complete additional paperwork in addition to the components below. International student applications must be received six months prior to the term for which the student is applying. Contact the Office of International Affairs for specific application forms, www.internationaladmissions.ucdenver.edu.

2. In-State Tuition Classification Application

Students who feel they may qualify for Colorado in-state tuition (i.e., residency) should fill out the in-state tuition form. *The Office of Admissions will make the determination of residency.* For information on residency criteria contact the Office of Admissions, 303-556-2704 or admissions@ucdenver.edu.

3. Entrance Examinations(s)

Official GRE scores (www.gre.com)—All applicants to the MSRA degree program must submit scores from the GRE. The “General Test” offered by Educational Testing Service will assist in evaluating applicants to the degree program. It evaluates verbal, quantitative and analytical writing skills for the candidates. This examination is offered

internationally by Educational Testing Service on a continuous schedule. The minimum required score for entrance in the program is the 50th percentile, although each student's score will be evaluated as part of complete application process. This examination is not intended to exclude any applicant from the degree program, but rather to assist in academic advising.

Scores must be received by the application deadline; therefore, students should plan accordingly when scheduling their testing dates. Late GRE scores are not accepted, and these applications will not be reviewed.

Test of English as a Foreign Language (TOEFL) (www.ets.org/toefl)—This examination is required for international students for whom English is not their primary language. These students are required to have a minimum TOEFL score of 500 (173 electronic).

4. Transcripts

The most recent *official* academic transcripts must be sent from the registrar of all previous institutions. Official transcripts should be mailed to:

MSRA Graduate Admissions Committee
Campus Box 162, P.O. Box 173364
Denver, CO 80217-3364

5. Letters of Recommendation

Three (3) letters of recommendation are required from responsible persons who can attest to your academic and professional accomplishment. The names those who are providing your letters of recommended should be included in your Part II of the application.

Letters of recommendation must be accompanied by the letter of recommendation form, available on the MSRA Web site.

Incomplete letters of recommendation will not be considered, and the application will not be reviewed.

6. Application Essay

This essay should summarize the educational and professional history of the applicant relative to a career in the audio/music industry, and should include:

- complete name and contact information
- educational background
- career objective

- anticipated dates of attendance

The essay must be typed, double-spaced and in English; the preferred length is three to five pages.

7. Resume

Students are required to submit a one- to two-page typed resume, including educational background, work experience and relevant skills. Students are welcome to include any published works, exhibitions, performances, awards or other relevant achievements. The resume should be chronological, beginning with your educational background and progressing to your employment history. Please refrain from functional resumes or those that simply summarize qualities or competencies. This professional vita complements the essay you will author by providing a chronology of all your educational and work experiences and of scholarly/creative work.

8. Portfolio

All applicants will submit a portfolio of recordings that represent their best accomplishments in audio production. Presentation, breadth of experience, technical and artistic quality will be evaluated.

The required submission format is Compact Disc (CD) or Digital Video Disc (DVD), with an annotated discography (index) to the portfolio material and a clear and accurate labeling of all material. Discography *must* include the applicant's function on each track (e.g. artist/performer, engineer, producer, arranger, etc.).

A DVD portfolio may be submitted if the student's primary experience is in visual media (film, TV, etc.). DVD portfolios must also contain an annotated discography.

Helpful tips for a good portfolio are available on the MSRA Web site. Portfolio submissions that do not follow these guidelines will not be evaluated, and the application will not be processed.

9. Application Fee

\$50 nonrefundable for domestic (within the USA) applicants

\$75 nonrefundable for international applicants

The application fee must be paid with a check, money order or by credit card. Cash will not be accepted. The fee must be paid in U.S. dollars.

Applications that do not include all of the requirements listed above or that include partial components are considered incomplete and will not be reviewed.

Required Courses

MSRA 5000 - Introduction to Graduate Studies

Summer 2010 Registration **MSRA 5000**

Surveys existing literature and research in science, technology, and pedagogy of recording arts. Extensive use of available resources in library, electronic and print, trade and scientific publications are explored. Use of computer applications for research and publication are developed. Prereq: Admission to the MSRA degree program. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MSRA 5580 - Graduate Audio Seminar

Summer 2010 Registration **MSRA 5580**

Faculty and majors of the music engineering program assemble to discuss and demonstrate issues of artistic and technical applications of recording technology. Student projects, faculty, and guest lectures provide topical focus. Prereq: MUSC 2560 or permission of instructor. Cross-listed with MUSC 4580. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MSRA 5590 - Graduate Audio Production

Summer 2010 Registration **MSRA 5590**

Deals with advanced audio skills for music recording, including technical and artistic considerations. This is a required course for the MSRA degree. Prereq: Acceptance into MSRA Degree Program. **Semester Hours:** 4to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

MSRA 6510 - Graduate Audio Studies Pedagogy

Summer 2010 Registration **MSRA 6510**

Surveys available resources for audio education. Interdisciplinary materials in physics, acoustics, engineering, music, broadcast, medicine, psychology, multi-media, theater, and film or video are reviewed. Emphasis on design and development of new methods and materials are pursued. (MSRA graduate students only.) Prereq: MUSC 5000. **Semester Hours:** 4to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

MSRA 6950 - Thesis in Professional Audio

Summer 2010 Registration **MSRA 6950**

With the guidance of a thesis advisor, each candidate for the MSRA degree select an approved topic for scholarly review, research and publication. The approved materials are evaluated for written and oral defense. Prereq: MUSC 5000, 5590, 6510, 6580,

6530.**Semester Hours:** 4to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

MSRA 6951 - Professional Audio Portfolio Thesis

Summer 2010 Registration **MSRA 6951**

With the guidance of a portfolio advisor, each candidate for the Msra degree produce specified documentation and audio materials that reflect the career intentions of the candidate. a completed "Show kit" or professional "Demo" of the candidate's specialty are produced. The approved materials are evaluated for written, audio and oral defense.

Prereq: MUSC 5000, 5590, 6510, 6530.**Semester Hours:** 4to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 18 Hours

Electives

Students may take courses not listed here, per approval of the faculty or academic advisor.

MSRA 5500 - Topics in Professional Audio

Summer 2010 Registration **MSRA 5500**

Selected topical subjects to include live or studio sound recording, sound reinforcement, new technologies or practices in the audio industry. Cross-listed with MSRA

4500.**Semester Hours:** 1to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

MSRA 5505 - Audio Post Production I

Summer 2010 Registration **MSRA 5505**

Reviews all aspects of audio synchronized with picture, including music, sound effects, narration, and dialog replacement. Topics studied with respect to film, video and multi-media. Cross-listed with MUSC 4505.**Semester Hours:** 4to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

MSRA 5575 - Graduate Surround Sound

Summer 2010 Registration **MSRA 5575**

This lecture-lab course deals with surround sound in film, digital TV and DVD's. Topics include monitoring, microphone techniques, recording, mixing, mastering, delivery formats and psychoacoustics. Students work on two lab projects in the semester.

Prereq: MSRA 5550. Cross-listed with MUSC 4575. **Semester Hours:** 4to 4
Registration is changing. Visit our website for details ucdenver.edu/registration.

MSRA 6530 - Graduate Audio Forensics

Summer 2010 Registration **MSRA 6530**

Deals with audio for the legal profession. Topics covered include tape authentication, audio enhancement, voice prints and analysis, consultation and expert witness testimony. The labs work with practice and real-life situations and prepare students for further research in this area. Prereq: MSRA graduate students only or permission of instructor. **Semester Hours:** 4to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.
or other courses as approved by MSRA advisor or program director.

Total: 34 Hours

Students may take courses not listed here, per approval of the faculty or academic advisor. Below is the suggested semester-by-semester sequencing of courses and semester hours.

Fall

MSRA 5000 - Introduction to Graduate Studies

Summer 2010 Registration **MSRA 5000**

Surveys existing literature and research in science, technology, and pedagogy of recording arts. Extensive use of available resources in library, electronic and print, trade and scientific publications are explored. Use of computer applications for research and publication are developed. Prereq: Admission to the MSRA degree program. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MSRA 5590 - Graduate Audio Production

Summer 2010 Registration **MSRA 5590**

Deals with advanced audio skills for music recording, including technical and artistic considerations. This is a required course for the MSRA degree. Prereq: Acceptance into MSRA Degree Program. **Semester Hours:** 4to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

Topics course (1 semester hour)

Two MSRA electives (8 semester hours)

Total: 16 Hours

Spring

MSRA 5580 - Graduate Audio Seminar

Summer 2010 Registration **MSRA 5580**

Faculty and majors of the music engineering program assemble to discuss and demonstrate issues of artistic and technical applications of recording technology. Student projects, faculty, and guest lectures provide topical focus. Prereq: MUSC 2560 or permission of instructor. Cross-listed with MUSC 4580. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MSRA 6510 - Graduate Audio Studies Pedagogy

Summer 2010 Registration **MSRA 6510**

Surveys available resources for audio education. Interdisciplinary materials in physics, acoustics, engineering, music, broadcast, medicine, psychology, multi-media, theater, and film or video are reviewed. Emphasis on design and development of new methods and materials are pursued. (MSRA graduate students only.) Prereq: MUSC 5000. **Semester Hours:** 4to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

MSRA elective (4 semester hours)

Topics courses (3 semester hours)

Total: 14 Hours

Summer

MSRA 6950 - Thesis in Professional Audio

Summer 2010 Registration **MSRA 6950**

With the guidance of a thesis advisor, each candidate for the MSRA degree select an approved topic for scholarly review, research and publication. The approved materials are evaluated for written and oral defense. Prereq: MUSC 5000, 5590, 6510, 6580, 6530. **Semester Hours:** 4to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

MSRA 6951 - Professional Audio Portfolio Thesis

Summer 2010 Registration **MSRA 6951**

With the guidance of a portfolio advisor, each candidate for the Msra degree produce specified documentation and audio materials that reflect the career intentions of the candidate. a completed "Show kit" or professional "Demo" of the candidate's specialty are produced. The approved materials are evaluated for written, audio and oral defense.

Prereq: MUSC 5000, 5590, 6510, 6530. **Semester Hours:** 4to 4
Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 4 Hours

Program Total: 34 Hours

The above progression is merely suggested and shows the quickest possible schedule for graduation (three semesters). Students may elect to enroll for less than the suggested semester hour total, and/or enroll in additional semesters as needed. Students can apply for graduation in any semester (fall, spring or summer) provided they have completed the required course work. All course work must be completed with a satisfactory grade of "B" (3.0) or higher. Students should not register for thesis/portfolio, unless approved by the faculty advisor.

Please refer to the master of science in recording arts Web site for additional information: <http://cam.ucdenver.edu/meis/recordingarts.htm>.

School Library and Instructional Leadership MA

Office: Lawrence Street Center, 701

Telephone: 303-315-6300

Fax: 303-315-6311

E-mail: education@ucdenver.edu

Web site: www.ucdenver.edu/education/schoollibrary

Faculty

Information about SLIL faculty is available online at www.ucdenver.edu/education/schoollibrary.

Program Overview

The school library and instructional leadership program within the ILT master's degree program is a nationally recognized NCATE-AASL revised and approved school library media education program that leads to the Colorado Department of Education endorsement for school libraries. The program integrates information literacy standards through the use of collaborative planning, as approved by the American Association of School Libraries. Technology and library resources are seen as tools to increase student achievement by integrating the information literacy standards with the content standards

of the classroom teacher. The program adheres to the constructivist theory of resource-based learning and promotes an appreciation of children's and adolescent literature. The program believes that school librarians require education as a teacher as well as a librarian, as advocated by the American Library Association and the International Association of School Libraries. As a school librarian, you will provide collaborative instruction, information access and leadership through the management of your library program and the library resources. Courses are offered in a completely online program, or a monthly Saturday cohort scheduled in communities across Colorado.

Once admitted, students begin a plan of study that typically takes about two years to complete. Consult the SLIL Web site for more information about specific plans of study, course offerings and expectations of cohort groups.

Admission Requirements

Admission decisions are based on undergraduate and graduate grades, external letters of recommendation and fit with the program as reflected in a letter of intent. In some cases, results of a test (GRE) are also required. Prospective students should consult the SLIL program Web site for complete admission procedures and requirements.

Professional Expectations

All students in the SLIL program are expected to show a strong commitment to the program and to maintain high academic, professional and ethical standards. Inappropriate or unprofessional conduct is cause for discipline or dismissal from the program.

Technology Expectations

The SLIL program uses computers and related technologies either as a focus or a tool for learning. Students are expected to obtain an e-mail account and check it frequently. In addition to on-campus facilities, SLIL students need convenient access to Internet-connected computers off campus, either at their place of work or at home. In addition to textbooks, software purchases may be required or recommended for specific classes.

Program Requirements

School library students also have a choice between endorsement-only and full master's programs. The master's program requires a minimum of 36 graduate semester hours. Students complete a plan of study consisting of courses and professional field experience. To receive Colorado teacher endorsement, students are required to pass

the PLACE test in school library. This is a Colorado Department of Education requirement.

An Example of Two-Year Plan for School Library Program

Courses are offered only in certain semesters and courses should be taken in a particular sequence based on when you start the program. Advising is required prior to enrolling in a course, even as a non-degree student, in order to ensure the most effective course sequencing and availability of courses.

Typical First Year

Fall	Spring	Summer
SCHL 5530 - Foundations of School Librarianship* LALC 5790 - Children's Literature Through the Ages***	SCHL 5020 - Collection Development	SCHL 5110 - Integrating Instructional Technology Practices in School Libraries (MA only) LALC 5740 - Adolescent Literature . ***

Second Year

Fall	Spring	Summer
SCHL 5160 - Managing School Library Programs RSEM 5080 - Research for Teachers *** SCHL 5911 - School Library Field Experience-Elementary **	SCHL 5030 - Information Literacy and Reference SCHL 5912 - School Library Field Experience-Secondary ** Elective (2 semester hours) (MA only)****	SCHL 5040 - Information Storage and Utilization SCHL 6999 - Leadership and Practice in School Libraries (MA Only)

* SCHL 5530 Foundations in School Librarianship should be taken as the first course in your program.

** 80 hours of field experience hours are required. Field experience may be completed over the course of a year; online seminar hours will be completed during the field experience timeframe. Field experiences are completed within a pre-approved school library. See Field Experience Policy for more information.

*** LALC 5740; LALC 5790; and RSEM 5080 are offered on-campus in other semesters as well.

****Electives are usually attendance at Colorado Association of Libraries (CAL) conference in the fall; CASL in the spring; or TIE in the summer.

Comprehensive Examination for All SLIL Students

The comprehensive exam consists of a professional portfolio where in students demonstrate program competencies through work products and related accomplishments. The portfolio is created throughout the student's program and submitted for faculty review the final semester. For more information, see the ILT Web site. For complete details about the SLIL program and endorsement requirements, see the ILT Web site at www.ucdenver.edu/education/schoollibrary.

School Psychology EdS/Licensure

Program Leader: Franci Crepeau-Hobson

Office: Lawrence Street Center, 1113

Phone: 303-315-6315

Fax: 303-315-6349

E-mail: education@ucdenver.edu

Web site: www.ucdenver.edu/education/spsy

Faculty

Information about faculty in the school psychology program is available online at www.ucdenver.edu/education.

Degree

The educational specialist degree in school psychology is a 74 graduate semester-hour program that leads to licensure in school psychology by the Colorado Department of Education, national certification in school psychology by the National School Psychology Certification Board and the educational specialist degree (EdS) in school psychology.

This NASP-approved program allows students to create individual plans for meeting program requirements on a full- or part-time basis, during summer and academic year terms and during evening and weekend hours.

The school psychology faculty have adopted a preventative model of school mental health services. Upon completion of the program, students will be able to:

- screen for and recognize the early warning signs of social, emotional or academic risk, distinguishing between these and the typical development of infants, children and adolescents (birth–age 21)
- communicate effectively and consult collaboratively with students, parents, school professionals and community leaders to enhance the academic and mental health skills of students
- incorporate data-based decision making through formal and informal assessment procedures and planning interventions that enhance students' cognitive, social-emotional and behavioral competencies
- plan, implement and evaluate the effectiveness of preventative and remedial therapeutic interventions that strengthen students' mental health and academic skills
- advocate for children and families through the application of legal, ethical and professional standards for practice

Admission Requirements

Successful applicants to the school psychology (SPSY) program will have obtained a minimum 3.0 undergraduate GPA and will score at least 1000 on the verbal and quantitative sections of the GRE. Also, applicants will submit a current resume, a statement of goals and three letters of recommendations. Applicants meeting these minimum standards will be invited to a half-day group interview that involves program orientation, a writing assignment and a group dynamics exercise.

Application materials are available by calling the Student Services Center at 303-315-6300 or coming to Lawrence Street Center, Suite 701. All materials must be submitted to the Student Services Center in one complete packet by the appropriate deadline — February 15 for fall semester. Application materials include the following:

- part I of the application for admissions
- tuition classification form
- \$50 application fee (make checks payable to the University of Colorado Denver)
- written statement

- three letters of recommendations (in sealed and signed envelopes)
- two official transcripts from each higher education institution attended (in the original, sealed envelope)
- official GRE scores sent directly to the University of Colorado Denver
- oath and consent
- fingerprint card
- online written response

Requirements for the Educational Specialist Degree in School Psychology and Licensure

Students will complete course work in child development, learning and cognition, educational methods, professional issues, assessment, counseling, intervention and consultation. Specific course requirements include one prerequisite course, 20 graduate courses and 14 graduate semester hours (1700 clock hours) of supervised experiences. Prerequisites include an undergraduate or graduate course in exceptional children or child psychology and an undergraduate or graduate course in tests and measurement (i.e., RSEM 5100 or RSEM 7110).

Students will complete the following core course work:

CPCE 5010 - Counseling Theories

Summer 2010 Registration **CPCE 5010**

Focuses on counseling theories: Psychodynamic, Adlerian, Person-Centered, Existential, Behavioral, including DBT, Cognitive Behavioral, Gestalt, & Reality Therapy. Also includes an overview of the history of the counseling profession and the role and function of counselors in various settings. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

EPSY 5100 - Advanced Child Growth and Development

Summer 2010 Registration **EPSY 5100**

Systematic study of the major theories of child growth and development. Focuses on current research regarding infants and children and the implication of such research for education. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

or

EPSY 5140 - Advanced Adolescent Growth and Development

Summer 2010 Registration **EPSY 5140**

Systematic study of the major theories of adolescent growth and development. Focuses on current research regarding adolescents and the implications of the research for education. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

EPSY 5240 - Cognition and Instruction

Summer 2010 Registration **EPSY 5240**

Explores recent developments in cognition and their implications for instructional practices. Includes theory and research in cognitive psychology and resultant educational practices. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

RSEM 5400 - Introduction to Evaluation of Programs and Persons

Summer 2010 Registration **REM 5400**

Models and methods of evaluating programs and persons in education and related fields, such as business and nursing, are examined. Emphasis is given to the topics of formative and summative evaluation, frameworks for program evaluation, teacher evaluation, merit pay, and the measurement and design problems associated with each topic. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

RSEM 7110 - Intermediate Statistics

Summer 2010 Registration **REM 7110**

Continuation of RSEM 5100, covering more advanced methods of analyzing data, with an emphasis on the use and interpretation of descriptive and inferential techniques. Topics covered are one-way and two-way analysis of variance; power; multiple comparisons; factorial designs and factorial ANOVA; partial correlation, multiple correlation and regression; analysis of covariance; and selected use of packaged statistical programs (SPSS). Prereq: RSEM 5100 or equivalent. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPED 5780 - Literacy Intervention for Students with Disabilities

Summer 2010 Registration **SPED 5780**

Provides the practitioner with an understanding of research-validated approaches, strategies, assessment tools and issues related to effective literacy instruction for students performing significantly below grade level. Practitioners can expect to be able to conduct thorough literacy assessments as well as be able to develop, implement, and

evaluate individual reading and writing programs for individual students with the most challenging literacy needs. Prereq: IPTE 4000 or IPTE 5000 and IPTE 4001 or IPTE 5001 or previous literacy course work with permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPSY 5600 - Functional Behavior Assessment and Planning

Summer 2010 Registration **SPSY 5600**

Prepares educational professionals in functional behavior assessment as it applies to the development of behavioral support plans. Students gain knowledge and experience in working collaboratively with others to design strategies that help students with challenging behaviors to be more successful in school. These strategies include the implementation of environmental supports and skills training, as well as behavioral interventions. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPSY 5900 - School-Based Multicultural Interventions

Summer 2010 Registration **SPSY 5900**

The course will foster student's understanding and appreciation of diversity and its applications for school psychology practice, educational contexts, and mental health policy. Students will learn to evaluate and implement school-based mental health and educational interventions with a multicultural lens. Prereq: SPSY 6410. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPSY 6100 - School Psychology: Professional & Legal Foundations

Summer 2010 Registration **SPSY 6100**

This course covers topics related to the practice of school psychology, both past and present, including legal/ethical obligations/issues, accreditation, certification/licensure, culturally competent practice, roles/responsibilities, and evaluation and accountability. Observation in schools and related settings is required. Prereq: Admission to School Psychology Program. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPSY 6150 - Psychoeducational Assessment I

Summer 2010 Registration **SPSY 6150**

Focuses on assessment of cognitive ability, cognitive processes, and achievement in children and adolescents. Topics include selection, administration, and interpretation of ability and achievement tests; psychological report writing, and psychometric, historical, theoretical, and cultural issues in assessment. Test administration required. Prereq:

RSEM 5300.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPSY 6160 - Psychoeducational Assessment II

Summer 2010 Registration **SPSY 6160**

Focuses on the assessment of adaptive behavior, personality, and social-emotional functioning in children and adolescents. Topics include selection, administration, and interpretation of these types of measures; cultural considerations in psychological assessment, psychological report writing, and developing interventions. Test administration required. Prereq: SPSY 6150.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPSY 6170 - Assessment and Intervention: Birth to 3

Summer 2010 Registration **SPSY 6170**

Course familiarizes students with the provision of psychological services to children birth to 3 years. The course includes coverage of relevant federal/state mandates, typical and atypical development, multicultural issues, and family-centered and consultative psychological intervention services. Test administration required. Prereq: SPSY 6150.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPSY 6200 - Risk, Resilience, and Prevention in School Mental Health

Summer 2010 Registration **SPSY 6200**

Examines sources of biological and social risk that prevent children from infancy through adolescence from reaching their full adult potential, the prevalence of these risk factors in North American communities, and the wellness models of intervention that ameliorate the effects of risk factors before problems manifest themselves and become disabling.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPSY 6350 - School-Based Interventions: Children, Youth and Families

Summer 2010 Registration **SPSY 6350**

Provides theoretical and practice-oriented introduction to child therapy in schools. Weaves together skills and techniques essential to theory and implementation of psychotherapeutic techniques. Course activities compliment the systemic and group-based interventions examined in SPSY 6400. Prereq: EPSY 5100 or EPSY 5140.**Semester Hours:** 4to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPSY 6400 - School-Based Interventions: Groups, Classrooms and Systems

Summer 2010 Registration **SPSY 6400**

Provides students with advanced study of research on and techniques of classroom and small group interventions. Includes instruction on the evaluation of intervention effectiveness. Systemic, school-wide interventions are addressed. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPSY 6410 - Psychoeducational Services for Linguistically Diverse Students

Summer 2010 Registration **SPSY 6410**

Prepares students to provide current 'best practices' in cognitive assessment and psychotherapeutic services for students who are linguistically diverse. Attention will be paid to differentiating between students with language disorders and students in the process of acquiring English as a second language. Service recommendations will be grounded in an understanding of the unique psychological and educational needs of linguistically diverse students and the legal and ethical standards governing their education. Prereq: 30 graduate semester hours in the School Psychology program. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPSY 6420 - Crisis Prevention, Planning and Intervention

Summer 2010 Registration **SPSY 6420**

Introduces students to crisis theory, prevention research, and intervention strategies. The course is designed for school mental health professionals interested in developing advanced crisis counseling and intervention skills sufficient for use in school settings. The course emphasizes the importance of practical hands-on opportunities for skills development. Prereq: SPSY 6350 and CPCE 5100 (or equivalent) and experience required. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPSY 6450 - School-Based Consultation for Mental Health Professionals

Summer 2010 Registration **SPSY 6450**

A wide range of traditional or emerging consultation models emphasizing practical application of empirically-based approaches to advance the social or academic competence of students, classrooms, schools and districts. Hands-on experience supplement course content as students develop, refine, and practice their own eclectic consultation approach. Prereq: RSEM 5100, RSEM 5300 and SPSY 6350. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPSY 6500 - Identifying and Planning for the Mental Health Needs of Children and Adolescents

Summer 2010 Registration **SPSY 6500**

Provides students with advanced concentrated study of the etiology, diagnostic criteria, recommend intervention strategies, and diagnostic procedures appropriate for the identification of children's mental health needs. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPSY 6550 - Academic Interventions in School Psychology

Summer 2010 Registration **SPSY 6550**

Provides training in knowledge and skills for the use of educational intervention practices in school psychology, including the development, implementation, and evaluation of academic interventions in the areas of reading, math, and written language; curriculum based measurement and progress monitoring. Prereq: SPSY 6150. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Supervised Experiences

SPSY 6911 - School Psychology Practicum

Summer 2010 Registration **SPSY 6911**

This 500 hour practicum allows students to integrate theory with school psychology practice under supervision of a licensed school psychologist. Consultation, psycho-educational assessment, and other school psychological services are stressed. Prereq: SPSY 5600, SPSY 6100, SPSY 6150, and SPSY 6160. **Semester Hours:** 1to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPSY 6930 - School Psychology Internship

Summer 2010 Registration **SPSY 6930**

The internship stresses the professional practice of school psychology in a psychoeducational facility. Field experiences will encompass an array of psychological services. Prereq: CPCE 5100, SPSY 6911 and permission of instructor. **Semester Hours:** 1to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 74 Hours

The education specialist in school psychology degree also requires satisfactory completion of two professional portfolios (pre-internship and EdS) demonstrating

mastery of the program objectives and passing scores (≥ 165) on the PRAXIS specialty exam in school psychology.

Professional Expectations

All students in the SPSY program are expected to show a strong commitment to the program and to maintain a high academic, professional, ethical standards and sensitivity to diversity. Inappropriate or unprofessional conduct is cause for discipline or dismissal from the program.

Secondary English Education Option, MA Curriculum and Instruction

Literacy, Language and Culturally Responsive Teaching

MA Requirements for the Reading and Writing Option and Secondary English Education Option, plus Reading Teacher Endorsement and Certificate Programs

Office: Lawrence Street Center, 701

Telephone: 303-315-6300

Fax: 303-315-6311

E-mail: education@ucdenver.edu

Web sites: www.ucdenver.edu/education/literacy and
www.ucdenver.edu/education/englished

Reading and Writing

Secondary English

Early and Adolescent Literacy Certificates

Faculty

Information about faculty in this program is available online at
www.ucdenver.edu/education/literacy.

The faculty of literacy, language and culturally responsive teaching (L2CRT) believe that effective teaching requires an awareness of and the ability to respond to individual

differences. L2CRT faculty also emphasize the importance of teachers as scholars and reflective practitioners. In particular, teachers must understand how linguistic and cultural diversity affect their teaching. Two themes run throughout all program offerings. The first concerns the importance of recognizing a variety of literacies—"home" literacies, school literacy, "mainstream" literacy, first and second language literacies—and to develop teaching practices that utilize an understanding of the complexity of literacy development across language contexts. The second theme involves the meaningful use of language and literacy to improve the quality of one's life. As an approach to teaching, this theme emphasizes the creation of diverse, rich environments in which learners experience oral and written language as part of authentic tasks, and where concern for the cultural and linguistic heritage of the students is evident.

Reading and Writing Option and Reading Teacher Endorsement

This master's program is designed for K-6 and 7-12 teachers. Those interested in elementary reading and writing should communicate with Professors Espinoza, Nathenson-Mejia or Taylor. Those interested in secondary and adult reading and writing should communicate with Professor Shanklin (see Web site for faculty contact information).

Reading is a credentialed program meeting the Colorado Department of Education requirements for reading teacher endorsement. Therefore, students who obtain a master's degree emphasizing reading education from UC Denver are certified to hold positions in public and private schools as special developmental and remedial reading teachers in K–6 or 7–12. This program is also valuable for elementary and secondary teachers who wish to enhance reading and writing instruction in their classrooms.

By placing emphasis on the reading, writing and oral and visual language development of culturally, linguistically and academically diverse student populations, this master's program is at the forefront of the field. Language is approached from a socio-psycholinguistic perspective that emphasizes the learner's construction of meaning rather than the learning of isolated skills. Importance is placed on using theory, inquiry and personal reflection to inform classroom practice. The program prepares teachers to become decision makers capable of developing learner-centered curricula where each student's reading and writing abilities are assessed to address developmental or special needs.

Curriculum

Course offerings lead to an MA degree in curriculum and instruction with an emphasis in reading and writing, as well as a reading teacher endorsement, at one of two levels: K–6 or 7–12.

Those who have completed UC Denver's graduate teacher education licensure program must earn an additional 27 semester hours to obtain the MA and endorsement. Those who completed licensure through other means must earn an additional 36 semester hours to obtain the MA and endorsement.

Teachers may add a reading teacher endorsement to an already-earned master's degree in education by taking those courses listed under the chosen endorsement level. (In the state of Colorado, the reading teacher endorsement cannot simply be added to a bachelor's degree.) Electives and core courses are not required. Two additional courses must be taken in other areas specified by the Colorado Department of Education. In many cases, previous master's degree courses will satisfy this requirement.

Requirements for Reading and Writing Program (Degree/Endorsement Options)						
	ELEMENTARY (K-6)			SECONDARY (7-12)		
Course	MA & CDE Endorsement	MA & CDE Endorsement (when added to UC Denver's graduate teacher education licensure program)	CDE Endorsement Only	MA & CDE Endorsement	MA & CDE Endorsement (when added to UC Denver's graduate teacher education licensure program)	CDE Endorsement Only
LALC 5020 - Workshop in Literacy and Language Teaching	Required		Required	Required	Required	Required
LALC 5810 - Workshop in Language Acquisition and	Required	Required	Required	Required	Required	Required

Development						
LALC 5910 - Foundations of Language, Literacy and Culture	Required	Required	Required	Required	Required	Required
LALC 5710 - Primary Literacy: Pre-3rd Grade	Required	Required	Required			
LALC 5720 - Writing: Process, Development, and Teaching Grades 3-12	Required	Required	Required	Required	Required	Required
LALC 5730 - Language and Literacy Across the Curriculum	Required		Required	Required		Required
Children's literature course, per advisor approval	Select one	Select one	Select one			
LALC 5740 - Adolescent Literature				Required	Required (waived if taken as part of English Licensure)	Required
LALC 6910 - Seminar	Required	Required	Required			

and Practicum in Literacy and Language, K-6						
LALC 6911 - Seminar and Practicum in Literacy and Language, 7-12+				Required	Required	Required
LALC 5055 - Linking Assessment and Instruction in Language and Literacy, Part I	Required	Required	Required	Required	Required	Required
LALC 6915 - Seminar and Practicum in Literacy Professional Developme nt	Required	Required		Required	Required	Required
Core course in Research and Evaluation Methodolog y - see list below	Select one	5080		Select one	5080	
Interdiscipli nary core	Select one			Select one		

course - see list below						
Graduate- level School of Education and Human Developme nt elective				Select one		
Portfolio	Required	Required		Required	Required	
PLACE Exam	Required	Required	Required	Required	Required	Required
Total Semester Hours	36	27	27	36	27	27

Secondary English Education Option

The master's program in secondary English education is designed to enhance the preparation of middle and high school English/language arts teachers. Students complete course work in language development, assessment and field experiences. With the help of their advisor, they also select specific courses from the English Department or within the School of Education and Human Development that provide a well-rounded repertoire of knowledge and skills to fulfill the needs of an English educator. Special consideration is given to working with diverse ethnic populations. Students interested in English education should see Professor Shanklin (see Web site for faculty contact information).

Program Requirements

To earn a master of arts degree in curriculum and instruction with an emphasis in secondary English education, students must complete the following:

- 30 graduate semester hours in English education
- 6 graduate semester hours of core courses
- performance-based assessments that culminate in a portfolio finalized in the last semester of the program as fulfillment of the MA comprehensive exam requirement

Each student's course plan is developed in conjunction with his/her advisor. Please review www.ucdenver.edu/education/englished for recommended course sequence.

LALC 5055 - Linking Assessment and Instruction in Language and Literacy, Part I

Semester Hours: 3

LALC 5740 - Adolescent Literature Semester Hours: 3

LALC 5760 - Theory and Methods of English Education Semester Hours: 3

-OR-

LALC 5835 - Special Topics: Literacy and Language Semester Hours: 3

LALC 5810 - Workshop in Language Acquisition and Development Semester Hours: 3

LALC 5910 - Foundations of Language, Literacy and Culture Semester Hours: 3

LALC 6911 - Seminar and Practicum in Literacy and Language, 7-12+ Semester Hours: 3

Research and Evaluation Methodology core course (see list below).

Interdisciplinary core course (see list below).

Four electives, per advisor approval, from the English department and/or the School of Education & Human Development. The following are recommended:

LALC 5720 - Writing: Process, Development, and Teaching Grades 3-12 Semester Hours: 3

-OR-

ENGL 5110 - Denver Writing Project Semester Hours: 3

Courses in working with English language learners and in instructional technology may also be helpful. For a technology course, please contact the professor about prerequisite knowledge.

Total: 36 semester hours

Program Requirements--When Added to UC Denver's Graduate Teacher Education Licensure Program

MA in curriculum and instruction with emphasis in secondary content leadership (English), when added to UC Denver's graduate teacher education licensure program:

- 18 graduate semester hours
- performance-based assessments that culminate in a portfolio finalized in the last semester of the program as fulfillment of the MA comprehensive exam requirement

Each student's course plan is developed in conjunction with his/her advisor. Please review www.ucdenver.edu/education/englished for recommended course sequence.

FNDS 5050 - Critical Issues in American Education Semester Hours: 3

-OR-

IPTE 5080 - Principles and Practice of Change Semester Hours: 3

-OR-

SPED 5300 - Collaborating In Schools and Communities Semester Hours: 3

RSEM 5080 - Research for Teachers Semester Hours: 3

Four electives, per advisor approval, from the English Department and/or the School of Education and Human Development. The following are recommended:

LALC 5720 - Writing: Process, Development, and Teaching Grades 3-12 Semester Hours: 3

-OR-

ENGL 5110 - Denver Writing Project Semester Hours: 3

Courses in working with English language learners and in instructional technology may also be helpful. For a technology course, please contact the professor about prerequisite knowledge.

Total: 18 semester hours

Core Courses

Research and Evaluation Methodology

RSEM 5000 - Orientation to Research and Measurement in Education Semester Hours: 3

RSEM 5050 - Assessment for Teachers Semester Hours: 3

RSEM 5080 - Research for Teachers Semester Hours: 3

RSEM 5100 - Basic Statistics Semester Hours: 3

RSEM 5200 - Introduction to Research Methods Semester Hours: 3

RSEM 5300 - Introduction to Measurement Semester Hours: 3

Interdisciplinary

EPSY 5100 - Advanced Child Growth and Development Semester Hours: 3

EPSY 5140 - Advanced Adolescent Growth and Development Semester Hours: 3

EPSY 5220 - Adult Learning and Education Semester Hours: 3

EPSY 6200 - Human Development Over the Life Span Semester Hours: 3

FNDS 5050 - Critical Issues in American Education Semester Hours: 3

FNDS 5420 - History and Philosophy of Education: Twentieth Century America
Semester Hours: 3

LALC 5140 - Multicultural Education Semester Hours: 3

LALC 5150 - Culture of the Classroom Semester Hours: 3

LALC 5160 - Historical and Legal Foundations of Bilingual Education Semester Hours: 3

LALC 5820 - Techniques in Teaching English as a Second Language Semester Hours: 3

Cumulative Portfolio

The MA portfolio counts as the comprehensive exam for the master's degree. The portfolio is an accumulation of the performance based assessments completed during program courses and reflects on the student's development over the course of the degree program. Reading and writing students must include confirmation of Reading Teacher PLACE exam registration in their portfolios. Information about the PLACE is online at www.place.nesinc.com.

Course Scheduling

During the fall and spring semesters, most university courses are offered in the late afternoon and evening and meet for three hours once a week over a 16-week semester. Some alternative course schedules are available, such as meeting on five Friday-evening/all-day Saturday combinations. In the summer semester, three- to eight-week sessions are offered, and courses may be in the morning, afternoon or evening. A current schedule of courses is available online at <http://courses.cudenver.edu>.

Planning

For practicing full-time teachers, we recommend taking one course each fall and spring semester, and up to two courses each summer. Plan carefully because courses are intended to build upon each other, and some courses are only offered once a year.

Active Status in the Graduate School

Students must complete their programs within seven years, maintaining a GPA of 3.0. Students typically take four courses each calendar year. Failure to enroll over three contiguous semesters will result in a requirement to resubmit part I of the application for admission and a letter of intent.

Early and Adolescent Literacy Certificates

The early literacy certificate and adolescent literacy certificate each include three graduate-level courses (for a total of 9 semester hours) and are conveniently offered entirely online. They are specifically designed to help licensed teachers develop the skills necessary to reach student readers. To find out more, please visit www.ucdenver.edu/education or email cpe@ucdenver.edu.

To learn about how these certificate credits may apply toward one of the above programs in reading and writing, contact education@ucdenver.edu.

Social Science MSS

- ▶ Graduate School Rules apply to this program

Requirements for Admission

General rules for admission into the Graduate School apply to admission into the MSS program.

For admission as a regular graduate student, applicants must:

- have earned a bachelor's degree
- submit two official copies of all transcripts, with an overall GPA of at least 3.0 out of 4.0
- have appropriate undergraduate training or professional background or indicators that supply evidence of ability to pursue the MSS degree
- include a writing sample
- submit three letters of recommendation (at least two from academic sources)
- submit a written statement specifying the goal of advanced study in the social sciences, expressed in clear, correct and effective English
- standardized test scores are not required, but will be considered if submitted

After meeting all other requirements for admission, applicants may be required to have an interview to discuss their interest in the program and their plans for study. For out-of-state applicants, an appropriate substitute for the interview may be determined by the director.

Provisional Admission:

Applicants may be admitted as provisional-status graduate students if their complete record indicates a high probability of success.

Non-degree Students:

Potential applicants may take graduate-level courses as nondegree students (unclassified student with a bachelor's degree) if they:

1. Wish to strengthen their record in order to demonstrate that they can successfully complete courses in the program
- or—

2. Wish to start courses in the program prior to completing their application. Up to 12 semester hours taken as a nondegree student may be accepted by the program once a student has been admitted into the program (the 12-hour limit also includes graduate work from another university).

International Students:

International students must also meet UC Denver requirements for international admission. See the Information for International Students section of this catalog or call 303-315-2230 for further information.

Degree Requirements

The MSS is a 36-semester-hour program, of which 30 hours must meet all specifications of the Graduate School. Throughout their work toward the MSS degree, students must maintain at least a *B* (3.0) average in all courses. A grade of *B-* or below will not be counted toward the degree.

Students may pursue courses around any coherent theme with the approval of MSS program directors and advisors. In addition to the unlimited self-structured options, there are four tracks in place from which students can select: women's and gender studies, international studies, society and environment and community health science.

Three Required Core Seminars

The following two courses must be taken during the first year following entrance to the program:

SSCI 5013 - Philosophical Problems in the Social Sciences and Humanities

Summer 2010 Registration **S SC 5013**

Presents an overview of key theoretical issues currently emerging across academic disciplines. Examines questions about reality, knowledge, ethics that affect social research and writing in the humanities. Readings explore how contemporary philosophical and cultural discourses have altered theory and method. Assignments include influential theoretical pieces by key historical and contemporary thinkers, examples of application in social research, and interpretations of thought and affect in cultural contexts. Cross-listed with HUMN/PHIL 5013. **Semester Hours:** 3 to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.
(Offered spring only)

SSCI 5020 - Elements of Social Thought

Summer 2010 Registration **S SC 5020**

Introduces students to the disciplines that comprise the social sciences (classical anthropology, sociology, sociology of religion, philosophy of history, political theory, classical psychology, etc.). Provides necessary tools for interdisciplinary students to understand the social infrastructure of contemporary society. Cross-listed with HUMN 5020 and PHIL 5020. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

(Offered fall only)

The third required course should be taken later in the program when students are ready to write a proposal for the thesis or project:

SSCI 5023 - Research Perspectives in Social Science

Summer 2010 Registration **S SC 5023**

Introduces interdisciplinary social research through a critical examination of various methodological approaches. Each student formulates a research proposal which includes a research question, a review of the literature, and methods of study. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

(Offered spring only)

Total: 9 Hours

Electives

Additionally, students must complete a total of 21-24 semester hours comprising a coherent selection of courses from a variety of disciplines. All courses for the self-structured portion of the program must be selected with the approval of one of the MSS program directors.

A total of two independent study courses and two 4000-level undergraduate courses taken while enrolled in the program may count toward the degree. All independent study contracts must be approved by one of the program directors. The remaining course work must be 5000/6000-level courses offered through various departments.

Students completing a project take 24 hours of electives, while thesis students complete 21 hours of electives.

Total: 21-24 Hours

Thesis or Project

In order to proceed with a thesis or project, all students must submit a proposal approved by three faculty members (and approved by one of the program directors in

cases where one of the directors is not serving on the committee). Students must also pass an oral comprehensive exam to graduate. Total hours required are: 3 hours of project and 6 hours of thesis.

SSCI 6950 - Master's Thesis

Summer 2010 Registration S SC 6950

Semester Hours: 1to 8

Registration is changing. Visit our website for details ucdenver.edu/registration.

SSCI 6960 - Master's Project or Report

Summer 2010 Registration S SC 6960

Research which may be based on field work. **Semester Hours:** 1to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 3-6 Hours

Degree Total: 36 Hours

Sociology MA

► Graduate School Rules apply to this program

Program Requirements

Two plans of study are available for students. Both options require a minimum of 36 hours. A thesis is required for the thesis option, and a project and internship are required for the nonthesis option. Before beginning the required course work, attendance at an orientation is required for incoming cohorts as well as the completion of mandatory diagnostic exams.

Required Courses

Core courses are required for all graduate students, regardless of plan. Students who are officially admitted to the program are required to follow a sequential plan. SOC 5000 must be taken in the first fall semester. Students must take SOC 5014 before taking SOC 5015. Similarly, SOC 5024 must be taken before SOC 5183.

SOCY 5000 - Professional Seminar: Sociological Inquiry

Summer 2010 Registration **SOC 5000**

Orients new graduate students to key elements of graduate and professional levels of sociological inquiry. Topics include analyses of basic theoretical and epistemological issues, the history and contemporary development of the discipline, essential research programs and an introduction to faculty research. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SOCY 5014 - Classical Sociological Theory

Summer 2010 Registration **SOC 5014**

Examines the emergence and development of sociological ideas, concepts, and principles. Introduces students to the historical and social contexts in which theories of society are instituted. Particular attention is paid to the importance of and implication to contemporary sociology made by classical sociologists such as Durkheim, Marx, and Weber. Prereq: SOCY 4150. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SOCY 5015 - Contemporary Sociological Theory

Summer 2010 Registration **SOC 5015**

The explication of various conceptual approaches to the problem of social order, societal functioning and integration, social conflict, and social structural change by the examination of the work of contemporary theorists. Note: Required for M.A. students in sociology. Prereq: Must have successfully completed an undergraduate course in contemporary sociological theory and SOCY 5014. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SOCY 5024 - Seminar: Research Methods I

Summer 2010 Registration **SOC 5024**

Problems and procedures in research design, data collection and processing. Note: Required for M.A. graduate students in sociology. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SOCY 5183 - Seminar: Quantitative Data Analysis

Summer 2010 Registration **SOC 5183**

A research-oriented seminar stressing the utilization of social data already collected in the test or generation of sociological theory. Note: Required for M.A. graduate students in sociology. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 15 Hours

PLANS OF STUDY

Students must also choose **one** of the following options:

Thesis Option Requirements

Core course requirements	15 Hours
Five elective courses	15 Hours
Master's thesis	6 Hours total required

SOCY 5955 - Master's Thesis

Summer 2010 Registration **SOC 5955**

Semester Hours: 1to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

Thesis Option Total: 36 Hours

Nonthesis Option Requirements

Core course requirements	15 Hours
Five elective courses	15 Hours
Internship	3 Hours
Master's project	3 Hours

SOCY 5964 - Master's Report

Summer 2010 Registration **SOC 5964**

Semester Hours: 1to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

Nonthesis Option Total: 36 Hours

Elective Credit Requirements (15 semester hours for both options)

Students can take an unlimited number of sociology graduate seminars (i.e., 5000-level, stacked or not) to fulfill their 15 elective semester hours, or a combination of the following:

- Independent study: maximum 6 semester hours
- Courses in other departments: maximum 6 semester hours
- Internship: maximum 3 semester hours

For further information about the Department of Sociology or the MA program, visit the Sociology Web Site.

Spanish MA

► Graduate School Rules apply to this program

The UC Denver modern languages faculty offers a Spanish master's degree program that is an alternative to the exclusively literary studies that traditionally lead to doctoral programs. By integrating language, literature and cultural studies with ancillary work in other disciplines, the degree provides a broader expertise that will lead to or enhance careers in teaching, government, social services, business and international trade. Students will tailor the program to their specific interests and needs by developing a topical focus and including courses from outside the Department of Modern Languages, through which they may develop a secondary emphasis that can be incorporated in a thesis project.

Requirements for Admission

In addition to the general admission requirements of the Graduate School, the Spanish MA program requires:

- an undergraduate GPA of at least 2.5, with a GPA of at least 3.0 in Spanish courses
- a bachelor's degree in Spanish is not required, although all candidates must demonstrate Spanish oral and written proficiency at the advanced level, as defined by the American Council on the Teaching of Foreign Languages
- two copies of all college transcripts
- three letters of recommendation

- a statement of the applicant's purpose in pursuing the degree, in Spanish; any gaps, weaknesses or special circumstances affecting an applicant's academic record should be addressed in the statement of purpose portion of the application
- a TOEFL score higher than 550 for students whose previous academic degree was completed in a non-English-speaking country

In special circumstances, the department may modify its admission standards.

Program Requirements

Candidates in Spanish must satisfy the general requirements of the Graduate School as outlined in this catalog and will be required to complete 33 hours of course work distributed with respect to one of the following two options:

Thesis option (course work + thesis):

SPAN 5000 - Introduction to Graduate Studies in Spanish

Summer 2010 Registration **SPAN 5000**

Introduces critical methodologies and critical perspectives of practices of signification such as literature and film, among others, in the context of culture and history. Prereq: Graduate standing. **Semester Hours:** 3 to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Literature/culture and linguistics, including at least 6 hours in literature/culture and 6 hours in linguistics: **15 semester hours**

Courses outside the Department of Modern Languages, as approved by advisor: **6 semester hours**

Elective, as approved by advisor: **3 semester hours**

Thesis preparation and writing: **6 semester hours**

Thesis Option Total: 33 Hours

Nonthesis option (course work):

SPAN 5000 - Introduction to Graduate Studies in Spanish

Summer 2010 Registration **SPAN 5000**

Introduces critical methodologies and critical perspectives of practices of signification

such as literature and film, among others, in the context of culture and history. Prereq: Graduate standing. **Semester Hours:** 3 to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Literature/culture and linguistics, including at least 6 hours in literature/culture and 6 hours in linguistics: **18 semester hours**

Courses outside the Department of Modern Languages, as approved by advisor: **6 semester hours**

Electives as approved by advisor (may include another course outside the Department of Modern Languages): **6 semester hours**

Nonthesis Option Total: 33 Hours

Notes:

1. No more than one undergraduate course (3 semester hours) may be applied toward the MA degree and then only in an ancillary field outside the Department of Modern Languages.
2. Students choosing the nonthesis option may elect to take three courses (9 semester hours) outside the department.

Financial Aid

The department offers a limited number of teaching assistantships for graduate students on a semester-by-semester basis. Appointment is competitive and is typically based on a student's academic credentials. Contact the department for details. For information on grants, federal work-study programs, scholarships and loans, contact the Office of Financial Aid (303-556-2886).

For further information concerning the master's degree in Spanish at UC Denver, direct inquiries to the graduate advisor.

Special Education MA

Special Education

Office: Lawrence Street Center, 701

Telephone: 303-315-6300

Fax: 303-315-6311

E-mail: education@ucdenver.edu

Web site: www.ucdenver.edu/education

Special Education Program Overview

The special education program within the initial professional teacher education division offers a special education generalist license and a special education endorsement as well as a master of arts degree in special education. All special education program options foster the development of critical reflection, inquiry about teaching and learning, as well as the breadth and depth in content knowledge necessary to work effectively in elementary and secondary classrooms. The program faculty promote the ability of teacher candidates to meet the needs of an increasingly diverse population of K–12 learners, as well as to participate productively in and lead school renewal.

The faculty in the program in special education value collaborative relationships between general and special educators, so we offer our teacher candidates the option of pursuing a dual endorsement in both general and special education to offer our teacher candidates the option of pursuing a dual endorsement in both general and special education.

Special Education Program Distinctions

Special Education Licensing Pathways

To be a licensed as a special education generalist for grades ages 5-21, a teacher candidate must hold a bachelor's degree from a four-year accepted institution of higher education, have completed the plan of study from one of the program options for the preparation of special education generalist, have passed the approved elementary content and special education assessments and have demonstrated all required state and national standards.

Program options for the special education generalist include: 1) initial licensure as a special education generalist; 2) dual licensure in either elementary or secondary education and as a special education generalist; and, 3) for those who already hold a Colorado teaching license, an added endorsement, which is also fully online. There is also an option to count these courses towards a masters in special education which will require an additional 9 semester hours of course work.

The time needed to complete the various special education generalist program options varies based on the needs of teacher candidates. In addition to traditional on-campus offerings, a wide selection of courses are available in online formats. During the

academic year, core special education courses are scheduled in late afternoons, evenings and on Saturdays to avoid conflict with teaching responsibilities.

Professional Development Schools

While in the licensure portion of the program, teacher candidates work in a partner school one to four days per week, depending on the internship. University courses are closely interrelated with the four internship experiences in which teacher candidates gradually assume responsibility for teaching. Special education teacher candidates engage in a series of four internships from the beginning of the program to the end of the program. Dual teacher candidates engage in five internships that result in a general education license at the elementary or secondary level and then complete a fifth internship and additional course work; this can be done during an additional full time semester or can be worked out flexibly as the student assumes their first teaching position to complete their special education license. The partner schools are located in several Denver metropolitan districts with most serving large populations of low-income and/or minority students, as well as a sizeable number of students for whom English is a second language and students with special needs. Each partner school is supported by a site professor from the university one day per week and by a master teacher, called a site coordinator.

Assessment

In 2000, Senate Bill 154 required all Colorado teacher education institutions to become performance based. PBA stands for performance based assessment. PBAs are created that correspond to many of the teacher education courses and concurrent practice in the series of internships. In doing so, knowledge can be evaluated as a result of coursework and performance in schools simultaneously. As teacher candidates progress through the program, they will be introduced to Performance Based Assessments (PBAs) and will be guided and supported in both course work and internships. Students seeking dual licensure are responsible for four additional PBAs associated with their second endorsement in special education.

The PBAs are:

1. Literacy Instruction & Assessment (elementary and secondary versions)
2. Mathematics Instruction & Assessment (elementary)
3. Subject Matter Content (secondary)
4. Student Profile
5. Classroom Management

6. Student Academic Performance Sample (SAPS)
7. Internship Performance Rubric (used at the end of each internship)

The four additional PBAs that all teacher candidates in the special education program are expected to proficiently complete include:

1. Assessment
2. Collaboration & Positive Behavior Supports
3. Literacy Instruction for Students with Identified Special Needs
4. The Individualized Education Program (I.E.P.) Process

Passing the PLACE or PRAXIS II Content examinations prior to the final internship is also required before a candidate is eligible for a provisional teaching license in Colorado.

Programs of Study

Due to the complex nature of state mandated influences of teacher preparation courses and constantly evaluated the program to meet student's needs, for the 2010-2011 term, please refer to the most current version of the Special Education Handbook for academic requirements for this program.

Requirements for Admission

The program conducts rolling admissions each semester. Summer and fall admission deadlines are January 15 & February 15; Fall Admission March 15. Spring admission deadlines are August 15, September 15 and October 15.

Teacher Education Information Sessions

All prospective teacher candidates are strongly encouraged to attend an information session before applying to the program. Information sessions are held twice a month lasting approximately 60-90 minutes. Advisors will be available to provide prospective students transcript reviews and pre-admission advising. To more effectively facilitate this process, please bring copies of all transcripts with you. A calendar of upcoming information sessions can be viewed on the Downtown Campus Web site. Go to www.ucdenver.edu/education to reserve a space or call the school's Student Services Center at 303-315-6300.

Teacher Education Program Requirements

- Applicants to the IPTE program must hold at least a bachelor's degree with a minimum undergraduate cumulative GPA of 2.75 for admission.
- Graduate candidates with a GPA less than 2.75 are required to take the GRE, with a combined score of 1000 on the verbal and quantitative sections; or the Miller Analogies Test, with an average score of 400–600, before consideration for admittance.
- All elementary education candidates must have a liberal arts major or equivalent content courses that provide a broad background of knowledge. *
- All secondary education candidates must have a major or major equivalent of at least 30 semester hours in their desired teaching field. *
- Registration verification of scheduled content knowledge exam or copy of official scores for PLACE or PRAXIS II.
- A complete application on file that can be obtained at information sessions, online or through the Student Services Center.

*This is determined through transcript evaluations at information sessions.

Urban and Regional Planning MURP

Overview of the Curriculum

The requirements for the master of urban and regional planning degree fall into three categories:

1. core courses required of all students (27 semester hours)
2. concentration courses (15 semester hours)
3. planning related elective courses (9 semester hours)

Completion of at least 51 semester hours is required for graduation, less transfers and other waivers approved during the first semester of study. Students are encouraged to focus primarily on core courses during their first year of study, except Studio II, which would normally be taken in the second year. Studio II serves as a capstone experience. It is offered every semester.

Beyond the core, the graduate planning program offers three 15-semester-hour concentrations around which students normally organize course selections: economic and community development planning, land use and environmental planning and urban place making. These have been carefully constructed to cover the broad terrain of the profession. Students may also, with an advisor's approval, craft their own unique

concentrations. The remaining 9 semester hours of the 51-semester-hour MURP requirement are generally used either to deepen expertise within the concentration field or to enable lateral coverage of allied or distinct fields. Those in the MURP-MPA, MURP-MBA, MURP-JD, MURP-MLA and MURP-MArch dual degree programs will find that the core of each serves as the elective base of the other, leaving few free electives. In no instances may remedial study needed to secure course or program prerequisites apply to the basic degree requirement.

The concentration is meant to insure synergy among courses elected and to lay the foundation for a satisfying and productive career and extended learning on the job. Students should bear in mind that planning is a diverse and evolving profession and that personal interests and career options often change after graduation. Moreover, the mix of courses elected normally allows some breadth in the subsequent definition of one's expertise as new graduates attempt to match their qualifications with employer requirements. Highly focused studies sometimes elevate the marketability of expertise in certain niches in the market for entry level planners, but may limit access to others. Excessive breadth may limit claims of specialized expertise; however, many positions do indeed require competent generalists.

Prerequisites

Students are expected to have achieved a basic level of computer literacy prior to enrollment, and should be familiar with PC or Apple operating systems. Acquiring some prior familiarity with digital visualization techniques is recommended for students who do not have a background in graphic communication. A higher level of proficiency is desirable for those seeking to emphasize the design elements of professional practice, most in evidence in our urban place-making concentration. Some assistance in attaining these skills may be provided in advance of the fall semester. Applicants are annually welcomed from virtually every field of prior study.

Advanced Standing

- Entering students who earned the college's bachelor of environmental design (BEnvd) degree offered on the CU Boulder campus, within five years prior to enrollment, and who have maintained a GPA of at least 3.0, will be admitted to the MURP with advanced standing. Those who graduated still earlier may receive advanced standing at the discretion of the department chair, in consultation with the program faculty.
- These students can earn the MURP degree after completing a minimum of 42 semester hours, which will include the core courses (less any waived due to prior study), an approved concentration and additional electives required to meet the overall credit requirement of 42.

- Students holding the college's BEnvd degree who also have completed, in this study, the undergraduate planning option with a GPA of at least 3.0 (and with a grade of at least 3.0 in ENVD 4320, Planning Studio III) will, in addition, receive a waiver with credit for URPL 6630, Planning Studio I. These students will earn the MURP degree upon completion of a minimum of 36 semester hours, including 21 semester hours of core courses and an additional 15 semester hours in an approved concentration.

Program Requirements

The master of urban and regional planning is the college's accredited degree for students intending to pursue careers in planning and in related fields across a wide spectrum of employment niches both within and outside government.

- With no advanced standing, candidates for the MURP degree must complete a minimum of 51 semester hours of graduate work, including all core courses (27 semester hours), a concentration (15 semester hours minimum) and additional electives (9 semester hours). Concentrations currently include: land use and environmental planning, economic and community development planning and urban place making. Students may also devise their own individual concentrations with an advisor's approval.
- Entering students who have engaged in the study or practice of planning elsewhere may petition the faculty prior or during their initial semester to determine whether any credit will be awarded or degree requirements relaxed as a result of these prior activities. A maximum of 9 semester hours of course work can be applied for advanced standing when such work was pursued at other institutions and meets prescribed level, content and quality thresholds. Graduates of the college's own BEnvd program are eligible for up to 15 semester hours of advanced standing.

Advising

Students should, early in their course of study, secure a program advisor. When that advisor also happens to serve as the concentration coordinator for the specific official concentration that the student wishes to pursue, then the faculty member should continue in both capacities. If the student wishes to pursue an official or self-devised concentration that is outside the program advisor's prime field of expertise, the student may either consult with the concentration coordinator while retaining the original program advisor, or switch all advising duties to the concentration coordinator. It will be important for the concentration coordinator to know of and approve course work in the context of the concentration itself. Monitoring student involvement in each concentration will also help the faculty to gauge demand, adjust offerings and facilitate activities outside the classroom such as visiting speakers and field trips, and to provide related services such

as data bases, software libraries and job placement information. Maintaining an active roster of interested students will also help to sustain contacts among students and with graduates in order to build career networks and engage area professionals.

Internships

Internships are encouraged though they are generally not accepted in meeting concentration requirements. Exceptions must be approved in writing by the concentration coordinator prior to commencement of the internship. No more than three credits of internship work may be applied to the 51-semester-hour degree requirement. Any student wishing to undertake an internship must comply with the procedures established in the internship materials available in the program office.

Independent Study, Thesis and Special Topic Courses

To engage in an independent study course, the student must provide the instructor with an outline of the topic, and a time schedule for its completion. The instructor may require additional supporting materials before agreeing to work with the student. Independent study courses (URPL 6840) and thesis work (URPL 6950 and URPL 6951) may meet concentration requirements, depending on the topic, upon the program advisor's approval. Special topics courses (URPL 6686) will be acceptable in at least one of the categories in the three official concentrations. A completed thesis may substitute for Studio II. Students considering thesis work must secure a thesis advisor drawn from our regular faculty, assemble a committee, secure approval of the thesis proposal before work commences, comply with the official campus form guidelines, make a final presentation, win the approval of the committee and file a bound copy in the Auraria Library.

MURP Program Planning Form (PPF)

Each student should have a copy of the Program Planning Form and use it to keep an up-to-date record of his/her program plan and progress. In addition, a copy of this form should be submitted to the program office and retained in the student's file. If you have any questions about how to use the form, contact your program advisor. No student will be certified for graduation by the department chair until a fully updated Program Planning Form is placed in the student's official file.

Core Curriculum

The core curriculum is composed of the courses listed below. Students are encouraged to focus primarily on core courses during the first year of study, except Studio II, which would normally be taken in the second year. Studio II serves as a capstone experience

and is offered every semester. We aspire to offer a diversity of Studio II options befitting the three official concentrations.

URPL 5501 - Planning Issues and Processes

Summer 2010 Registration **URP 5501**

Provides an overview of planning history and theory. The philosophical, political, and economic roots of the various theories are discussed. Ideas are placed in the context of the planning profession's history and its present aims, interests, and ethics.

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

URPL 5510 - Planning Methods I

Summer 2010 Registration **URP 5510**

Focuses on application of methodological techniques commonly used in planning practice. Course covers data collection, management, analysis, communication and presentation. Major topics include primary/secondary data analysis, database construction, descriptive and inferential statistics, sampling, probability distributions, hypothesis testing, and correlation. Cross-listed with GEOG 4000.

Semester Hours: 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

URPL 5511 - Planning Methods II

Summer 2010 Registration **URP 5511**

Addresses advanced models associated with the estimation, prediction, and prescription of conditions and trends in population, employment, land use and transportation. Examines orchestrating analytic studies that inform all phases of a project, including effective methods for engaging the public, presentation techniques, etc.

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

URPL 5520 - Urban Spatial Analysis

Summer 2010 Registration **URP 5520**

Examines urban spatial patterns and processes. Considers city as system. Major topics: defining urban/spatial/analysis; economic theory of city origin; urban land value; social space; industrial and retail structure; economic base/urban growth, sustainable development; city of mind.

Semester Hours: 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

URPL 5530 - Planning Law

Summer 2010 Registration **URP 5530**

Focuses on the legal setting for urban and regional planning in the United States and major constitutional issues in the effectuation of planning policy. Contemporary controversies are put into the larger context of attempts by the judicial system to redefine the balance between individual rights and governmental power in an increasingly weakened society. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

URPL 6630 - Planning Studio I

Summer 2010 Registration **URP 6630**

Focuses on plan design in urban and regional planning and explores basic concepts, techniques, and issues related to urban planning, urban design, site planning, and environmental awareness. **Semester Hours:** 6to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

URPL 6631 - Planning Studio II

Summer 2010 Registration **URP 6631**

Focuses on plan-making related to urban and regional planning. An understanding of the plan-making process is emphasized. Students have direct experience with the various steps in planning, including data-gathering, goal-setting, identification of alternatives, analysis, synthesis, and presentation of the plan. The plan may be for a city sector, a neighborhood, an entire community, a region, or it may be a policy plan. Where possible, students work with an actual client. Prereq: URPL 6630. **Semester Hours:** 6to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

Areas of Concentration

The concentration is meant to insure synergy among courses elected, and to lay the foundation for a satisfying and productive career and extended learning on the job. Students should bear in mind that planning is a diverse and evolving profession and that personal interests and career options often change after graduation. Moreover, the mix of courses elected normally allows some breadth in the subsequent definition of one's expertise as students attempt to match qualifications with employer requirements.

Highly focused studies will sometimes elevate marketability in certain niches for an entry level planner, but may limit access to others. Excessive breadth may limit claims of specialized expertise, however, many positions do indeed require competent generalists.

The program supports three official concentrations:

Economic and Community Development Planning

This concentration focuses on:

- The marriage of community development and urban economic development. Communities, regions and nations suffering economic insufficiency, stagnation or decline—evidenced in under or unemployment, poverty, diminished opportunity, environmental decline or fiscal decay—often seek remedies for these shortcomings through strategic economic development planning.
- In this concentration, considerable attention will be given to means for assessing economic impact and apportioning growth's gains across people, places and sectors.

Land Use and Environmental Planning

This concentration focuses on:

- Practices and innovations in land use regulation and public investment
- Analytical methods including transportation modeling, land market evaluation, environmental impact analysis and use of decision support systems
- Administration of policies and plans
- Management of collaborative processes across diverse interest groups
- Planning politics and governance

Urban Place Making

This concentration focuses on responding effectively to the following recent trends and demands on the profession:

- Stronger residential real estate markets in urban centers, especially in the Front Range communities
- Planning for mixed-use and high density neighborhoods
- Necessity for understanding of urban form and the interactions between uses, facilities and services within complex urban contexts
- Higher levels of public participation
- Wider scope of in design review and increased level of discretion that necessitates design creativity in review processes.

A set of foundation courses is identified in each concentration, plus additional supporting electives.

Course Sequence

Applicants may be admitted for both the fall and spring semesters. The schedule below posits a fall onset. If study is commenced in the spring the student may not encounter Planning Methods I until the following fall, so Planning Methods would be deferred to the third semester of study since we now encourage students to take these in the numeric sequence. Planning Issues and Processes is currently offered only in the fall and is the usual “door of entry” to the program. It is possible however that we will move to offer sections of this course during both semesters. Students may take more than 12 semester hours of study and so may progress faster than the template below would indicate. Generally taking more than 15 hours is ill-advised. Under some circumstances—and on a space-available basis—Studio I may be taken during the first semester of study. Both Studio I and II are offered every semester, and additional sections will be added as demand warrants to preserve an acceptable class size. We offer numerous courses beyond the core, and also designate additional options in other departments, elsewhere within our college and across the campus.

First Year

Fall

URPL 5501 - Planning Issues and Processes

Summer 2010 Registration **URP 5501**

Provides an overview of planning history and theory. The philosophical, political, and economic roots of the various theories are discussed. Ideas are placed in the context of the planning profession's history and its present aims, interests, and ethics. **Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

URPL 5510 - Planning Methods I

Summer 2010 Registration **URP 5510**

Focuses on application of methodological techniques commonly used in planning practice. Course covers data collection, management, analysis, communication and presentation. Major topics include primary/secondary data analysis, database construction, descriptive and inferential statistics, sampling, probability distributions, hypothesis testing, and correlation. Cross-listed with GEOG 4000. **Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

URPL 5530 - Planning Law

Summer 2010 Registration **URP 5530**

Focuses on the legal setting for urban and regional planning in the United States and major constitutional issues in the effectuation of planning policy. Contemporary controversies are put into the larger context of attempts by the judicial system to redefine the balance between individual rights and governmental power in an increasingly weakened society. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.
Elective course (3 semester hours)

Total: 12 Hours

Spring

URPL 5511 - Planning Methods II

Summer 2010 Registration **URP 5511**

Addresses advanced models associated with the estimation, prediction, and prescription of conditions and trends in population, employment, land use and transportation. Examines orchestrating analytic studies that inform all phases of a project, including effective methods for engaging the public, presentation techniques, etc. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

URPL 5520 - Urban Spatial Analysis

Summer 2010 Registration **URP 5520**

Examines urban spatial patterns and processes. Considers city as system. Major topics: defining urban/spatial/analysis; economic theory of city origin; urban land value; social space; industrial and retail structure; economic base/urban growth, sustainable development; city of mind. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

URPL 6630 - Planning Studio I

Summer 2010 Registration **URP 6630**

Focuses on plan design in urban and regional planning and explores basic concepts, techniques, and issues related to urban planning, urban design, site planning, and environmental awareness. **Semester Hours:** 6to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 12 Hours

Second Year

Fall

Concentration Courses (9 semester hours)

Electives (6 semester hours)

Total: 12 Hours

Spring

URPL 6631 - Planning Studio II

Summer 2010 Registration **URP 6631**

Focuses on plan-making related to urban and regional planning. An understanding of the plan-making process is emphasized. Students have direct experience with the various steps in planning, including data-gathering, goal-setting, identification of alternatives, analysis, synthesis, and presentation of the plan. The plan may be for a city sector, a neighborhood, an entire community, a region, or it may be a policy plan. Where possible, students work with an actual client. Prereq: URPL 6630. **Semester Hours:** 6to 6
Registration is changing. Visit our website for details ucdenver.edu/registration.

Concentration Courses (6 semester hours)

Total: 12 Hours

* Both studios are offered in the fall and spring semesters.

Dual Degree Options

Students may enroll in dual degree programs with public administration (MURP+MPA), law (MURP+JD) and business (MURP+MBA). In addition, dual degree options are also available combining the MURP with landscape architecture (MLA) and architecture (MArch). A new dual degree combining planning and public health (MURP+MPH) is under development combining strengths on both the Denver and Anschutz Medical Campuses of UC Denver. The dual degree with law combines study on the Denver Campus and in the CU Boulder Law School. Interested students should consult the college Web site for additional information regarding these options. Overall, applicants to any dual option must apply to and gain separate admission to each degree program. Once admitted the student can graduate from neither until the work is completed for both degrees. Synergies enable a significant reduction in both the time and credit required to complete these pairings than would be needed if each were separately pursued. If the student should opt to drop either member of the dual set, he/she must then fulfill the stand-alone requirements of the remaining degree.

Certificate Programs

The college offers official certificate programs in design build, geospatial information science and historic preservation. Consult our Web site for details on each of these. The first is more attuned to the requirements of architectural students, whereas the latter two could suffice—with the approval of the department chair—as a basis for a concentration satisfying the MURP concentration requirement. Some students may wish to augment their 51-semester-hour MURP with additional course work in order to complete any one of these certificate programs.

Urban Design MUD

► Graduate School Rules apply to this program

Program Information: Jeremy Németh

Telephone: 303-556-3688

The master of urban design (MUD) is an intensive, one-year, interdisciplinary postprofessional degree program intended for talented persons already holding a professional degree in architecture, landscape architecture or urban and regional planning (e.g. BArch, BLA, MArch, MLA, MURP/MUP or equivalents).

Urban design is an integrative activity focused on creating beautiful, vital, functional, environmentally sustainable and socially just public places. By contextualizing architecture while providing a means of implementation for planners and landscape architects, urban design occupies a realm supportive of these fields while simultaneously generating its own responses to the most pressing urban issues. Although urban designers often intervene on the neighborhood scale, the program fosters mastery of inclusive and participatory community design processes and the attendant means for effectively implementing physical plans at the metropolitan, neighborhood, district, corridor, street and block scale.

The MUD program focuses on creating sustainable urban infrastructure and interprets the city as a set of overlaid and integrated systems. The program views urban designers playing a vital role in the production of the built environment because of their dual responsibility to illustrate preferable design solutions and shape the regulatory patterns governing future development. The inherent interdisciplinarity of this approach brings students into frequent contact with professors, practitioners and experts in urban planning, architecture and landscape architecture, and encourages students to forge their own tailored degree by pursuing an independent study and a variety of electives in the college. Students relate their independent study projects to one of the college's fields

of expertise, such as participatory design in distressed communities, postindustrial landscapes, “green streets,” vernacular design or historic preservation.

Denver and the American West provide an exciting urban laboratory as we face a number of complex and difficult challenges (e.g. water scarcity, urban sprawl). Students undertake at least one studio in the Denver metropolitan region while remaining cognizant that similar systems and challenges exist in a variety of domestic and international contexts. As a capstone project during their final term, students enroll in an international studio course, preparing for this studio by taking a mandatory seminar in global design history and practice.

The MUD program is informed by innovations in practice. Tested techniques and methods are brought into classroom and studio settings to be evaluated, refined and disseminated in ways that prepare graduates for highly innovative work as critical, reflective urban designers employed in both the public and private sectors. In addition, each spring semester brings a visiting urban design fellow to the college. This practitioner-in-residence is selected from a highly competitive pool of designers from around the world. The selected practitioner teaches an advanced urban design studio and supervises independent study projects.

Prerequisites

Students are required to hold a first professional degree in architecture, landscape architecture or urban and regional planning (e.g. BArch, BLA, MArch, MLA, MURP/MUP or equivalents).

Admissions

The Master of Urban Design Admissions Committee accepts applications for Fall semester entry. Right now, the program does not allow entry to the program in any Spring semester. The general requirements the Admissions Committee considers are:

- Evidence of a professional degree (BArch, BLA, MArch, MLA, MURP/MUP) or equivalent
- At least a 3.0 undergraduate or graduate cumulative GPA
- A portfolio (8.5 × 11-inch bound document) that includes:
 - Your statement of purpose (which should include your educational and professional goals and objectives)
 - Résumé (which describes your educational and professional background)
 - Examples of student or professional projects

- A list of courses that you have taken that relate to design and planning
- A writing sample from previous professional or academic work

Program Requirements

The requirements for the postprofessional master of urban design (MUD) degree depend on your current standing and educational background. The basic study plan is a 36-semester-hour plan that includes two elective courses. Students obtaining a first professional degree in University of Colorado Denver College of Architecture and Planning may receive up to 12 semester hours of advanced standing.

Core Requirements

URBN 6610 - Infrastructure Studio

Summer 2010 Registration **U D 6610**

Introduces urban structure and morphology, presenting city as complex, ecological organism comprised of interrelated systems. Working on urban/metropolitan scale, students deconstruct city into series of infrastructural layers, then recompose and restructure it in a more integrated fashion. **Semester Hours:** 6to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

URBN 6611 - Regulatory Studio

Summer 2010 Registration **U D 6611**

Advances understanding of tools, methods and practice of urban design. Operating on neighborhood scale, studio emphasizes proactive role designers play in shaping regulations. Students consider real estate development economics, aesthetic criteria, historic preservation, and methods of effective community participation. **Semester Hours:** 6to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

URBN 6612 - Urban Synthesis Studio

Summer 2010 Registration **U D 6612**

Synthesizes learning from previous studios, emphasizing exploration and experimentation on variety of scales. Civic engagement is paramount component, with the studio taking place in a variety of challenging contexts, including metropolitan

regions in China, India and the Middle East.**Semester Hours:** 6to 6
Registration is changing. Visit our website for details ucdenver.edu/registration.

URBN 6640 - History of the City

Summer 2010 Registration U D 6640

Introduces students to the history of global cities through selected typologies. Explores similarities and differences among cities considered against the larger cultural, political and socio-economic envelope of which they are part. Provides awareness of origins, growth and evolution of urban form.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

URBN 6641 - Design Process/Practice

Summer 2010 Registration U D 6641

Advances current practice by exploring innovative methods of design analysis, production, representation, and communication. Community participation and civic engagement are integral components of seminar, and students are introduced to business of urban design through contact with prominent urban design professionals.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

URBN 6642 - Design Policy/Regulation

Summer 2010 Registration U D 6642

Argues that a role of urban designers is to shape built environment through combination of physical intervention and policy development. Students review urban economic and real estate trends and assess zoning/land use regulations to understand impacts on built environment quality.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

URBN 6840 - Independent Study: URBN

Summer 2010 Registration U D 6840

Studies initiated by students or faculty and sponsored by a faculty member to investigate a special topic or problem related to urban design.**Semester Hours:** 1to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

or

URBN 6930 - Urban Design Internship

Summer 2010 Registration U D 6930

Designed to provide professional practice experience in urban design. Emphasis on actual work experience in settings with client groups as students assist them in

determining solutions. Program directors approval required. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 30 hours

Course Sequence

Fall

URBN 6610 - Infrastructure Studio

Summer 2010 Registration **U D 6610**

Introduces urban structure and morphology, presenting city as complex, ecological organism comprised of interrelated systems. Working on urban/metropolitan scale, students deconstruct city into series of infrastructural layers, then recompose and restructure it in a more integrated fashion. **Semester Hours:** 6to 6
Registration is changing. Visit our website for details ucdenver.edu/registration.

URBN 6640 - History of the City

Summer 2010 Registration **U D 6640**

Introduces students to the history of global cities through selected typologies. Explores similarities and differences among cities considered against the larger cultural, political and socio-economic envelope of which they are part. Provides awareness of origins, growth and evolution of urban form. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

URBN 6641 - Design Process/Practice

Summer 2010 Registration **U D 6641**

Advances current practice by exploring innovative methods of design analysis, production, representation, and communication. Community participation and civic engagement are integral components of seminar, and students are introduced to business of urban design through contact with prominent urban design professionals. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

Spring

URBN 6611 - Regulatory Studio

Summer 2010 Registration **U D 6611**

Advances understanding of tools, methods and practice of urban design. Operating on

neighborhood scale, studio emphasizes proactive role designers play in shaping regulations. Students consider real estate development economics, aesthetic criteria, historic preservation, and methods of effective community participation. **Semester Hours:** 6to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

URBN 6642 - Design Policy/Regulation

Summer 2010 Registration U D 6642

Argues that a role of urban designers is to shape built environment through combination of physical intervention and policy development. Students review urban economic and real estate trends and assess zoning/land use regulations to understand impacts on built environment quality. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

URBN 6840 - Independent Study: URBN

Summer 2010 Registration U D 6840

Studies initiated by students or faculty and sponsored by a faculty member to investigate a special topic or problem related to urban design. **Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

or

URBN 6930 - Urban Design Internship

Summer 2010 Registration U D 6930

Designed to provide professional practice experience in urban design. Emphasis on actual work experience in settings with client groups as students assist them in determining solutions. Program directors approval required. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Summer

URBN 6612 - Urban Synthesis Studio

Summer 2010 Registration U D 6612

Synthesizes learning from previous studios, emphasizing exploration and experimentation on variety of scales. Civic engagement is paramount component, with the studio taking place in a variety of challenging contexts, including metropolitan regions in China, India and the Middle East. **Semester Hours:** 6to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

Dual Degree Programs

Business Administration/Business MBA/MS

The Business School also offers MBA/MS dual degree programs for each function of business. The program consists of a minimum of 66 semester hours of graduate work and leads to both an MBA degree and an MS degree, which must be completed within seven years and one semester. See MS program pages for a list of functional areas. Contact a graduate academic advisor for details, 303.315.8200

Business Administration/International Management MBA/MIM

This unique combined degree is offered in cooperation with the American Graduate School of International Management (the Thunderbird School) located in Glendale, Arizona, a suburb of Phoenix. Thunderbird has established eight dual programs with universities in the United States. The student applies independently to both schools and, if admitted, earns the MBA from UC Denver and a master of international management degree from Thunderbird. The student begins the program at UC Denver and, after completing 36 semester hours (12 courses) required for the MBA, transfers to the Thunderbird campus and takes a minimum of 30 semester hours (10 courses) for the MIM. When all dual degree requirements are finished, the student is awarded a diploma from each school. For more information about admission to the MBA on the Downtown Campus, refer to the appropriate section of this chapter. For specifics about the dual MIM application process, call Thunderbird's associate dean of admissions, Stephen R. Beaver, 1-800-848-9084.

Business Administration/Medicine MBA/MD

The MBA/MD is for medical students at the University of Colorado School of Medicine who wish to pursue a career in administrative medicine or who seek additional training in administration or business. The program is designed to be completed in five years, at which time both the MD and MBA degrees would be awarded. Candidates for the

MBA/MD complete 36 semester hours of course work in the business school and all requirements for the MD.

Business Administration/Urban and Regional Planning MBA/MURP

This dual degree enables students to obtain both the master of urban and regional planning offered by the College of Architecture and Planning and the master of business administration offered by the Business School upon completion of 78 semester hours. The dual degree program is composed of the core curricula in each program plus a set of electives jointly approved by the student's advisors.

Business/Business MS/MS

Students may concurrently pursue dual MS degrees in any two fields of business. The program consists of a minimum of 51 semester hours of core course work, which must be completed within a period of seven years. In addition, candidates for the dual degree must satisfy all the common body of knowledge (CBK) and background requirements prescribed for each degree. Waivers may be approved for some of the CBK or background upon transcript evidence of equivalent previous undergraduate or graduate course work. For more information contact a graduate staff advisor, 303-315-8200.

Chemistry BS/MS

While students are completing a BS degree in chemistry, they may also complete some of the requirements for an MS degree in chemistry under the following guidelines:

- The student must apply and be accepted for participation in the BS/MS program prior to completion of the BS degree and be advised by both the undergraduate and graduate advisors.
- Up to 9 semester hours of graduate-level course work may be taken as an undergraduate and applied toward the MS degree. This course work may not be applied toward the BS degree or ACS certification requirements for the BS degree.
- Up to 3 semester hours of independent study (research) may be applied toward the graduate degree if that research is expanded and continued for a portion of the master's thesis research. This requires approval of the student's graduate

research advisor in chemistry, the chemistry graduate program director and the CLAS associate dean for graduate studies.

- The chemistry department will waive the requirement for qualifying examinations in each area of chemistry for which the student has completed the undergraduate sequence of courses and laboratories at the Downtown Campus with grades of *B* or better for each course.
- The student must apply for and be admitted to the graduate program in chemistry beginning the semester immediately following completion of the BS degree in chemistry at the Downtown Campus.

This program allows undergraduate students who have begun their research as undergraduates to complete up to 12 semester hours (with approval of the graduate dean) toward the 30 semester hours required for a Plan I MS degree in chemistry while they are still completing their BS degree. This makes it possible for students to complete an MS degree in chemistry in only one year beyond the BS degree in chemistry. Students entering the program through the BS/MS program option must fulfill all of the requirements of the Plan I or Plan II graduate programs.

Criminal Justice BA/MCJ

The dual BA/MCJ program is designed to allow students to work concurrently toward the BA in criminal justice and the master in criminal justice (MCJ). Graduate credit hours earned while enrolled in the BA/MCJ program can be counted toward both the bachelor of arts and master of criminal justice. This program offers high-achieving students the opportunity to complete their undergraduate and graduate degrees in criminal justice in five years.

Admissions Requirements and Process

Interested students should contact their BA academic advisor as early as possible to ensure proper planning for the five year degree.

Eligibility Requirements

Both current UC Denver students and new transfer students are eligible to apply after meeting the following:

- Currently enrolled in the School of Public Affairs as a criminal justice major
- Completed the University of Colorado Denver's core curriculum
- Completed 60 semester credit hours

- Completed the following 12 semester credit hours in criminal justice: CRJU 1001 Introduction to Criminal Justice, CRJU 2041 Crime Theory and Causes, CRJU 3100 Criminal Justice Research Methods, and CRJU 3150 Statistics for Criminal Justice (transfer criminal justice courses must have been approved and accepted toward the major).
- Minimum 3.0 cumulative GPA
- Minimum 3.5 cumulative GPA in criminal justice courses
- Completed or Scheduled official GRE or LSAT exam

Application Process

Students can apply for the joint program anytime from their second year forward, but students will most likely apply during the second semester of their junior year. We require students submit all application materials by Oct. 15 for admission to the spring semester and by March 15 for admission to the fall semester for full consideration. The following steps should help in the application process:

1. Plan ahead when scheduling courses through the junior year. All four of the required criminal justice courses and all of the student's core education requirements must be completed by the end of the student's junior year.
2. At the beginning of the semester in which the student is applying to the program, the student should approach a criminal justice faculty member about writing a letter of recommendation. The student should also begin working on a personal statement of purpose. The following guidelines should help with writing the statement.
 - Length 1 to 2 pages
 - The statement should describe:
 - Applicant's reasons for undertaking graduate study in criminal justice
 - Applicant's future career plans
 - Planned area of concentration within criminal justice
3. By Oct 15 of the fall semester or March 15 of the spring semester the student must submit the following items to the undergraduate coordinator:
 - Personal statement of purpose
 - One letter of recommendation from a faculty member

- School of Public Affairs' BA/MCJ application form
- Official GRE or LSAT scores

Admission Criteria

Admission to the BA/MCJ program is competitive. Applicants will be evaluated on the following:

1. Grade point average (overall and in criminal justice course work)
2. Grade trend (improving, consistent, or declining)
3. Total number of credit hours completed
4. Likelihood of success and persistence based from the Statement of Intent and Reference Letter
5. Official GRE or LSAT scores

Students who are not admitted to the BA/MCJ program are eligible to reapply after completing an additional 12 semester credit hours. *Students can apply and be considered for admission to the dual BACJ/MCJ program a maximum of two times.*

BA/MCJ Program Matriculation

Students must successfully complete (B, or better) a minimum of 6 semester credit hours of graduate criminal justice course work each academic year following admission to the BA/MCJ program. A maximum of 15 graduate semester credits can be completed as a BA/MCJ student, for dual credit.

Students must maintain a minimum 3.0 cumulative grade point average for all course work and a 3.0 grade point average for courses in criminal justice.

The School of Public Affairs reserves the right to rescind a BA/MCJ student's admittance to the dual program *if at any point the students' grade point average falls below the requirements lists above.*

Tuition and Fees

Students will be assessed tuition and fees at the undergraduate rate until the bachelor of arts in criminal justice degree is conferred.

Students will assess tuition and fees at the graduate level upon formal acceptance to the master of criminal justice program.

Program Requirements

General BA/MCJ Degree Program Requirements

- 144 total semester credit hours passed
- 34-36 semester credit hours in UC Denver general education core curriculum
- 46-48 semester credit hours in general electives
- 21 semester hours of undergraduate criminal justice course work
- 18 upper-level (3000 or higher) semester credit hours in criminal justice
- 45 total semester hours of upper-division course work (3000 and above)
- Minimum 3.0 CU cumulative grade point average in undergraduate criminal justice courses
- Full acceptance to the Graduate School and the master in criminal justice program
- Minimum 36 semester hours of graduate-level course work (5000 and above)
- Minimum of 30 hours of resident credit; 21 out of the last 30 hours in resident course work
- Minimum of a B (3.0) in each required core MCJ course
- Minimum of 3.0 CU cumulative grade point average in all graduate level courses
- Successful completion of master of criminal justice capstone/advanced seminar or thesis
- Fulfillment of all college and major requirements

Degree Confirmation

Students are eligible to receive the BA in criminal justice degree once they have successfully completed 120 semester hours and all UC Denver undergraduate degree requirements. The MCJ will be conferred once the student has completed all requirements of the master of criminal justice degree.

Economics/Finance MA/MS Dual Degree

- Graduate School Rules apply to this program

For students interested in combining the quantitative skills of an economics degree with the specific applications of a business degree, we offer an MA economics/MS finance dual degree. This 42-semester-hour program is offered jointly with the Business School. It is a "dual" degree, meaning that students who complete the program earn two master's degrees: MA in economics and MS in finance. Students must be admitted separately to both the MA program in economics and MS program in finance; they may apply to both programs at the same time or apply to the economics program first, and then to the finance program at the end of their first semester, or vice versa. Both programs must be completed in the same semester to take advantage of the dual degree program. Further information about this program can be obtained from either the Department of Economics or the Business School. [Click here for admissions information for economics.](#)

The dual degree program is intended to create highly-skilled research professionals with considerable econometric skill as well as familiarity with their chosen financial institutions. Given the similarity in course work within the two programs, there can be considerable time savings for the student. Essentially, the program allows students to complete the two programs that separately would require 60 hours of course work with 42 hours of combined course work.

Degree Requirements

Core Courses

ECON 5073 - Microeconomic Theory

Summer 2010 Registration **ECON 5073**

Fundamental features of partial equilibrium theory of the firm, consumer and market. General equilibrium and welfare economic topics are examined. Features of the models that have empirical applications are accented. Prereq: ECON 5803. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 5083 - Macroeconomic Theory

Summer 2010 Registration **ECON 5083**

Examines the major macroeconomic models within a common framework. Differences in the foundations, structure, and policy implications of the competing models are analyzed. Prereq: ECON 5803 or permission of the instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 5803 - Mathematical Economics

Summer 2010 Registration **ECON 5803**

Introduces the use of mathematics in advanced micro- and macro-economic analysis. Emphasis on model-building techniques, solution methods, and economic interpretations. Prereq: ECON 4071 and 4081. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 5813 - Econometrics I

Summer 2010 Registration **ECON 5813**

Theory and application of statistical techniques used to analyze economic problems. Topics include simple and multiple regression models, simultaneous equation models, and the problems encountered in their application. Students formulate models, obtain data, estimate models, interpret results and, forecast. Prereq: ECON 4811 or equivalent. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 5823 - Econometrics II

Summer 2010 Registration **ECON 5823**

Second course in the econometrics sequence, covering intermediate topics in cross-section and time series analysis. Topics include limited dependent variables, autoregressive and distributed lag models, longitudinal data analysis and unit roots, co-integration and other time-series topics. Prereq: ECON 5083 and 5813. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 6073 - Research Seminar

Summer 2010 Registration **ECON 6073**

Focuses on training students to do rigorous research in economics. Topics include the analysis of large data sets, further development of econometric skills, and writing a research paper. Note: Students attend lectures and also meet regularly with the instructor in the process of doing a sophisticated research project. Prereq: ECON 5823 and 6053. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

BUSN 6640 - Financial Management

Summer 2010 Registration **BUSN 6640**

This course is concerned with the business firm's decisions to make investments and to finance its operations. Students learn to use the tools and theories underlying business valuation, cost of capital, capital budgeting and capital structure. Students will learn to evaluate a firm's financial position through the examination of its financial statements and to prepare pro forma statements for the firm. Prereq: BUSN 6530 or FNCE 6290,

BUSN 6620 (both may be taken concurrently) and BUSN 6550 completed prior and strictly enforced. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FNCE 6300 - Macroeconomics and Financial Markets

Summer 2010 Registration **FNCE 6300**

Covers the U.S. financial system in the global economy. Specific topics include financial institutions, money creation and monetary policy; the Federal Reserve System and its operation; the international financial system; interest rate determination, yield curves, and their relation to fiscal policy; the role of households and business in financial markets; stock markets; and money markets and instruments. (Required for the M.S. in Finance degree.) Prereq: BUSN 6620 (may be taken concurrently if student has previous economics coursework). **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FNCE 6330 - Investment Management Analysis

Summer 2010 Registration **FNCE 6330**

In this course students will learn investment theories and how to apply them to portfolio management. Topics covered include asset allocation, security markets, the analysis and use of investment information, risk analysis and security valuation. This course is required for the M.S. in Finance degree. Prereq: BUSN 6620 and BUSN 6640. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 27 Hours

Electives

Four 6000-level finance elective courses: **12 semester hours**

One 5000-level or above economics elective course: **3 semester hours**

Total: 15 Hours

Dual Degree Total: 42 Hours

Economics/Public Administration MA/MPA Dual Degree

Admissions Advisor: Brian Duncan (brian.duncan@ucdenver.edu)

Schedule Advisor: Dan Rees (daniel.rees@ucdenver.edu)

The fields of public administration and economics are inextricably linked. Economists provide much of the theory and analytic foundation that administrators use to evaluate and implement policy. Given that the capital of the state of Colorado is in Denver, there is great need for administrators that fully understand methods of program evaluation and have the theoretical background needed to forecast how individuals and institutions will respond to new proposals. Similarly, good theory and practice must take into account how the proposals will be implemented and results interpreted. Both administrators and economists need to be engaged in constructive dialogue for either to be fully effective.

Students interested in completing the dual degree in economics and public administration *must apply separately* to each program, meet the admission requirements of each program, and *be accepted by* each program. If one program accepts a student for the dual degree but the other program does not, then the student may not graduate under the dual degree program. It is possible for students currently admitted to one program to learn about the dual degree and choose to apply after admission to either economics or the School of Public Affairs (SPA).

Admission Requirements

Deadlines for Application:	Fall	June 1
	Spring 1	December

Applicants must:

- Meet all general requirements of the Graduate School (including a 2.50 undergraduate grade-point average).
- Submit three letters of recommendation (at least two of your letters of recommendation should come from individuals who are familiar with your scholarly record)
- Submit two copies of official transcripts from all colleges attended
- Have completed 15 credit hours of undergraduate economics (including intermediate microeconomic theory and intermediate macroeconomic theory)

- Have completed courses in calculus and statistics
- All applicants, international and domestic, must submit GRE scores regardless of prior degrees, course work, or work experience. **The institution code for UCD is 4875.** Most students admitted to the MA program score 690 or above on the quantitative section of the GRE, but there is not a minimum GRE cutoff score.
- International students must submit TOEFL scores. The required minimum score is 197 (computer-based TOEFL), 71 (IBT-based TOEFL), 525 (paper-based TOEFL), or 6.0 (IELTS). **The institution code for UCD is 4875.**

The Department of Economics accepts late applications after these official deadlines. However, there is no guarantee that a late application will be processed in time for the start of the semester. Students are encouraged to apply well before the application deadline.

International students who apply after the June 1 or November 1 deadline may not have time to obtain a student visa. Being admitted to the MA program in economics does not guarantee that a student will receive a student visa in time for the start of the semester. International students who are admitted to the MA program, but fail to obtain a visa in time, may defer admission for up to one year. All questions about student visas should be directed to the Office of International Education.

Course Requirements

The requirements for the dual degree in economics and public administration include completing 21 credit hours in ECON and 27 credit hours in SPA (48 total credit hours).

Core Courses

ECON 5073 - Microeconomic Theory

Summer 2010 Registration **ECON 5073**

Fundamental features of partial equilibrium theory of the firm, consumer and market. General equilibrium and welfare economic topics are examined. Features of the models that have empirical applications are accented. Prereq: ECON 5803. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 5083 - Macroeconomic Theory

Summer 2010 Registration **ECON 5083**

Examines the major macroeconomic models within a common framework. Differences in the foundations, structure, and policy implications of the competing models are

analyzed. Prereq: ECON 5803 or permission of the instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 5803 - Mathematical Economics

Summer 2010 Registration **ECON 5803**

Introduces the use of mathematics in advanced micro- and macro-economic analysis. Emphasis on model-building techniques, solution methods, and economic interpretations. Prereq: ECON 4071 and 4081. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 5813 - Econometrics I

Summer 2010 Registration **ECON 5813**

Theory and application of statistical techniques used to analyze economic problems. Topics include simple and multiple regression models, simultaneous equation models, and the problems encountered in their application. Students formulate models, obtain data, estimate models, interpret results and, forecast. Prereq: ECON 4811 or equivalent. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 5823 - Econometrics II

Summer 2010 Registration **ECON 5823**

Second course in the econometrics sequence, covering intermediate topics in cross-section and time series analysis. Topics include limited dependent variables, autoregressive and distributed lag models, longitudinal data analysis and unit roots, co-integration and other time-series topics. Prereq: ECON 5083 and 5813. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 5001 - Introduction to Public Administration and Public Service

Summer 2010 Registration **P AD 5001**

Examines the fundamental theories, structures, and processes of governance in the United States. Explores the constitutional foundations and functions of legislative, administrative, and legal institutions. Covers topics such as federalism, public-private relations, and comparative public administration. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 5002 - Organizational Management and Change

Summer 2010 Registration **P AD 5002**

This course provides coverage of those elements which, when combined, create a

resilient learning organization. Topics include, but are not limited to, organization theory and design, managing human capital, group development and performance, inter- and intra-group communication, information management, and ethical decision making.

These topics are presented within the framework of how to organize people to enhance the delivery of public services. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 5003 - Research and Analytic Methods

Summer 2010 Registration P AD 5003

Examines quantitative research methods used to answer questions and test hypotheses in public and non-profit settings. Methods covered include identifying and reviewing scholarly literature; formulating research questions; selecting appropriate design, data collection and sampling strategies; and analyzing data. Topics include causal and descriptive designs, interview and survey methods, and descriptive and inferential statistics such as chi square and regression. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

PUAD 5004 - Economics and Public Finance

Summer 2010 Registration P AD 5004

Uses economics to explore public and private sector roles, and the allocation of resources in the public sector. Introduces the concepts of public goods, market failure and externalities. The effects of taxation and subsidies on consumer and firm behavior are analyzed. Also covers cost benefit analysis and national, state, and local budgeting methods. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 5005 - The Policy Process and Democracy

Summer 2010 Registration P AD 5005

Provides an introduction to theoretical and applied studies of the policy process. The policy process includes the manner in which (I) issues are conceptualized and brought to the government as problems needing action; (II) policies are designed and selected; and (III) the enacted policies are implemented, monitored, evaluated, and revised. The policy process also includes the study of politics, especially how government and non-government actors interact and exercise power in allocating societal benefits and burdens. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 5006 - Leadership and Professional Ethics

Summer 2010 Registration **P AD 5006**

Examines theories of leadership applied to the public and non-profit sectors and the skills and processes employed by effective leaders. The course also considers ethical theories as applied to problems in the public and non-profit sectors; emphasizes critical thinking to address value conflicts, notably in the context of a pluralistic society; and teaches moral reasoning as a practical professional skill. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 6073 - Research Seminar

Summer 2010 Registration **ECON 6073**

Focuses on training students to do rigorous research in economics. Topics include the analysis of large data sets, further development of econometric skills, and writing a research paper. Note: Students attend lectures and also meet regularly with the instructor in the process of doing a sophisticated research project. Prereq: ECON 5823 and 6053. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

PUAD 5361 - Advanced Seminar in Public Policy and Management

Summer 2010 Registration **P AD 5361**

In this seminar, students demonstrate their mastery of the knowledge and skills acquired in core courses, through the conduct of a client-based project. Students in a concentration must undertake a project related to that concentration. Students also make a juried oral presentation of the professional paper which reports project findings. This is the cumulative opportunity for students to apply concepts, theories, and research skills gained in the program to professional practice. (Successful completion of this course is an M.P.A. degree program requirement.) Cross-listed with PUAD 7361. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Core Total: 33 Hours

Electives

If the student takes ECON 6073, then 3 hours of elective credits must come from economics and 12 hours from public administration.

If the student takes PUAD 5361, then 6 hours of elective credits must come from economics and 9 hours from public administration.

All elective courses must be at the 5000 level and above.

Electives Total: 15 Hours

Dual Degree Total: 48 Hours

Finance/Economics MS/MA

Students may concurrently pursue an MA in economics offered by the College of Liberal Arts and Sciences and the MS in finance offered by the Business School. Students must complete 27 semester hours of a combination core, 15 semester hours of combination electives and 3 semester hours of a 5000- or 6000-level economics elective.

Public Administration MPA/JD

The School of Public Affairs and the University of Colorado at Boulder School of Law jointly sponsor a dual degree program leading to the simultaneous granting of the master of public administration (MPA) and juris doctor (JD) degrees. The program may be of particular interest to students who wish to practice law within the public sector, obtain a senior administrative post, represent public-sector clients, represent private-sector clients in transactions with government agencies and institutions and/or develop scholarly expertise in the relationship between law and public administration.

Interested persons must separately apply to and be admitted by both SPA and the School of Law. Upon admission, students may begin full-time study at either SPA or the School of Law; however, law study must be initiated no later than the beginning of the second year of enrollment in the program, and the first year of law study must be taken in its entirety and exclusive of nonlaw course work.

Through the choice of electives, students may develop a limited substantive specialization within the study of law and public administration. The dual degree program is structured to allow for 12 semester hours from the law school to be accepted as electives in the 36-semester-hour MPA program, and 12 semester hours from SPA to be accepted into the law school's 89-semester-hour JD program. Students are thus simultaneously awarded both degrees with a cumulative total of 101 semester hours; the program therefore allows students to complete all dual degree requirements in approximately four years of full-time study. Students without prior public-sector work experience will be required to complete an internship in an appropriate governmental institution or closely related nonprofit organization.

Public Administration/Economics

MPA/MA

The fields of public administration and economics are inextricably linked. Economists provide much of the theory and analytic foundation that administrators use to evaluate and implement policy. Given that the capitol of Colorado is in Denver, there is great need for administrators that fully understand methods of program evaluation and have the theoretical background needed to forecast how individuals and institutions will respond to new proposals. Similarly, good theory and practice must take into account how the proposals will be implemented and results interpreted. Both administrators and economists need to be engaged in constructive dialogue for either to be fully effective.

Therefore the Department of Economics of the College of Liberal Arts and Sciences and the School of Public Affairs jointly sponsor a dual degree program. This program enables students to simultaneously earn an MA degree in economics with a master of public administration (MPA).

The dual degree program provides students to opportunity to take the core of both programs and choose electives that suit their career and personal goals best. Electives in one program are allowed to count as an elective in the other. The net result is that while both degrees separately require 66 hours, the dual degree program provides a more comprehensive and effective education in 48 hours or 73 percent of the dual degree total.

Degree Requirements

Admission into both programs

Students must apply separately to each program, meet the admission requirements of each program and be accepted by each program. If one program accepts a student for the dual degree but the other program does not, then the student will not be accepted for the dual degree. It is possible for students currently admitted to one program to learn about the dual degree and choose to apply after admission to either economics or SPA.

Other policies

Minimum Grade for Graduation

Students must maintain a GPA of 3.0 or higher across all courses that are applied to the dual degree. Students who fail to maintain a GPA of 3.00 will be placed on probation for a semester, after which they may be dropped from the dual degree program if the GPA

is not increased to 3.0 or above. Additionally, any core course in which a student receives a final grade lower than B- cannot be counted toward the total credits required for the dual degree; in such a case, the student must retake the course.

Capstone Advising

All students are required to complete a capstone paper and obtain the signatures of three graduate faculty. Every dual degree student, regardless of the capstone course they choose (ECON 6073 or PUAD 5361) must select a committee composed of faculty from both programs.

Course Credit Transfers from Other Universities

No more than 6 hours may be transferred, and both SPA and economics program directors must approve any transfers.

Sample Plan of Study for the MPA/MA Economics

Total: 48 semester hours with 21 in economics and 27 in public administration

Core

(33 semester hours)

A grade of B- or better is required in all core courses, with a B average overall. No public administration course may be taken a third time.

ECON 5073 - Microeconomic Theory

Summer 2010 Registration **ECON 5073**

Fundamental features of partial equilibrium theory of the firm, consumer and market. General equilibrium and welfare economic topics are examined. Features of the models that have empirical applications are accented. Prereq: ECON 5803. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 5083 - Macroeconomic Theory

Summer 2010 Registration **ECON 5083**

Examines the major macroeconomic models within a common framework. Differences in the foundations, structure, and policy implications of the competing models are analyzed. Prereq: ECON 5803 or permission of the instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 5803 - Mathematical Economics

Summer 2010 Registration **ECON 5803**

Introduces the use of mathematics in advanced micro- and macro-economic analysis. Emphasis on model-building techniques, solution methods, and economic interpretations. Prereq: ECON 4071 and 4081. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 5813 - Econometrics I

Summer 2010 Registration **ECON 5813**

Theory and application of statistical techniques used to analyze economic problems. Topics include simple and multiple regression models, simultaneous equation models, and the problems encountered in their application. Students formulate models, obtain data, estimate models, interpret results and, forecast. Prereq: ECON 4811 or equivalent. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 5823 - Econometrics II

Summer 2010 Registration **ECON 5823**

Second course in the econometrics sequence, covering intermediate topics in cross-section and time series analysis. Topics include limited dependent variables, autoregressive and distributed lag models, longitudinal data analysis and unit roots, co-integration and other time-series topics. Prereq: ECON 5083 and 5813. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 5001 - Introduction to Public Administration and Public Service

Summer 2010 Registration **P AD 5001**

Examines the fundamental theories, structures, and processes of governance in the United States. Explores the constitutional foundations and functions of legislative, administrative, and legal institutions. Covers topics such as federalism, public-private relations, and comparative public administration. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 5002 - Organizational Management and Change

Summer 2010 Registration **P AD 5002**

This course provides coverage of those elements which, when combined, create a resilient learning organization. Topics include, but are not limited to, organization theory and design, managing human capital, group development and performance, inter- and intra-group communication, information management, and ethical decision making.

These topics are presented within the framework of how to organize people to enhance the delivery of public services.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 5003 - Research and Analytic Methods

Summer 2010 Registration P AD 5003

Examines quantitative research methods used to answer questions and test hypotheses in public and non-profit settings. Methods covered include identifying and reviewing scholarly literature; formulating research questions; selecting appropriate design, data collection and sampling strategies; and analyzing data. Topics include causal and descriptive designs, interview and survey methods, and descriptive and inferential statistics such as chi square and regression.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

or

PUAD 5004 - Economics and Public Finance

Summer 2010 Registration P AD 5004

Uses economics to explore public and private sector roles, and the allocation of resources in the public sector. Introduces the concepts of public goods, market failure and externalities. The effects of taxation and subsidies on consumer and firm behavior are analyzed. Also covers cost benefit analysis and national, state, and local budgeting methods.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 5005 - The Policy Process and Democracy

Summer 2010 Registration P AD 5005

Provides an introduction to theoretical and applied studies of the policy process. The policy process includes the manner in which (I) issues are conceptualized and brought to the government as problems needing action; (II) policies are designed and selected; and (III) the enacted policies are implemented, monitored, evaluated, and revised. The policy process also includes the study of politics, especially how government and non-government actors interact and exercise power in allocating societal benefits and burdens.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 5006 - Leadership and Professional Ethics

Summer 2010 Registration P AD 5006

Examines theories of leadership applied to the public and non-profit sectors and the skills and processes employed by effective leaders. The course also considers ethical theories as applied to problems in the public and non-profit sectors; emphasizes critical

thinking to address value conflicts, notably in the context of a pluralistic society; and teaches moral reasoning as a practical professional skill. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 6073 - Research Seminar

Summer 2010 Registration **ECON 6073**

Focuses on training students to do rigorous research in economics. Topics include the analysis of large data sets, further development of econometric skills, and writing a research paper. Note: Students attend lectures and also meet regularly with the instructor in the process of doing a sophisticated research project. Prereq: ECON 5823 and 6053. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

or

PUAD 5361 - Advanced Seminar in Public Policy and Management

Summer 2010 Registration **P AD 5361**

In this seminar, students demonstrate their mastery of the knowledge and skills acquired in core courses, through the conduct of a client-based project. Students in a concentration must undertake a project related to that concentration. Students also make a juried oral presentation of the professional paper which reports project findings. This is the cumulative opportunity for students to apply concepts, theories, and research skills gained in the program to professional practice. (Successful completion of this course is an M.P.A. degree program requirement.) Cross-listed with PUAD 7361. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

To be completed after all other core courses or with instructor and advisor consent.

Electives

(15 semester hours)

If the student takes PUAD 5361, then they are required to take 6 semester hours of economics electives and 9 semester hours of electives from SPA labeled 5000 or above.

If the student takes ECON 6073, then they are required to take 3 semester hours of economics electives and 12 semester hours of electives from SPA labeled 5000 or above.

Public Affairs BA/MPA

The College of Liberal Arts and Sciences and the School of Public Affairs, offer students the opportunity to complete both a bachelor's degree and master's degree in five years rather than the usual six years. The program combines undergraduate general education and major studies with a specialized curriculum in public affairs and strives to develop intellectual and professional skills in a coordinated manner. The five year BA/MPA program decreases the time and number of semester hours required to earn both degrees by allowing students to count graduate level courses in the School of Public Affairs toward the bachelor's degree requirements. The program is designed to give students an opportunity to prepare for professional positions and advancement with federal, state or local governments, nonprofits or private sector firms concerned or involved with public affairs.

Admissions Requirements and Recommendations

Interested students should contact their CLAS advisor as early as possible to ensure proper planning for the five year degree.

Interested students should contact the MPA Director as early as possible for advising (Dr. Mary Guy, 303-315-2007 or mary.guy@ucdenver.edu).

Students may apply to the program during the semester in which they will successfully complete 90 semester hours.

To apply, students must have a 3.5 or higher GPA in CLAS.

Students who wish to apply should have most of their general education and major requirements completed by the time they have earned 90 semester hours.

Students must complete all the required application materials for the School of Public Affairs:

- The UC Denver graduate application, parts 1 and 2
- A declaration of program form
- A resume highlighting work and volunteer experience, extra-curricular activities and any special skills, achievements and awards
- Scores from the GRE, GMAT or LSAT (GRE preferred)

Program Requirements

Students must fulfill all the requirements for graduation for CLAS:

- Total of 120 hours (includes hours in public affairs)
- 30 hours in the core curriculum
- 30-48 hours to satisfy major requirements
- Writing proficiency (1 – 7 hours)
- Mathematics proficiency (0 – 3 hours)
- Level III foreign language (0 – 13 hours)
- It is highly recommended that students complete a course in American government, statistics and economics before applying to the MPA program

Students must maintain a 3.5 GPA in CLAS course work.

Students may complete a maximum of 18 semester hours of SPA course work while classified as an undergraduate student.

Students must fulfill all the requirements for graduation from SPA:

- Total of 36–39 semester hours in public affairs
- Six core courses (PUAD 5001 – PUAD 5006)
- Five elective courses at the graduate level (5000 and 6000 level courses)
- Nine of the 15 elective semester hours must be PUAD courses
- An internship (3 hours) is required from those who do not have significant work experience in the field
- Successful completion of the advanced seminar (capstone) course taken in a semester AFTER all core courses are completed. A thesis option is available. Interested students should contact their SPA faculty advisor.

Students must maintain a 3.0 or higher GPA in public affairs course work.

Program Options

BA/MPA students may choose from any CLAS major.

BA/MPA students may choose to do a general MPA or select a MPA concentration in local government, nonprofit management, environmental policy, emergency management and homeland security or domestic violence.

Degree Confirmation

Students are eligible to receive a bachelor's degree once they have successfully completed 120 semester hours and all CLAS requirements. The BA/MPA will be conferred once the student has completed all requirements of the master of public administration degree, including at least 36 hours of graduate level course work.

Public Affairs/Urban and Regional Planning MPA/MURP

Background and Purpose

Public administration and urban and regional planning have many aspects in common. To provide students with an excellent education through understanding of both professions, the School of Public Affairs and the College of Architecture and Planning have developed a dual degree program. Students can obtain both master of public administration (MPA) and master of urban and regional planning (MURP) degrees with a minimum of 63 semester hours, as compared to a total of 87 semester hours to complete both degrees independently.

To be eligible for the dual MPA/MURP degree program, students must be admitted to each of the two schools under their respective admission procedures and standards and indicate an intention to pursue the dual degree. Students will take all the core courses and the advanced seminar in public policy and management required for an MPA, plus the core and concentration requirements necessary for the MURP.

Students in each school must apply to the other school before completing 18 hours in their respective programs. Upon admission to both schools, students will be assigned an advisor in each school to work out a specific degree plan.

Core and Elective Requirements

Core Courses (42 semester hours)

MURP

URPL 5501 - Planning Issues and Processes

Summer 2010 Registration **URP 5501**

Provides an overview of planning history and theory. The philosophical, political, and economic roots of the various theories are discussed. Ideas are placed in the context of the planning profession's history and its present aims, interests, and ethics. **Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

URPL 5511 - Planning Methods II

Summer 2010 Registration **URP 5511**

Addresses advanced models associated with the estimation, prediction, and prescription of conditions and trends in population, employment, land use and transportation.

Examines orchestrating analytic studies that inform all phases of a project, including effective methods for engaging the public, presentation techniques, etc. **Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

URPL 5520 - Urban Spatial Analysis

Summer 2010 Registration **URP 5520**

Examines urban spatial patterns and processes. Considers city as system. Major topics: defining urban/spatial/analysis; economic theory of city origin; urban land value; social space; industrial and retail structure; economic base/urban growth, sustainable development; city of mind. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

URPL 5530 - Planning Law

Summer 2010 Registration **URP 5530**

Focuses on the legal setting for urban and regional planning in the United States and major constitutional issues in the effectuation of planning policy. Contemporary controversies are put into the larger context of attempts by the judicial system to redefine the balance between individual rights and governmental power in an increasingly weakened society. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

URPL 6630 - Planning Studio I

Summer 2010 Registration **URP 6630**

Focuses on plan design in urban and regional planning and explores basic concepts, techniques, and issues related to urban planning, urban design, site planning, and environmental awareness. **Semester Hours:** 6to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

URPL 6631 - Planning Studio II

Summer 2010 Registration **URP 6631**

Focuses on plan-making related to urban and regional planning. An understanding of the

plan-making process is emphasized. Students have direct experience with the various steps in planning, including data-gathering, goal-setting, identification of alternatives, analysis, synthesis, and presentation of the plan. The plan may be for a city sector, a neighborhood, an entire community, a region, or it may be a policy plan. Where possible, students work with an actual client. Prereq: URPL 6630. **Semester Hours:** 6to 6
Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 18 Hours

MPA

PUAD 5001 - Introduction to Public Administration and Public Service

Summer 2010 Registration P AD 5001

Examines the fundamental theories, structures, and processes of governance in the United States. Explores the constitutional foundations and functions of legislative, administrative, and legal institutions. Covers topics such as federalism, public-private relations, and comparative public administration. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 5002 - Organizational Management and Change

Summer 2010 Registration P AD 5002

This course provides coverage of those elements which, when combined, create a resilient learning organization. Topics include, but are not limited to, organization theory and design, managing human capital, group development and performance, inter- and intra-group communication, information management, and ethical decision making. These topics are presented within the framework of how to organize people to enhance the delivery of public services. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 5004 - Economics and Public Finance

Summer 2010 Registration P AD 5004

Uses economics to explore public and private sector roles, and the allocation of resources in the public sector. Introduces the concepts of public goods, market failure and externalities. The effects of taxation and subsidies on consumer and firm behavior are analyzed. Also covers cost benefit analysis and national, state, and local budgeting methods. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 5005 - The Policy Process and Democracy

Summer 2010 Registration **P AD 5005**

Provides an introduction to theoretical and applied studies of the policy process. The policy process includes the manner in which (I) issues are conceptualized and brought to the government as problems needing action; (II) policies are designed and selected; and (III) the enacted policies are implemented, monitored, evaluated, and revised. The policy process also includes the study of politics, especially how government and non-government actors interact and exercise power in allocating societal benefits and burdens. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 5006 - Leadership and Professional Ethics

Summer 2010 Registration **P AD 5006**

Examines theories of leadership applied to the public and non-profit sectors and the skills and processes employed by effective leaders. The course also considers ethical theories as applied to problems in the public and non-profit sectors; emphasizes critical thinking to address value conflicts, notably in the context of a pluralistic society; and teaches moral reasoning as a practical professional skill. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 15 Hours

Take one of two

PUAD 5003 - Research and Analytic Methods

Summer 2010 Registration **P AD 5003**

Examines quantitative research methods used to answer questions and test hypotheses in public and non-profit settings. Methods covered include identifying and reviewing scholarly literature; formulating research questions; selecting appropriate design, data collection and sampling strategies; and analyzing data. Topics include causal and descriptive designs, interview and survey methods, and descriptive and inferential statistics such as chi square and regression. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

URPL 5510 - Planning Methods I

Summer 2010 Registration **URP 5510**

Focuses on application of methodological techniques commonly used in planning practice. Course covers data collection, management, analysis, communication and presentation. Major topics include primary/secondary data analysis, database construction, descriptive and inferential statistics, sampling, probability distributions, hypothesis testing, and correlation. Cross-listed with GEOG 4000. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 3 Hours

Additional Course Work (21 semester hours)

MURP

12 hours if URPL 5510 elected, or 15 hours if PUAD 5003 elected. Courses are to be selected with MURP advisor's approval.

URPL 5510 - Planning Methods I

Summer 2010 Registration **URP 5510**

Focuses on application of methodological techniques commonly used in planning practice. Course covers data collection, management, analysis, communication and presentation. Major topics include primary/secondary data analysis, database construction, descriptive and inferential statistics, sampling, probability distributions, hypothesis testing, and correlation. Cross-listed with GEOG 4000. **Semester Hours:** 3to

3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 5003 - Research and Analytic Methods

Summer 2010 Registration **P AD 5003**

Examines quantitative research methods used to answer questions and test hypotheses in public and non-profit settings. Methods covered include identifying and reviewing scholarly literature; formulating research questions; selecting appropriate design, data collection and sampling strategies; and analyzing data. Topics include causal and descriptive designs, interview and survey methods, and descriptive and inferential statistics such as chi square and regression. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 12-15 Hours

MPA

6 hours if PUAD 5003 elected, or 9 hours if URPL 5510 elected.

PUAD 5003 - Research and Analytic Methods

Summer 2010 Registration **P AD 5003**

Examines quantitative research methods used to answer questions and test hypotheses

in public and non-profit settings. Methods covered include identifying and reviewing scholarly literature; formulating research questions; selecting appropriate design, data collection and sampling strategies; and analyzing data. Topics include causal and descriptive designs, interview and survey methods, and descriptive and inferential statistics such as chi square and regression. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

URPL 5510 - Planning Methods I

Summer 2010 Registration **URP 5510**

Focuses on application of methodological techniques commonly used in planning practice. Course covers data collection, management, analysis, communication and presentation. Major topics include primary/secondary data analysis, database construction, descriptive and inferential statistics, sampling, probability distributions, hypothesis testing, and correlation. Cross-listed with GEOG 4000. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 6-9 Hours

Practicum

PUAD 5361 - Advanced Seminar in Public Policy and Management

Summer 2010 Registration **P AD 5361**

In this seminar, students demonstrate their mastery of the knowledge and skills acquired in core courses, through the conduct of a client-based project. Students in a concentration must undertake a project related to that concentration. Students also make a juried oral presentation of the professional paper which reports project findings. This is the cumulative opportunity for students to apply concepts, theories, and research skills gained in the program to professional practice. (Successful completion of this course is an M.P.A. degree program requirement.) Cross-listed with PUAD

7361. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 3 Hours (required)

Electives

Take one of the following or another option with MPA advisor's approval (3 hours):

PUAD 5250 - Intergovernmental Management

Summer 2010 Registration **P AD 5250**

Surveys the basic literature of intergovernmental management and examines the interactive role of managers at federal, state, and local levels of government. Emphasis is placed on current intergovernmental issues. Cross-listed with PUAD 7250.

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 5410 - Administrative Law

Summer 2010 Registration **P AD 5410**

Examines legal aspects of policy implementation particularly the relationship between courts and administrative agencies. Covers standards of judicial review and agency action; administrative procedure and due process; selected special topics such as rights, liabilities, and immunities of public employees; and administrative discretion and scientific uncertainty. Cross-listed with PUAD 7410.

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 5440 - Negotiation and Conflict Resolution

Summer 2010 Registration **P AD 5440**

Focuses on concepts and skills necessary to negotiate policy and management decisions and manage internal and external conflicts. Designed to help students understand the dynamics that affect negotiations and to apply the principles and strategies of negotiation in a variety of decision making and dispute resolution contexts. Cross-listed with PUAD 7440.

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 5502 - Public Financial Management and Policy

Summer 2010 Registration **P AD 5502**

Includes topics on investment and spending policy, public borrowing and advancing credit to the public sector; specialties of budgeting and anticipated revenues and costs, accounting for the receipt and disbursement of funds once the budget is enacted, and purchased goods and services; investing idle funds; issuing short-term and long-term debt. Cross-listed with PUAD 7502.

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 5503 - Governmental Budgeting

Summer 2010 Registration **P AD 5503**

Focuses on theory and practices of government budgeting, including cycles, formats, political considerations, costing and analytical tasks. Covers both operating and capital budgeting, plus fiscal management issues. Cross-listed with PUAD 7503.

Semester

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 5540 - Organization Development

Summer 2010 Registration P AD 5540

Studies the dynamics involved in managing and facilitating change in organizations by application of behavioral science knowledge. Emphasis is placed on both cognitive and experiential learning. A background in organization theory and administrative behavior is required. Cross-listed with PUAD 7540. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 5625 - Local Government Management

Summer 2010 Registration P AD 5625

Relates the systems, processes, and principles of public management to the local government environment. Public management concepts such as strategic planning, bureaucracy, formal and informal organizational structures, human resource planning, management control, systems theory, and administrative behavior are explored within the context of local government. Cross-listed with PUAD 7625. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 5626 - Local Government Politics and Policy

Summer 2010 Registration P AD 5626

Examines local government from the perspective of politics and public policy making. The course focuses on local government political structures, policy analysis and formulation, political forces in administrative decision making, and the relationships between professional administrators and elected officials. Cross-listed with PUAD 7626. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 5631 - Seminar in Environmental Politics and Policy

Summer 2010 Registration P AD 5631

Examines the fundamental principles of politics and policy that shape strategies of environmental protection. Focuses on the role of institutional processes, government organizations and nongovernmental organizations in environmental politics and policy. Cross-listed with PUAD 7631. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 5632 - Seminar in Environmental Management

Summer 2010 Registration **P AD 5632**

Examines the practical challenges facing environmental managers today, using a series of case studies. Focuses on the role of institutional processes, government organizations and nongovernmental organizations in the practice of environmental management. Cross-listed with PUAD 7632. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 3 Hours

Doctoral Programs

Applied Mathematics, PhD

► Graduate School Rules apply to this program.

Program Requirements

The Department of Mathematical and Statistical Sciences also offers a PhD in applied mathematics. The degree is designed to give candidates a contemporary, comprehensive education in applied mathematics and to provide research opportunities in the special fields of discrete mathematics, optimization, operations research, applied probability, computer science, computational mathematics, applied statistics and the mathematics of science and engineering.

There are six phases of the PhD program. A candidate must fulfill course requirements, pass the preliminary examinations, establish a PhD committee, meet the academic residency requirement, pass the comprehensive examination and write and defend a dissertation.

- Students must complete 42 semester hours of nonthesis course work at the graduate level (up to 30 hours of this course work may be transferred in, including courses taken as part of the MS master's degree). In addition, 30 hours of dissertation credit must be taken. The following courses are required as part of the formal course work: four PhD-level courses (3 hours each), math clinic and three readings courses (1 semester hour each). Students must also satisfy a **breadth requirement** by completing a total of six graduate math courses from among several areas of mathematics, with no more than three of these courses from any one area. A 3.25 GPA must be maintained throughout all course work.
- The preliminary examinations are designed to determine that students who intend to pursue the PhD program are qualified to do so. These four-hour written examinations are in the areas of applied analysis and applied linear algebra. Students must pass these exams within two years of entering the program.

Exception: students admitted with prerequisite deficiencies must pass these exams within three years.

- Six semesters of residence are required, as specified in the rules of the Graduate School. All students are strongly advised to spend at least one year doing full-time course work or research with no outside employment.
- Application for candidacy is made after completion of the preliminary examinations and after at least three semesters of residency. The application must be submitted at least two weeks before taking the comprehensive examination. The comprehensive examination is designed to determine mastery of graduate-level mathematics and the ability to embark on dissertation research. It consists of a six-hour written examination and an oral follow-up examination. Students must pass the comprehensive exam within 4 years of admission. Within six months after passing the comprehensive examination, the candidate must present a dissertation proposal to the dissertation committee.
- Each student must write and defend a dissertation containing original contributions and evidence of significant scholarship. The dissertation defense is public and must be given before an examining committee approved by the Graduate School.

For more detailed information about the applied mathematics PhD, see the Math Graduate Handbook.

Civil Engineering PhD

► Graduate School Rules apply to this program

The PhD degree in civil engineering is offered through a coordinated program with University of Colorado at Boulder.

Specialty Areas for Degrees:

- Environmental and Sustainability Engineering
- Geotechnical Engineering
- Hydrologic and Hydraulic Engineering
- Structural Engineering
- Transportation Engineering
- Civil Engineering Systems

What is civil engineering systems?

The doctoral program in civil engineering systems has different rules than the five other traditional doctoral tracks in order to facilitate more interdisciplinary research. This doctoral track can be the degree that would follow a master's of engineering.

Additional Doctoral Admissions Requirements

In addition to the admissions requirements listed for master's students, doctoral applicants need to have the support of a faculty advisor before they are admitted. Once doctoral students are approved by the graduate admissions committee, their application must be reviewed again by the Department of Civil, Environmental and Architectural Engineering at CU Boulder as the programs are jointly administered. Prospective PhD students should contact the Department of Civil Engineering on the Downtown Campus to inquire about application requirements and to obtain the "Rules and Policies for the Coordinated PhD Program."

Requests for applications for graduate study in civil engineering should be addressed to

UC Denver Department of Civil Engineering
Campus Box 113
P.O. Box 173364
Denver, CO 80217-3364

Clinical Health Psychology PhD

► Graduate School Rules apply to this program

Objectives of the Program

A primary focus of clinical health psychology is the development of effective disease prevention interventions for populations at high risk for medical problems. A second focus of clinical health psychology is the development of strategies to help individuals who are already ill to manage their disease, increase their ability to collaborate with medical professionals and improve their coping skills. Students in this program will be trained to work within the community to use psychological tools and techniques to promote health, prevent and treat illness and improve the health care system. In addition to course work, students acquire expertise in research by completing a second-year project and doctoral dissertation, and demonstrate competence in clinical assessment and intervention through several applied practicum experiences, a clinical competency project and a pre-doctoral internship. Students can complete the program in five years and have up to eight years to complete the program according to Graduate School Rules.

Admissions

The application deadline is December 15 for the following fall. You are responsible for making sure all materials are in on time. We do not consider late applications. International students should be sure to submit all materials at least two weeks before this deadline (by December 1) so that they arrive at our department on time. Below is condensed information; see the department website for complete information.

Admission Requirements:

- BA or BS from an accredited college or university, with a minimum GPA of 3.5 based on all college course work.
- Undergraduate courses in: introductory psychology, psychological statistics, research methods and abnormal psychology. Additional courses in psychology are highly desirable; our admissions committee will also look favorably upon courses in the biological and physical sciences.
- Two official transcripts from each college and university attended.
- Graduate Record Exam (GRE): The GRE General Test (verbal, quantitative, analytical writing) AND the Psychology Subject Test are required. General test: minimum score of 1100 for the combined verbal and quantitative sections is required. 600 is the minimum required score for the psychology subject test. Take both exams at least six weeks before the December 15 deadline so that the scores arrive on time.
- Three letters of recommendation, at least two of which must be academic references, accompanied by the Request for Recommendation form. Recommendations and supplemental application materials are sent directly to the department. Each recommendation should be in a sealed envelope, signed along the back by the recommender.
- Application Forms I and II, with answers to Part II as informative as possible.
- Application fee of \$50 (\$75 for International Students). Specify "CHP PhD" on the memo line in the lower left corner of your check.

Financial Information

The University of Colorado Denver administers various forms of financial aid for graduate students: fellowships, scholarships and a number of awards from outside agencies. See the Office of Financial Aid for further information. Additionally, the psychology department offers teaching assistantships each year in such courses as introductory psychology, statistics, research methods and human development. Although

we do not guarantee TA positions, we generally have been able to offer positions to most of our interested students.

Contingent upon the availability of grant money, faculty may also offer part-time research assistantships to qualified students. The typical RA position involves data collection and analysis, library research, etc. Some computer and statistical skills are usually required. RA positions are less available than TA positions, and they may arise on very short notice.

In-state tuition waivers and additional stipend monies may be available for doctoral students.

Please note: Neither teaching nor research assistantships confer in-state tuition status or include tuition waivers.

Degree Requirements

Course Work:

Approximately 69 credits of course work are required for graduation. Typically, students will take 4 courses each semester of their first year, 3 courses each semester of their second and third years, 2 courses in the first semester of their fourth year and at least 1 course in the second semester of their fourth year in the program. Students must maintain a 3.0 grade point average, and no grade below a *B-* will count toward the requirements.

In addition to the minimum required 69 credits of course work, students must also register for a minimum of 12 clinical practicum hours and 30 dissertation hours. Students must also register for 3 credits of pre-doctoral internship each of the three semesters of their internship year, for a total of 120 credits. Students can complete the program in five years and have up to eight years to complete the program according to Graduate School Rules.

Second Year Project:

All students must complete a second year research project. This thesis involves a research project that makes a significant contribution to the field. Although the question must be the student's own original question, use of archival data and pilot studies are encouraged for this project.

Clinical Practica:

A minimum of 500 face-to-face intervention and assessment hours and 1200 total practicum hours [face-to-face intervention and assessment hours, plus supervision, plus support hours as defined by the Association of Psychology Postdoctoral and Internship Centers (APPIC)] will be required in preparation for applications to pre-doctoral internships. A minimum of 50% of required practica will be conducted in medical settings. Beyond the minimum requirements, students select practica based on personal

interests. All field placements must be approved by the Director of Clinical Training (DCT) in advance.

Demonstration of competence:

Upon completion of the first two years of course work (42 credits), in the third year of training, students must demonstrate competence in several core areas (e.g., statistical methods, ethics, assessment, psychotherapy, psychopathology) by completing a clinical competency project (CCP). The primary goal of this project is to encourage integration of empirical research and applied clinical work. Following completion of the written portion of the exam, students must orally defend the project to a committee of three faculty members.

Dissertation:

Students must complete a dissertation that involves original empirical work and is distinct from other research projects and publications. The dissertation proposal must be completed and defended prior to making application for the pre-doctoral internship. Students must have a dissertation committee composed of four members. When the dissertation is completed to the satisfaction of the primary advisor, the student must orally defend the dissertation to the committee.

Internship:

Students must complete a 12-month, full-time pre-doctoral clinical internship, preferably at an APA-accredited site. This internship is required of all clinical psychologists and is the capstone of clinical training in the doctoral program.

Computer Science and Information Systems PhD

► Graduate School Rules apply to this program

Program co-directors: Gita Alaghband (CSE) and Mike Mannino (Business School)

Web site: business.ucdenver.edu/Disciplines/InfoSystems/PhD/index.htm

The Department of Computer Science and Engineering (CSE) and the Business School offer a joint doctor of philosophy degree program in computer science and information systems (CSIS). The program targets students with a master's-level education in either computer science or information systems who seek research training that combines CS and IS along with strong industry interaction. The joint PhD program provides training for academic positions, industrial research positions and senior consulting positions. The specific goals of the program complement these general goals:

- create a pool of graduates with CSIS research training who are qualified for academic and nonacademic careers
- meet student demand for advanced training in CSIS with accommodations for full-time and part-time students
- promote interdisciplinary research between CSE and the Business School
- enhance technology transfer between CSIS academic units and Front Range technology businesses through joint research, student internships, faculty externships and committee participation

Advisor

Upon entering the program, each chooses an advisor to provide mentoring and guidance throughout the program and work with the student to prepare a program of study. Requests to change advisors must be approved by the program co-directors, and this happens in very rare circumstances.

Doctoral Committee

The advisor and four other members form a doctoral committee. To foster interdisciplinary work, you may have your doctoral research co-supervised by two faculty members. At least one co-supervisor must be a full-time current graduate faculty member in the CSE department or Business School. The committee must contain at least one faculty member from the CSE department and at least one from the Business School. At least one committee member is from outside of the CSE department and the information systems faculty.

Program Components

Plan of Study

A list of course work and other requirements for the degree should be prepared with the advisor and then submitted to the co-directors for approval. The successful completion of all work indicated on the plan of study is an important prerequisite for the conferring of the degree. A plan of study should be submitted for approval by the end of the first semester of the program. The current plan of study should be updated before the beginning of the second year of the program and submitted for reapproval by the co-directors.

Preliminary Exam

According to Graduate School rules, students are required to demonstrate their basic knowledge and preparation toward more advanced doctoral level work. For more information visit the PhD CSIS Web site.

Comprehensive Exam

Students will submit a paper to fulfill the graduate school's comprehensive exam requirement. The paper should describe an area of research including literature review, problem definition, and possible methodologies/models to study a significant problem in computer science or information systems. The paper will be evaluated by a committee of three faculty members. An oral presentation of the paper will be open to the entire CSIS faculty. The committee may adopt additional guidelines to evaluate the paper and presentation. According to graduate school rules, the comprehensive exam must be completed by the end of the fourth year in the program. In addition to these requirements, the comprehensive exam must meet the other graduate school requirements.

Dissertation Proposal

Each student should prepare a proposal that will be evaluated by the doctoral committee. A proposal should be ready for review at least one semester before the expected completion date of the degree. The proposal is submitted for review and approval by the doctoral committee. An oral presentation of the dissertation proposal before the doctoral committee is required for approval. An approved proposal is then submitted to the co-directors of the program for final approval.

Dissertation Completion

Once the dissertation proposal is approved, each student prepares and submits a dissertation. The dissertation is defended before the doctoral committee in a public meeting. Final approval for the dissertation is given by a vote of the dissertation committee after the public defense.

Graduation

Upon completion of all degree requirements including the dissertation defense, the student receives the degree of doctor of philosophy. Students applying through CSE receive the PhD from the College of Engineering and Applied Science, while students applying through information systems receive the PhD from the Business School.

CSIS-Business PhD

Program Components

Plan of Study

A list of course work and other requirements for the degree should be prepared with the advisor and submitted to the program co-directors for approval. The successful completion of all work indicated on the plan of study is an important prerequisite for the conferring of the degree. A plan of study should be submitted for approval by the end of the first semester of the program. The current plan of study should be updated before the beginning of the second year of the program and submitted for reapproval to the co-directors.

Preliminary Exam

According to Graduate School rules, students are required to demonstrate their basic knowledge and preparation toward more advanced doctoral level work. For more information visit the CSIS program Web site.

Comprehensive Exam

Students will submit a paper to fulfill the graduate school's comprehensive exam requirement. The paper should describe an area of research including literature review, problem definition and possible methodologies/models to study a significant problem in computer science or information systems. The paper will be evaluated by a committee of three faculty members. An oral presentation of the paper will be open to the entire CSIS faculty. The committee may adopt additional guidelines to evaluate the paper and presentation. According to graduate school rules, the comprehensive exam must be completed by the end of the fourth year in the program. In addition to these requirements, the comprehensive exam must meet the other graduate school requirements.

Dissertation Proposal

As the first phase of the dissertation, each student should prepare a proposal that will be evaluated by the doctoral committee. A proposal should be ready for review at least one semester before the expected completion date of the degree. The proposal is submitted for review and approval by the doctoral committee. An oral presentation of the dissertation proposal before the doctoral committee is required for approval. An approved proposal is then submitted to the co-directors of the program for final approval.

University-Level Instructional Training

During the program, each student will obtain training for university-level instruction. This requirement can be fulfilled by working with a faculty member as a teaching assistant, attending university-level teacher training or teaching a university-level class. Students who plan a university career will be encouraged to teach one or more courses and participate in training. When teaching or working as a teaching assistant, a student will be compensated according to standard university salaries.

Dissertation Completion

Following completion of the approval of the dissertation proposal, each student prepares and then submits a dissertation. The dissertation is defended before the doctoral committee in a public meeting. Final approval for the dissertation is given by a vote of the dissertation committee after the public defense of the dissertation.

Graduation

Upon completion of all degree requirements, including the dissertation defense, the student receives the degree of doctor of philosophy. Students applying through the CSE receive the PhD from the College of Engineering and Applied Science, while students applying through the information systems program receive the PhD from the Business School.

Design and Planning PhD

► Graduate School Rules apply to this program

Program Director: Kevin J. Krizek

Telephone: 303-315-2422

The PhD in design and planning from University of Colorado Denver trains scholars for careers in higher education, research and high-level policy positions. It is a research-oriented doctoral degree with a flexible, interdisciplinary focus. Students actively draw from the rich intellectual resources of the University of Colorado campuses in both Denver and Boulder for classes, personalized instruction, teaching opportunities and research appointments. Graduates of the program work in universities, government, nonprofits and the private sector, both in the U.S. and around the world.

Planning and design form a well-established and expanding field of knowledge and practice regarding the relationships of natural, behavioral, technological, political, economic and cultural factors to the organization of physical space, and their combined

influence on the quality of life in general. Housed within the college, the departments of architecture, landscape architecture, and planning and design share the idea that the complex problems of the built environment are best addressed through collaboration among the various design and planning disciplines. As a result of this collaboration, the departments jointly offer the advanced research degree, a PhD in design and planning.

Areas of Specialization

The PhD program serves as the intellectual driver of the College of Architecture and Planning; its mission is to provide a scientific foundation for planning and design. Unique and distinguishing characteristics include the physical environment as the domain of interest, the interdisciplinary and integrative orientation of study and the applied nature of prescriptions. Being broad in its offerings, available study covers issues ranging from highly technical urban modeling to the history of architecture. Students in the program are encouraged to embrace tenets embodied in one of the following areas of specialization. Each broad specialization area is represented by its own core curriculum specific to the domains of expertise and faculty interests; in exceptional circumstances, advanced study on a related topic (e.g., historic preservation, green buildings) is available to bridge the two specialty areas.

Sustainable and Healthy Environments (SHE)

Studies in SHE are concerned with the design making by public agencies to guide the pattern and timing of land development that advance goals of sustainable and healthy environments. Subfields include land use planning, growth management, transportation, urban design, housing and community development, environmental planning and management of urban, rural and natural areas. Primary work in this area focuses on land use controls, design review processes and the development of models and tools to understand and support decision processes and design practices.

History of Architecture, Landscape and Urbanism (HALU)

Studies in HALU include the history and theory of architecture, landscape and urbanism considered within socioeconomic and political contexts, intellectual history and cultural studies, as well as questions concerning the evolution of technology, technique and materiality. Interdisciplinary and cross-cultural collaboration is encouraged. In this manner, the disparate range of ideologies and methodologies within the discipline itself are introduced. It is critical for the contemporary scholar and teacher to be aware of the tradition of strategies and perspectives in order to operate in an intellectually responsible manner in the present. A background in a professional design field is desirable for all applicants.

As part of studies in either specialty area, students work on diverse topics, advancing the intellectual environment of the college by participating in a common colloquium, organizing workshops, presenting at conferences and writing publications.

Admission Requirements

As a candidate for admission to the PhD program, you must meet the requirements of the Office of Vice Chancellor of Academic and Student Affairs of UC Denver. These include but are not limited to:

- Matters of provisional admission
- Transfer credit restrictions
- Residency requirements
- Eligibility of courses for graduate-level credit
- Foreign language requirements
- Examination schedules

Residency

To be accepted, you will have to meet the academic residency requirement, which requires six semesters of scholarly work beyond the attainment of an acceptable bachelor's degree.

Two semesters of residence credit may be allowed for a master's degree from another institution of approved standing.

At least four semesters of resident credit, two of which must be consecutive in one academic year, must be earned from this university.

Specific Requirements

The specific admission requirements for the PhD program in design and planning are as follows:

1. Degree

Minimally, to be a successful applicant, you must have a bachelor's degree, however, it is strongly advised that students entering the program will have completed both a bachelor's and a master's degree. Field specialization and background are open.

However, you will preferably have completed a professional (master's or bachelor's) program in planning or a design-related field, such as:

- Architecture
- Landscape Architecture
- Architectural Engineering
- Urban Design

In combination with a degree in an area, such as:

- Geography
- Urban Economics
- Environmental Law
- Urban Sociology
- Real Estate
- Management Science
- Computer Science
- Public Administration
- Environmental Psychology

2. Knowledge from Prior Course Work

The applicability of your prior course work will be decided by the program committee upon review of your transcript and additional materials. If you do not have the requisite educational background, grade point average or GRE scores, you may be admitted on a conditional or provisional basis and additional course work may be required in accordance with Graduate School Rules.

A. Design and Planning: You can satisfy this requirement by virtue of having completed either a professional or a pre-professional degree program in these areas.

If you do not have such prior qualifications, you must complete 12 hours of upper level undergraduate course

work in the College of Architecture and Planning, while obtaining in each of these courses a grade of 'B' or

higher. These courses are to be chosen from a selected list, in consultation with your faculty advisor, and are

to be completed within two years after admission to the Program, and may count

towards fulfilling the degree requirements.

B. Undergraduate Work: You must have completed 12 semester hours of undergraduate work in one of the following areas:

Social and Behavioral Sciences
Environmental and Natural Sciences
Engineering
Humanities

C. Prerequisites: You must also have completed one of the following prerequisites with a grade of "B-" or above (the choice depends on your area of specialization):

Statistics. Including probability theory, parametric and nonparametric methods, and acquaintance with basic multivariate techniques. A minimum of 3 hours.

Mathematics. Including differential equations, finite mathematics, algorithms, data structures or other appropriate courses. A minimum of 3 hours.

Language. Ability to read at least one foreign language relevant to the area of specialization.

Computer Applications. Background in computer aided Design (CAD) or Geographic Information Systems (GIS). A minimum of 3 hours.

3. Demonstrated Academic Achievement

- Academic achievement as evidenced by an undergraduate grade point average of 3.0 (on a 4.0 scale) or better, and a graduate grade point average of 3.5 or better.
- A 575 TOEFL (Test of English as a Foreign Language) score is required if you are a foreign applicant whose native language is not English.

Curriculum

Degree requirements are set both by the Graduate School at the University of Colorado Denver and the PhD program within the college. Degree requirements are divided into two parts: pre-candidacy and candidacy/dissertation research. The former involves course work, qualifying examinations and a dissertation prospectus. Candidacy is certification that all requirements have been met except the dissertation. The doctor of philosophy (PhD) degree in design and planning is granted upon the successful completion and defense of the dissertation.

Students meet these requirements through course work and exams over a two year period. During this time, a student's cumulative grade point average may not fall below a 'B' without academic discipline or probation.

Degree Completion

Students in the PhD program in design and planning have up to eight years to complete all requirements for the degree. It is possible to take a leave of absence (referred to as a 'time out,' however, such circumstances should be pursued in tandem with your advisor and/or your committee). A leave of absence form, obtained from PhD program administrative coordinator, must be completed to ensure your place in the program.

Three Components

The PhD curriculum consists of three components:

- Core curriculum
- Additional course work
- Dissertation

1. Core Curriculum (12 semester hours)

Students in the program are encouraged to embrace tenets embodied in one of the following areas of specialization. Each broad specialization area is represented by its own core curriculum that is specific to the domains of expertise and faculty interests. The core curriculum includes 12 semester hours of course work and consists of a series of theory and methods and application courses, which all students must complete during their first two years of residence, plus an additional three hours of programwide colloquia.

The core curriculum for the specialization in SHE includes:

DSPL 7011 - Research Design: the Logic of Inquiry. **Semester Hours: 3**

DSPL 7013 - Environment and Behavior. **Semester Hours: 3**

DSPL 7012 - Theories of Planning, Government Intervention and Implementation: Means and Ends. **Semester Hours: 3**

The core curriculum for the specialization in HALU includes:

DSPL 7686 - Special Topics. Historiography: History of the Scholarly Discipline.

Semester Hours: 3

DSPL 7686 - Special Topics. History of Theory: History of the Ideas Informing Practice.

Semester Hours: 3

DSPL 7686 - Special Topics. Pro-Seminar: Advanced Seminar on Faculty Research Interests. **Semester Hours: 3**

Advanced study on related topics (e.g., historic preservation, green buildings) is available to bridge the two specialty areas, in which case a core curriculum would consist of one of the above tracks complemented by select offerings from the other track. Such circumstances are addressed in close consultation with your initial advisors and/or your committee.

All students are also required to complete three sessions of the colloquium (DSPL 7014 - Colloquium in Design) during their first two years in the program (1 semester hour, pass/fail credits only). You also have the option of taking more than the three required credits. The colloquium includes presentations by speakers (internal to the program, external to the program/university, students), workshops on research/scholarship skills, and perhaps even more social-type activities.

The year-long colloquium has three primary objectives:

1. It exposes students to various approaches to research related to design and planning.
2. It enables students to formulate and test out researchable topics among faculty and student peers.
3. Finally, it serves as a bridge between the two specializations offered within the program, HALU and SHE.

2. Additional Course Work (total 34 semester hours)

In addition to the core curriculum, each student must take at least 12 semester hours of course work in classes broadly conceptualized as “methods” indicative to your field of research. The type of research methods courses varies considerably depending on your chosen area of study. Students must also have 12 semester hours of course work in their minor field of study and will typically take 10 semester hours of support electives. Courses outside the core curriculum may be chosen from outside the college on either the Denver or Boulder campus. Up to 18 semester hours of graduate-level course work can be transferred into the program to qualify for advanced standing.

3. Dissertation (30 semester hours)

It is most important that you continue to work closely with your advisor while you are doing your dissertation research. Meet at least once a month to discuss your progress and be sure to communicate with your other committee members as well. It is a

continual process that should be a joint effort to assure that your committee will be well informed and prepared at your defense.

Required Semester Hours

The required semester hours are as follows:

Core Curriculum	12 semester hours
Specialization	12 semester hours
Minor	12 semester hours
Electives	10 semester hours
Dissertation	30 semester hours
Total	76 semester hours

The average course load is 15 semester hours per academic year, especially for the first two years.

Suggested Timing of the Program

(for full-time students without advanced standing):

Year One

- Develop your degree plan
- Complete any prerequisite courses
- Enroll in 11 semester hours of the required core curriculum and additional courses in your specialty area
- Finish the preliminary examination

Year Two

- Enroll in one semester of Colloquium
- Continue or begin to take electives in your minor and specialty areas as described in your degree plan
- Begin literature review papers

- Prepare for your comprehensive exam

Years Three and Beyond

- Complete your literature review papers
- Prepare a dissertation proposal
- Take the comprehensive exam
- Establish your dissertation committee

The remainder of the third and fourth years you will spend researching and writing the dissertation, under the supervision of the dissertation committee.

Educational Studies and Research PhD

► Graduate School Rules apply to this program

Office: Lawrence Street Center, 701

Telephone: 303-315-6300

Fax: 303-315-6311

E-mail: education@ucdenver.edu

Web site: www.ucdenver.edu/education/doctorate

The PhD in educational studies and research links an intensive research-based course of study with a content area in order to prepare candidates to assume positions in institutions of higher education or research-based organizations. Successful applicants will be paired with a faculty mentor with whom the student will engage in research and developing content expertise over time. The preparation model will require students to be available for about 20 hours per week in research and to enroll in 2-3 courses per semester.

Students complete a plan of study that includes at least 45 semester hours of course work (including all required core courses) and 30 semester hours of dissertation and labs. PhD students are expected to be full-time, typically working (research assistantships, teaching assignments, internships, grants, etc.) at the university while completing their course work. This allows for induction to the university research and teaching culture.

Overview of Course Work:

Foundations: Equity and Diversity, Learning, Epistemology, and Teaching in Higher Education - 4 Courses; 12 Semester Hours

Research Methods – 6 Courses; 18 Semester Hours

Concentration Area – 5 Courses; 15 Semester Hours**

Dissertation: 30 semester hours total (6-9 research lab credits and 21-24 dissertation credits)

**Doctoral students will complete a series of courses/experiences in a specified concentration area. Content domains that align to prospective positions in institutions of higher education will be the basis for concentration areas. We define a concentration area as a line of courses that leads to increasing subject matter expertise. Concentration areas are designed to help students focus on a defined discipline or content area in preparation for professional roles as researchers and faculty members. Following, we list the current areas of concentration in which students can be admitted. These areas may change over time as they are tied to faculty research and externally funded grant projects; prospective students will find updated information regarding current availability on the School of Education & Human Development Web site.

- **Math Education.** Students and faculty in this concentration area focus on teacher learning and professional development experiences. Specifically, projects investigate the ways that particular interventions used in professional development for mathematics teachers impacts their content knowledge and pedagogical practices in their classrooms. Work in this area is framed by a situative perspective of learning and incorporates mixed methods to answer questions around the ways particular interventions support teacher and student learning. Video data is prominent in both the design of professional development interventions as well as a major data source for analyses. Analytic methods vary based on the research question and grain size. Faculty: Karen Koellner, Ron Tzur
- **Science Education.** The goal of this area is to prepare students to explore, understand, and think critically about the nature of science and science education from a largely research-oriented perspective. Students may elect to focus on environmental science education as an area of specialization within this concentration area through electives and discipline- specific research agendas.
- **Urban Ecologies.** This concentration area brings together several faculty members in interdisciplinary study of education in urban ecologies. Participating faculty members are aligned with the interdisciplinary concentration area as a whole, rather than specific threads or foci. The philosophical assumptions underlying work in this concentration area are: 1) Cultural groups are not monolithic, 2) Urban life and learning, including Pre-K-20 education, complex phenomena that benefit from the multiple lenses offered by multi-disciplinarity,

- and 3) Trans-nationalism characterizes the cultural experiences and political/economic realities of many communities in cities and contributes to the hybrid identities of residents. These assumptions contribute to a conceptual frame for investigating diversity within the city that is not focused on specific groups and is concerned with the influence of globalization on communities in general within the city. Experiences of and issues confronting different cultural and ethno-linguistic groups will be the key content of this concentration area.
- **Assessment.** The goal of this concentration area is to introduce students to the theory, methods, practices and problems in the development and technical evaluation of assessments in education at both large-scale and classroom assessment levels, considering issues of diverse learners, including English Language Learners and students with special educational needs. The arena of assessment is playing an increasingly important part in P-20 education. This ranges from issues of accountability, student achievement, growth- models, common/benchmark assessments to classroom assessment. In addition to the need for researchers in this area, there are needs for individuals with advanced skills in developing and evaluating the technical quality of instruments in education for different purposes, from developing and implementing surveys to collecting information about teachers to implementing and analyzing achievement assessments to make decisions about the efficacy of educational programs. These individuals need to know how to analyze the information gathered from these instruments and make appropriate decisions based on the information collected. They need to understand the limitations of assessment instruments based on the evaluation on their technical quality.

Health and Behavioral Sciences PhD

- Graduate School Rules apply to this program

Requirements for Admission

A master's or equivalent graduate degree is required for admission to the PhD program. In addition, we encourage prior graduate training in the areas noted below. Students applying without prerequisites may be admitted, but will be required to complete appropriate courses before being permitted to complete the core curriculum. The program currently works with two master's-level programs to provide articulated master's-PhD training, as described below.

In addition to the general admission requirements of the Graduate School, the specific admission requirements for the PhD in health and behavioral sciences are as follows:

1. Knowledge from prior course work or vocational experience at the equivalent of college senior or graduate level in each of the following areas.

Social or behavioral sciences (15 semester hours minimum): knowledge of essential facts and concepts concerning the relationship among individuals and society, social organization, individual psychology and the relationship among culture, belief and behavior. This could be satisfied by course work in psychology, sociology and anthropology.

Human biology or physiology (6 semester hours minimum): familiarity with the functioning of the human body in health and disease states, including an understanding of cellular and organ system processes; an appreciation of evolutionary theory and the mechanisms by which evolution operates on both cellular and population levels; and an understanding of the interplay between the evolution of disease and host response. This could be satisfied by course work in human biology, physiology, pathophysiology or biological anthropology.

Statistics (3 semester hours minimum): prior course work and current familiarity with statistics including probability theory, parametric and nonparametric methods and acquaintance with basic multivariate techniques.

Epidemiology (3 semester hours minimum): prior course work at the advanced undergraduate or graduate level with the basic concepts and methods of epidemiology including measures of risk, mortality, distribution of disease, role of bias and confounders and study design.

2. Demonstrated academic excellence as evidenced by an undergraduate GPA of 3.25 (out of a possible 4.0 points) or better, a graduate GPA of 3.5 or better, and scores in the top 30th percentile (averaged) of the GRE. Admission to the program is highly competitive; minimum GPAs and GRE scores for acceptance in any given year may be higher than the minimum levels indicated here.

The applicability of a student's prior course work will be decided by the program executive committee after reviewing the student's transcript and additional materials. If the student does not have the requisite educational background or GPA, the student may be admitted on a conditional or provisional basis and additional course work required in accordance with Graduate School Rules.

Prospective students should not be dissuaded from applying to the program if they do not meet all of the requirements for admission. In some cases, employment experience may be counted toward meeting a requirement. In other cases, students may be admitted conditionally upon their completion of a list of prerequisite courses that will be established at the time of admission. Students should be sure to address this issue in completing the graduate application by specifying the academic and vocational experience they possess that meets, in part or full, the admission requirements described above.

MASTER'S LEVEL PREPARATION FOR THE DOCTORAL PROGRAM IN HEALTH AND BEHAVIORAL SCIENCES

The program does not currently offer master's-level training in HBSC. Instead, we urge interested applicants to pursue relevant master's degree training in one of the social, behavioral or health sciences disciplines. In addition, we work closely with two master's programs at UC Denver. These are the concentrations in medical anthropology within the anthropology MA program offered by the anthropology department and the master of public health offered by the Colorado School of Public Health. Contact the respective programs for more information on these degree options and our program for how their requirements articulate with those for the health and behavioral sciences PhD.

TO APPLY FOR ADMISSION

At the UC Denver Downtown Campus, all graduate applications are now submitted electronically. To begin the application process, go to the online admissions Web site. If you have any difficulties, call the program assistant at 303-556-4300. The program admits students only for the fall semester, which typically begins in mid- to late August. The deadline for the receipt of all application materials is **February 15** for admission the following August.

Applicants should invest considerable thought and effort in preparing their application. For instance, in the essay (Part II, question six) applicants should provide information on: (a) their academic training and any employment related to public health or health care; (b) their experiences with inter- and multidisciplinary perspectives, and (c) how they envision using their doctoral degree to improve the health status of human populations and individuals. Students should also indicate the kinds of research *foci* that interest them the most.

In addition to the required recommendation form, letters of recommendation are required from at least three individuals in a position to judge the applicant's ability to complete the program. Recommenders may be employers, colleagues or professors; however, the applicant should be sure that the letters address the quality of and aptitude for academic work as well as personal characteristics and qualities.

Financial Aid

There are four kinds of financial aid available: graduate student stipends/fellowships; tuition assistance; research assistantship positions funded by grants to specific program faculty; and the regular package of financial aid (primarily loans) available through the financial aid office.

Newly admitted, out-of-state and students demonstrating outstanding scholastic achievement receive priority when assigning departmental sources of funding. Students interested in research assistantships should contact the individual faculty member with whom they wish to work regarding potential assistantship positions.

All other aid should be requested through the UC Denver Financial Aid Office, North Classroom, 1030, Campus Box 125, P.O. Box 173364, Denver, CO 80217-3364. Telephone: 303-556-2886.

Program Requirements

There are three dimensions to the required curriculum:

- a. A core curriculum that focuses on problem-oriented, interdisciplinary approaches to theory and method
- b. Elective course work intended to provide the student with a solid base from which to launch the dissertation research
- c. Dissertation research and writing

The core curriculum is subject to change. What appears below is intended to give students a general idea of the extent, shape and content of the core curriculum. Students should check with the program office for up-to-date information on specific course requirements and scheduling.

The Core Curriculum

The core curriculum should be completed by students by the end of their second year of full-time study. It consists of the following series of courses which, together, constitute 26 semester hours:

I. Health and Behavioral Sciences Colloquium

Each fall, the HBSC program will organize a series of presentations by scholars working in the health and behavioral sciences. The presentations provide students with the most current science and theory in the field. Required of all first- and second-year students, who must take at least two times.

HBSC 7001 - Colloquium Series in the Health and Behavioral Sciences

Summer 2010 Registration **HBSC 7001**

Bi-weekly lectures given by Health and Behavioral Sciences faculty, advanced graduate students and alums, on selected and current topics in the health and behavioral sciences. Required of all first and second year students in HBSC; may be taken up to

three times for credit. **Semester Hours:** 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 2 Hours

II. Theoretical Perspectives in the Health and Behavioral Sciences

This series is designed to give students a thorough background in how the principles of the social and behavioral sciences have been applied to health issues. Topics include: the interplay between structure and agency in creating and maintaining health; social epidemiology; critical theory and social determinants of health; issues affecting Western biomedicine and public health systems; diffusion of healthy behavioral change among populations; social construction of health and illness; health policy and bioethics; social networks; and stress.

HBSC 7011 - Theoretical Perspectives in Health and Behavioral Science I

Summer 2010 Registration **HBSC 7011**

Covers the following subject areas: philosophy and epistemology of the social and behavioral sciences as they are applied in public health and health care contexts; historical perspectives of Western biomedicine and public health; cross-cultural perspectives on health systems; class, ethnic, and gender correlates of health and sickness; critical perspectives on Western health and health care models; and the structure and organization of health care systems. Note: Part I of a required, two-semester, interdisciplinary, team-taught, seminar-format course that meets three hours a week for the academic year. Prereq: Admission to the Health and Behavioral Sciences program. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HBSC 7021 - Theoretical Perspectives in Health and Behavioral Science II

Summer 2010 Registration **HBSC 7021**

Reviews multiple approaches and strategies for understanding and changing the health of systems, organizations, communities and individuals. Course is intended to give students content knowledge and practical skills for assessing, planning, and implementing change processes. Note: Part II of two-semester seminar course that meets three hours a week for the academic year. Prereq: HBSC 7011 and admission to the Health and Behavioral Sciences program. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HBSC 7071 - Social and Behavioral Determinants of Health and Disease

Summer 2010 Registration **HBSC 7071**

Surveys the distribution, determinants, and psychological and behavioral aspects of

health and disease. Social, economic, environmental, and cultural variations in and determinants of health, disease, and quality of life, as well as barriers to access and utilization, geopolitical influences, environmental and social injustice, historical trends, and future directions are addressed. Prereq: HBSC 5001 or equivalent. **Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 9 Hours

III. Human Ecology and Environmental Adaptation

This course will emphasize the biological/physiological dimensions of human health and disease.

HBSC 7031 - Human Ecology and Environmental Adaptation

Summer 2010 Registration **HBSC 7031**

Focuses on the interplay of biology, environment, culture, and behavior in the causes and exacerbation of disease. The course includes the following topics: health in environmental and evolutionary contexts; models of causation in biomedicine and other medical systems; individual, community, and population manifestations of health and disease; and biocultural interaction in disease process. Specific case studies drawn from contemporary health problems are used to illustrate in detail the nature of these processes. Prereq: Admission to the Health and Behavioral Sciences

program. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 3 Hours

IV. Research Design and Methods in the Health and Behavioral Sciences

Two HBSC core research design and methods courses, plus one additional advanced methods course of student's choosing. This series covers the philosophy of science and the structure of scientific inquiry, procedures for hypothesis-testing, quantitative and qualitative methodological strategies commonly employed in the field, epidemiology and program evaluation. Students must further develop specialized methodological skills by completing an independent study (HBSC 6840) or taking one additional course in advanced epidemiology, advanced biostatistics, health economics, survey research design or qualitative methods and data analysis. This requirement will be tailored specifically to the student's particular interests by his/her advisor.

HBSC 7041 - Research Design and Methods in the Health and Behavioral Sciences I

Summer 2010 Registration **HBSC 7041**

This course has four principal aims: (1) to provide students a working knowledge of research methodology as applied to field research efforts; (2) to enable students to apply research methodologies to areas of particular interest in the health and behavioral sciences; (3) to expose students to data manipulation techniques common to social science quantitative research; and (4) to teach basic research proposal development techniques. Prereq: Admission to the Health and Behavioral Sciences program. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HBSC 7051 - Qualitative Research Design and Methods

Summer 2010 Registration **HBSC 7051**

Much of the data collected in the social sciences is interview- and text-based. This course explores methods for collecting and analyzing these data and theoretical paradigms that underlie these methods. Cross-listed with ANTH 6063. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

One elective course in advanced methods: **3 semester hours**

Total: 9 Hours

V. Applications of the Health and Behavioral Sciences

This course offers students the opportunity to focus on individual research interests with guidance from faculty and input from peers.

HBSC 7111 - Applications of the Health and Behavioral Sciences

Summer 2010 Registration **HBSC 7111**

Students focus on eight or nine specific health problems, applying multiple social and behavioral science perspectives in pursuit of a truly interdisciplinary understanding of the most significant dimensions of each problem. Guest experts provide "grand rounds" type presentations on each selected topic. Prereq: HBSC 7041. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 3 Hours

TOTAL CORE: 26 Hours

Elective Courses

Elective course work together constitutes 26 semester hours, of which a minimum of 6 hours can be drawn from the large number of offerings in the health and behavioral sciences at UC Denver. A full listing of elective courses is available in the program office and online on the HBSC Web site. Students will be expected to fulfill the necessary prerequisites for taking these courses, and final authority as to whether a student may enroll in the course will rest with the department in which the course is offered.

TOTAL ELECTIVES: 26 Hours

Doctoral Dissertation Research

The doctoral dissertation research topic is chosen by the student. The student is expected to define a research question in health and behavioral science, identify the research strategy to be used for answering the question, conduct the research required and document the project in the form of a doctoral dissertation. The student will be guided in this process by a doctoral dissertation advisor and the additional members who comprise the student's doctoral dissertation committee (see below). A minimum of 30 semester hours of dissertation work is required. Students must register for a minimum of 5 dissertation credits each semester of their dissertation work. Students may not take more than a year's leave of absence or fail to enroll for semester hours more than three semesters before they are dropped from the program.

Advisors

Upon admission to the program, each student will be assigned a first-year advisor. The student or the faculty will then choose the faculty advisor who will guide the student through the core and elective course work. The faculty advisor may or may not be the chair of the student's dissertation committee. The student selects his or her chair and three additional committee members who oversee the student's comprehensive examination and dissertation research.

Formal Review

A formal review of each student's first-year progress will be undertaken at the end of the first year of study. A student may not take any additional courses in the program until this review is completed. Students who are deemed not to be making satisfactory progress will be informed in writing as to the nature and final result of the review before the end of June in the first year of study.

The Dissertation Prospectus and the Comprehensive Examination

Before a student advances to candidacy, she/he must complete a dissertation prospectus and defend it successfully in the context of an oral comprehensive examination. The dissertation prospectus is a complete description of the question or hypothesis that the student wishes to research for the dissertation project, the research design and study techniques and an assessment of the proposed project's contribution to the field. It will include a comprehensive review of the relevant literature. If the student chooses to undertake research in a particular ethnic or cultural community, she/he must also demonstrate sufficient understanding of that setting including adequate knowledge of the language. This prospectus must be approved by the student's advisor prior to scheduling the comprehensive examination.

The comprehensive examination will be an oral format based in part on, but not restricted to, the material presented in the dissertation prospectus. This exam *must* take place before the student's advancement to candidacy and will typically occur by the end of the third year of study. A committee comprising the chair and three faculty members will supervise the completion of the dissertation prospectus. This committee will conduct the oral examination and will recommend to the executive committee by a majority vote whether or not the student should be advanced to candidacy.

The Doctoral Dissertation and Final Exam

After advancement to candidacy, the student in consultation with his or her advisor will appoint a dissertation committee comprising the chair and three faculty members. The chair and composition of the committee will be subject to approval by the program executive committee. The chair and two other members must have been present at the student's comprehensive examination and will be responsible for overseeing the research and writing of the doctoral dissertation. The committee will review drafts of the dissertation and, when the dissertation is completed to its satisfaction, will conduct the final exam, which will be based on the doctoral dissertation and related materials. The final examination will be open to the public.

Dissertation Total: 30 Hours minimum

Leadership for Educational Equity EdD

- Graduate School Rules apply to this program

Office: Lawrence Street Center, 701

Telephone: 303-315-6300

Fax: 303-315-6311

E-mail: education@ucdenver.edu

Web site: www.ucdenver.edu/education/doctorate

Program Overview

The goal of the doctor of education (EdD) leadership for educational equity program is to prepare future leaders for social justice and equity in P-20 and community-based education contexts who can effectively translate research into practice, influence policy, use data effectively in decision making and organize individuals and groups to address challenges collaboratively and successfully.

The EdD is a practice-based, doctoral level program for professional leadership in P-20 or community-based educational contexts. The EdD will prepare leaders within the profession to address complex educational challenges by combining decision-focused analytic and research skills with a broad-based understanding of systems anchored in principles of social justice and equity and access to public education.

This program reflects a cohort model. Courses will generally be offered in weekend, hybrid (part face-to-face, part online), online and/or summer intensive formats. Students follow their cohort in taking the prescribed course work and experiences for three consecutive years.

Course Work – 69 Semester Hours

Equity and Diversity Core (9 hours)

Leadership Core (12 hours)

Research Methods Core (12 hours)

Concentration Area Core (9 hours)

Culminating Experiences:

Concentration Area Internship (one, 6 credit experience)

Dissertation Courses and Independent Hours (21 credits)

Concentration Areas

Executive Leadership: designed to deepen individuals' skills in policy analysis, development and research; personnel management; finance; accountability systems and evaluation; and community relations. Support individuals who hold or seek to move into senior management positions inside school districts, community colleges, higher education policy or community-based education organizations. Roles may include that of a director, deputy, superintendent or president.

Instructional Leadership: designed for individuals who want to hone their skills through inquiry in the areas of adult learning, professional development, teaching, assessment and accountability, technology and policy analysis and application. This concentration area targets professionals who hold or seek to move into positions such as teacher leaders, coaches/mentors, program coordinators, curriculum directors or instructors at teaching colleges or community colleges.

Public Affairs PhD

► Graduate School Rules apply to this program

Program Director: Peter deLeon, PhD

Faculty

Professors:

Kathleen Beatty, PhD, Washington State University
Lloyd Burton, PhD, University of California, Berkley
Peter deLeon, PhD, Pardee RAND Graduate School
Robert Gage, PhD, Indiana University
Mary Guy, PhD, University of South Carolina
Richard Stillman, PhD, Syracuse University
Paul Teske, PhD, Princeton University

Associate Professors:

Linda deLeon, PhD, University of California, Los Angeles
Angela Gover, PhD, University of Maryland
Jody Fitzpatrick, PhD, University of Texas, Austin
Allan Wallis, PhD, City University Graduate Center
Christine Martell, PhD, Indiana University

Assistant Professors:

George Busenberg, PhD, University of North Carolina at Chapel Hill
Danielle M. Varda, PhD, University of Colorado Denver
Christopher M. Weible, PhD, University of California-Davis

Wirth Chair:

Sen. Gary Hart (Ret.), JD, Yale University

Research Professor:

Stephen Block, PhD, University of Colorado

Clinical Professor

Malcolm Goggin, PhD, Stanford University

Research Associate:

Robert Reichardt, PhD, Pardee RAND Graduate School

Lecturers:

Todd Bryan, MPA, Harvard University
Floyd Ciruli, JD, Georgetown University
Wellington Webb, MA, University of Northern Colorado

Professors Emeritus:

John Buechner, PhD, University of Michigan
Dale Neugarten, PhD, University of Southern California

The School of Public Affairs offers a program of advanced graduate study leading to the doctor of philosophy in public affairs. The program, based on the Downtown Campus, permits elective work to be taken on any campus of the university if it is part of the approved program of study or degree plan.

The doctoral program was developed to meet the need for people with mastery in the scholarly theory, concepts and research skills of public administration, public policy and public management, and who are able to use such skills in careers of research, teaching

and analysis of public-sector challenges. The PhD is designed to prepare students for leadership responsibilities in academia, research and public policy analysis. Accordingly, the PhD stresses the development of theoretical, conceptual and methodological knowledge in public administration, policy and management.

Participants

The doctoral program is primarily designed to serve (1) people who desire to further the field of public policy and public and nonprofit management through teaching and research; (2) scholar-practitioners working in government, private-sector organizations concerned with government and nonprofit organizations; and (3) policy analysts in government, private-sector organizations concerned with government and nonprofit organizations.

Time Required for PhD Degree

The PhD program requires an intense commitment. Most courses and seminars are offered during the late afternoon, in the evenings or on an intensive basis. (Some electives are offered online, but core courses are not.) Anyone starting the PhD program with a master's degree in public administration can expect to take at least three but no more than eight years to complete all of the requirements for the PhD.

Students are required to enroll for a minimum of 6 semester hours of course work each fall and spring semester. All requirements for the PhD degree should be completed within eight years of admittance. Any student entering the program with no prior graduate work in public administration, public policy or management should expect additional course requirements.

PhD Admission Requirements

Admission to the program is based on the personal and professional qualifications of the applicant. It is desirable that an applicant have a master's degree in public administration or a closely related field before undertaking doctoral work. Applicants should have a 3.5 GPA or above in master-level course work, as well as a combined score of 1,000 or better on the quantitative and verbal sections of the GRE. Successful applicants will also show the potential for productive careers of scholarship, research and analysis.

Meeting the minimum thresholds listed above does not assure admission. In unusual cases, students who fail to meet the thresholds may be admitted if high academic skills are demonstrated in other ways.

PhD Application Process

Applicants must submit the following items to the SPA office before they can be formally considered for admission. The application deadline is February 1; admitted students will begin in the fall semester.

- application forms
- official transcripts (two copies) from all degree granting institutions
- GRE scores (no more than three years old)
- a resume or vita
- three letters of recommendation from colleagues and previous professors, focusing on the potential for deriving benefit from the PhD program
- a 500–1,000 word statement of educational and career goals, focusing on research interests

In addition, students may also submit samples of research reports or publications. All application materials will be retained by SPA and will not be returned. A personal meeting with the PhD director or other faculty member is recommended.

Financial Assistance

For excellent candidates, SPA will fund a small number of doctoral research assistantships each year based on financial availability. Students selected will receive a full-tuition waiver as well as a stipend of \$15,000 for the academic year. Our goal is to provide such funding for students for at least three years.

Degree Requirements

Course Work

A total of 36 semester hours of course work is required past a master's degree in public administration or a related degree. In some cases, additional prerequisite courses may be required to assure adequate preparation for doctoral studies. All PhD students are required to take a minimum of 6 semester hours of course work in both the fall and spring semesters, until their course work requirements are met, if they wish to maintain their full-time student status.

During their first year of study, all PhD students are required to take the following four doctoral seminars:

PUAD 8010 - Historical and Comparative Foundations of Public Administration

Summer 2010 Registration **P AD 8010**

A doctoral seminar on developments and changes in public administration as a field of study. It examines how public administration and bureaucracy has evolved and is defined, practiced, studied and taught. It must normally be taken during the first full semester of the doctoral program. Prereq: PUAD 7001 or PUAD 5001 (or equivalent). **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 8020 - Seminar in Public Management

Summer 2010 Registration **P AD 8020**

An in-depth examination of contemporary literature, concepts, and theories of public management. Current issues and research problems are emphasized to prepare students for their advanced research. Prereq: PUAD 7003/5003, 7004/5004 or equivalent. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 8030 - Seminar in Public Policy

Summer 2010 Registration **P AD 8030**

Offers an in-depth examination of contemporary literature, concepts, and theories of public policy, with an emphasis on policy process. Current issues and research problems are emphasized to prepare students for their advanced research. Prereq: PUAD 7004/5004, 7005/5005 or equivalent. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 8040 - Critical Issues in Public Affairs

Summer 2010 Registration **P AD 8040**

Identifies and examines emerging topics of public administration, policy, and management in which additional research and theory are required with a focus on economic and related approaches. The intent is to help students identify advanced conceptual and methodological issues for dissertation research. Prereq: PUAD 8010, 8020, 8030 and 8060. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 12 Hours

During the next year, doctoral students are required to take

PUAD 8040 - Critical Issues in Public Affairs

Summer 2010 Registration **P AD 8040**

Identifies and examines emerging topics of public administration, policy, and

management in which additional research and theory are required with a focus on economic and related approaches. The intent is to help students identify advanced conceptual and methodological issues for dissertation research. Prereq: PUAD 8010, 8020, 8030 and 8060. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 8070 - Advanced Seminar in Research Methods

Summer 2010 Registration **P AD 8070**

Provides in-depth knowledge about designing and conducting dissertation research. The course follows a basic sequence of problem definition, theoretical and propositional formulation, sample selection, data collection and observational methods, data analysis and presentation, and writing skills. This course represents the final class in the PhD sequence of seminars. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 8060 - Seminar on Conduct of Empirical Inquiry

Summer 2010 Registration **P AD 8060**

Examines a range of empirical approaches used in the study of public policy and management. Introduces some of the major concepts and problems of scientific inquiry; explores relevant aspects of the philosophy of science; and further develops skills in the design, conduct, and use of research. Prereq: PUAD 5003 or PUAD 7003. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 6 Hours

Prerequisites for PUAD 8070 include PUAD 7330, Intermediate Statistical Analysis, PUAD 8010, 8020, 8030, 8040 and 8060. These prerequisites may be waived with the permission of the doctoral director.

In addition, all PhD students must complete a second methodology course (as well as four elective courses) relevant to the student's dissertation plans.

Comprehensive Exam and Dissertation

In addition to course work, PhD students must pass a comprehensive exam no later than the beginning of their third year of study. Students are also required to complete and defend, before a faculty committee, a dissertation that makes a significant contribution to the literature and theory of public administration, management or policy.

Students are advanced to candidacy for the PhD once they have completed all required course work and examinations, have successfully presented their research colloquium and have been certified for candidacy by his/her doctoral committee. After students are

formally advanced to candidacy, they must register for a total of 30 hours of dissertation research credit to complete the PhD. Each fall and spring semester, students are expected to register for 5 semester hours of dissertation research; if unable to register for at least 5 semester hours, students must request a leave of absence from the PhD program until able to complete the minimum dissertation requirement. Students may take up to two semesters' leave of absence before they are disenrolled from the program. Students then would need to reapply to the program.

Further details on the program can be found in the *Handbook for the Doctor of Philosophy in Public Affairs Program*, available from the SPA office online at <http://spa.ucdenver.edu>.

Licensure

Administrator License - Executive Leadership Program

Administrative Leadership and Policy Studies

Requirements for Principal Licensure, the MA and EdS degrees, and Executive Leadership Administrator Licensure Program

Office: Lawrence Street Center, 701

Telephone: 303-315-6300

Fax: 303-315-6311

E-mail: education@ucdenver.edu

Web site: www.ucdenver.edu/education/alps

Principal Licensure

Master of Arts Degree

Education Specialist Degree

Executive Leadership Administrator Licensure Program

Faculty

For information about faculty in this area, visit www.ucdenver.edu/education/alps.

The primary responsibility of the administrative leadership and policy studies (ALPS) faculty is to prepare leaders for public education in Colorado and the nation. Currently, the principal license is required for people seeking building-level administrative positions in Colorado.

Principal Licensure Program

ALPS offers course work that leads to the initial license for principal. Having earned an initial license, those who have obtained a master's degree and who go on to complete a district sponsored induction program may then be awarded a professional license by the Colorado Department of Education.

ALPS's 32 semester-hour principal licensure program is project-based, requiring students to present evidence of meeting both state and national standards through performance based assessments. A 400-hour clinical-practice experience is integrated throughout the four-semester program.

Students develop a portfolio during the principal licensure program. Portfolios not finalized by the end of the fourth semester must be completed within the two subsequent semesters (not including summer).

Note: Those already holding a principal license and master's degree should see the Executive Leadership Program (below) for pursuing administrator licensure.

Denver Metro-Area Cohorts

Denver metro-area cohorts are delivered in **four 8-semester-hour courses** over four consecutive semesters. Cohorts start at one or more locations each semester and involve a combination of regular in-person meetings (up to 15 times per semester) and online work.

EDUC 5751 - Principal/Administrator Licensing I Semester Hours: 5 to 9

EDUC 5752 - Principal Administrator Licensing II. Semester Hours: 5 to 9

EDUC 5753 - Principal/Administrator Licensing III. Semester Hours: 5 to 9

EDUC 5754 - Principal or Administrator Licensing IV. Semester Hours: 5 to 9

Total: 32 Hours

Distance-Learning Cohorts

Distance-learning cohorts start each summer in June with a weeklong boot camp in Denver, meet over several intensive weekends during the subsequent fall and spring semesters and end with a weekend the following summer. Online work is completed in between the in-person sessions. Distance-learning cohorts are delivered in **three 9-**

semester-hour courses and one 5-semester-hour course:

EDUC 5751 - Principal/Administrator Licensing I. Semester Hours: 5 to 9

EDUC 5752 - Principal Administrator Licensing II. Semester Hours: 5 to 9

EDUC 5753 - Principal/Administrator Licensing III. Semester Hours: 5 to 9

EDUC 5754 - Principal or Administrator Licensing IV. Semester Hours: 5 to 9

Total: 32 Hours

MA Program

The MA is designed for those who do not already hold a graduate degree. Usually master's students will complete 9 semester hours beyond the 32 required in the licensure program, for a total of 41 semester hours of course work after the bachelor's degree.

For the MA degree, students must select at least one course in each of the following three areas:

Section A: Educational Research

RSEM 5100 - Basic Statistics Semester Hours: 3

RSEM 5200 - Introduction to Research Methods Semester Hours: 3

RSEM 5300 - Introduction to Measurement Semester Hours: 3

Section B: Educational Foundations/Multicultural Education

FNDS 5050 - Critical Issues in American Education. Semester Hours: 3

FNDS 5500 - Contemporary Philosophies of Education. Semester Hours: 3

FNDS 5410 - History and Philosophy of Modern Education. Semester Hours: 3

LALC 5140 - Multicultural Education Semester Hours: 3

LALC 5150 - Culture of the Classroom Semester Hours: 3

LALC 5160 - Historical and Legal Foundations of Bilingual Education Semester Hours: 3

Section C: Educational Psychology/Special Education

EDUC 5400 - Special Education Seminar for Principals. Semester Hours: 3

EPSY 5100 - Advanced Child Growth and Development. Semester Hours: 3

EPSY 5110 - Human Learning. Semester Hours: 3

EPSY 5140 - Advanced Adolescent Growth and Development. Semester Hours: 3
EPSY 5160 - Behavior Disorders in Exceptional Children. Semester Hours: 3
EPSY 5200 - Social Psychology of Learning. Semester Hours: 3
SPED 5140 - Advanced Assessment in Special Education. Semester Hours: 3
SPED 5180 - Curriculum Planning for Students with Special Needs. Semester Hours: 3
SPED 5400 - Advanced Seminar in Special Education. Semester Hours: 3
SPED 5600 - Special Education for School Professionals. Semester Hours: 3

Candidates must also successfully complete a comprehensive exam paper, reflecting on how the three MA classes will help them in the role of principal or administrator.

EdS Program

The EdS degree program affords the opportunity for advanced graduate study and is available to those who already hold a master's degree. Generally for the specialist degree students will complete 9 semester hours that constitute an area of focus, in addition to the 32 required in the licensure program. Candidates must also successfully complete a comprehensive exam paper, reflecting on how the three EdS classes will help them in the role of principal or administrator.

Administrator Licensure - Executive Leadership Program

Designed for the professional educator who, already holding a principal license and master's degree, wishes to obtain an initial administrator license in Colorado and prepare for a career as a superintendent or other district leader. This one-year, 12-semester-hour certificate program combines weekend meetings with online work and hands-on clinical practice—usually completed in participants' home districts. Learn more at www.ucdenver.edu/education/elp.

Additional Program Information

Individuals interested in any of these programs are encouraged to contact ALPS faculty. Conferences prior to application are encouraged and welcomed. Following admission, students are expected to maintain frequent contact with assigned advisors to plan, develop and complete their programs of study.

Early Childhood Special Education Specialist Licensure

Early Childhood Education

Office: Lawrence Street Center, 701

Telephone: 303-315-6300

Fax: 303-315-6311

E-mail: education@ucdenver.edu

Web site: www.ucdenver.edu/education

Faculty

More information about faculty in this division is available online at www.ucdenver.edu/education.

Early Childhood Education Program

The early childhood education (ECE) program leads to a master's degree in early childhood education (early childhood accomplished teacher focus) and/or licensure in early childhood special education (early childhood special education specialist). The program prepares leaders who will enrich the life experience of young children (birth to 8) and their families through a variety of professional roles.

ECE Program students may select from three program options:

1. MA in early childhood education
2. ECSE specialist license (initial or added endorsement)
3. MA plus ECSE specialist license (initial or added endorsement)

The ECE program is interdisciplinary in focus, drawing on university resources and the clinical expertise of various community professionals. There is a strong emphasis on fieldwork and practicum experiences in both regular and special education concentrations. Field experiences are a part of each course and provide an opportunity for each student to gain knowledge, abilities and dispositions while interacting with children, families, program staff and community agencies. Practicum experiences are designed to allow students to apply knowledge and practice skills in a closely supervised environment.

The early childhood accomplished teacher focus and the early childhood special education focus share course content in:

- literacy development and disorders
- child growth and development, differences and disorders

- learning approaches with young children
- measurement and evaluation
- basic statistics/research methods
- multicultural education
- research and current issues
- early childhood curriculum and program development for inclusive classrooms
- working collaboratively with parents and families
- program administration/leadership

The early childhood special education program provides specialized preparation in:

- screening and assessment of young children
- intervention strategies with infants and preschoolers
- behavior management
- working as a member of the transdisciplinary team
- cognitive and socio-emotional development and disorders
- treatment of children who have neurological impairment and chronic illness
- challenging behaviors and autism

Program Requirements

Semester Hour Requirements

Master's degree in ECE: 40 semester hours

ECSE specialist license: 40 semester hours

Master's degree plus ECSE specialist license: 49 semester hours

Master's degree plus ECSE specialist added endorsement: 40 semester hours

ECSE specialist added endorsement: 25 semester hours

Fieldwork and Practicum Requirements

The master's degree in early childhood education includes a total of 425 hours of required fieldwork/practica. Approximately 200 hours of fieldwork are associated with course assignments; 225 hours of intense, culminating practica occur toward the end of the second year of study. Students completing the MA program take a written

comprehensive exam (take home) during the final semester of their program (concurrently with courses at the end of the program sequence).

For the master's degree in early childhood education plus the ECSE specialist initial license, a total of 800 hours of fieldwork/practica is required. Approximately 290 hours of fieldwork are associated with course assignments; 510 hours of intense, culminating practica occur toward the end of the second year of study. Students seeking an added endorsement in ECSE specialist also complete 510 hours of practicum experiences.

Nine semester hours can be transferred for the master's degree; 15 semester hours can be transferred for the ECSE specialist license. These credits include courses taken through continuing education, from other institutions or as a nondegree student at the University of Colorado Denver before the term officially admitted.

Plans of Study

The following table delineates course work and program completion requirements for the MA degree and ECSE specialist license through various program options.

ECE Program Options Plans of Study	MA in ECE	ECSE Specialist License	MA in ECE and ECSE Specialist License	ECSE Specialist Endorsement for those holding Elementary or ECE License	MA in ECE and ECSE Specialist Endorsement for those holding Elementary or ECE License	ECSE Specialist Endorsement for those holding Special Education License	MA in ECE and ECSE Specialist Endorsement for those holding Special Education license
Course							
EPSY 5100 - Advanced Child Growth and Development	Required	Required	Required				
RSEM 5100 - Basic Statistics	Required		Required		Required		Required

ECED 5010 - Curriculum and Program Development in Early Childhood Education	Required	Required	Required	Required *	Required *	Required	Required
ECED 5060 - Working with Parents and Families	Required	Required	Required		Required **		Required **
ECED 5040 - Administrative Seminar	Required	Required	Required		Required **		Required **
ECED 5202 - Stress, Violence, and Behavior Challenges in Young Children's Lives	Required				Required **		Required **
ECED 6690 - Seminar: Research and Current Issues in Early Childhood Education	Required		Required		Required		Required
ECED 5140 - Measurement and Evaluation in Early Childhood Education	Required		Required		Required		Required

ECED 6010 - Literacy and Mathematics K-2	Required	Required	Required	Required*	Required*		
ECED 5200 - Screening and Assessment of Young Children		Required	Required	Required	Required	Required	Required
ECED 6200 - Early Intervention Strategies		Required	Required	Required	Required	Required	Required
ECED 6911 - Practicum in Early Childhood Education	Required						
ECED 6910 - Infant/Toddler Practicum in ECSE		Required	Required	Required	Required	Required	Required
ECED 6912 - Preschool in ECSE Preschool Practicum		Required	Required	Required	Required	Required	Required
ECED 6914 - Primary Practicum in ECSE		Required	Required	Required	Required	Required	Required
Total Semester Hours	40	40	49	25	40	25	40

Comprehensive Exam	Required		Required		Required		Required
PLACE Exam #27		Required	Required	Required	Required	Required	Required
				* choose one	* choose one	* choose two	* choose two
					** choose two		** choose two

Elementary/Secondary Education Licensure

Teacher Education Program

Lawrence Street Center, 701
Campus Box 106
P.O. Box 173364
Denver, CO 80217-3364
Telephone: 303-315-6300
Fax: 303-315-6311
E-mail: education@ucdenver.edu
Web site: www.ucdenver.edu/education/ipte

Graduate Programs
Undergraduate Program
Admissions Requirements

Teacher Education Licensure Program Overview

The teacher education program is both an undergraduate and graduate level program for general education licensure. (Special education is currently only an option at the graduate level, but undergraduates who want to obtain a special education license are encouraged to consider pursuing their endorsement plus an MA in special

education.) The expectations for performance are identical for both undergraduates and graduates because the expectations for newly licensed teachers in the state of Colorado are exactly the same. Undergraduates and graduates work side by side in coursework and internships. There are very slight differences including the course registration numbers (UGs register for 4000 level; Grads register for 5000 level) and undergraduates take 1-2 licensure courses and one internship prior to admission in the program. The teacher education program fosters critically reflective inquiry about teaching and learning and the development of collaborative skills necessary to work effectively with other adults on schooling issues. The program strives to meet the needs of an increasingly diverse population of students, and to productively participate in and lead school renewal by applying democratic principles in educational settings.

Education Pathways

The graduate teacher education program at UC Denver is designed for individuals with a minimum of a bachelor's degree who seek a master's degree along with an initial Colorado provisional teacher's license in the following areas:

- **Elementary Education** (K–6) (40 semester hours)
- **Secondary Education** (7–12) (36 semester hours)
 - English
 - mathematics
 - science (general science, biology, earth science, physics, chemistry)
 - social studies
 - foreign language (Spanish, French)
- **Special Education Generalist** (Ages 5–21) (58 semester hours)
- **Dual General Education/Special Education** (60-63 semester hours)

Program Distinctions

Program Structure

The program admits teacher candidates in three cohort groups, one in the summer, one in fall and one in the spring. The initial professional teacher education program includes a full time 12- or 15-month licensure plan for regular education, a 15 month full time option for special education, and a 18 month full time option for dual special education. Part time 18 month options for regular education are planned for Spring 2011. Students will be taking course work at the university and field-based work in one

of UC Denver's partner schools. By enrolling in several courses together, elementary and secondary teacher candidates consider how students develop as learners over the entire K–12 school span. This collaborative approach applies to students in the general and special education program as well. This ensures that all elementary and secondary classroom teachers are well-prepared to work with students with special needs and that all special educators have a solid foundation in general education in curriculum and instruction.

Professional Development Schools

While in the licensure portion of the program, teacher candidates work in a partner school one to four days per week, depending on the internship level with the sequence of the program plan. University courses are closely interrelated with the four internship experiences in which teacher candidates gradually assume responsibility for teaching. Elementary teacher candidates generally spend an entire academic year in a single partner elementary school, whereas secondary teacher candidates spend their four internships in one of the partner middle schools *and* one of the partner high schools. The partner schools are located in several Denver metropolitan districts with most serving large populations of low-income and/or minority students, as well as a sizeable number of students for whom English is a second language and students with special needs. Each partner school is supported by a site professor from the university one day per week and by a master teacher/mentor, called a site coordinator.

Assessment

In 2000, Senate Bill 154 required all Colorado teacher education institutions to become performance based. PBA stands for performance based assessment. PBAs are created that correspond to many of the teacher education courses and concurrent practice in the series of internships. In doing so, knowledge can be evaluated as a result of coursework and performance in schools simultaneously. As teacher candidates progress through the program, they will be introduced to Performance Based Assessments (PBAs) and will be guided and supported in both course work and internships. Students seeking dual licensure are responsible for four additional PBAs associated with their second endorsement in Special Education.

The PBAs are:

1. Literacy Instruction & Assessment (elementary and secondary versions)
2. Mathematics Instruction & Assessment (elementary)
3. Subject Matter Content (secondary)
4. Student Profile

5. Classroom Management
6. Student Academic Performance Sample (SAPS)
7. Internship Performance Rubric (used at the end of each internship)

Passing the PLACE or PRAXIS II content examination prior to the final internship is also required before a candidate is eligible for a provisional teaching license in Colorado.

Programs of Study

Due to the complex nature of state mandated influences of teacher preparation courses and consistently evaluating our program to meet student needs, please see current programs of study in the teacher education handbook.

Master's Degree Options

The teacher education program design supports the concept of teacher education as an ongoing developmental process linking preservice, induction and ongoing professional growth experiences. Upon completion of the licensure portion of the program, beginning teachers continue working toward their master's degree (an additional 18-35 semester hours) in the areas of special education, educational psychology, content in English or history in collaboration with the Department of College or Liberal Arts and Sciences, or curriculum and instruction during their first or second year of teaching. This ensures that UC Denver's new teachers are provided with continuing support from the university while in their first few years of teaching.

Undergraduate Teacher Licensure

Undergraduate Teacher Education Program

The undergraduate teacher education program at UC Denver is a joint effort between the College of Liberal Arts and Sciences and the School of Education & Human Development. Students earn a bachelor's degree through the College of Liberal Arts and Sciences and a teaching license through the School of Education & Human Development.

This undergraduate program is dedicated to quality teacher education. To that end, our admission standards are rigorous and there are a number of program "gates" that teacher candidates go through to complete licensure.

UC Denver has selective admission standards for entering freshmen, including a 93 institutional index that includes students who are typically in the top third of their class or have a 3.4 GPA or score above a 23 on the ACT or 1100 on the SAT. Students transferring from community colleges must have a minimum of a 2.5 GPA.

Please note: The admission into the School of Education & Human Development teacher education program is a separate process from admission to the university. Summer deadlines are January 15* February 15; the fall deadline is March 15. Spring admission deadlines are August 15, September 15 and October 15.

Undergraduate Teacher Education Pathways

Undergraduate teacher candidates can earn a BA and a Colorado provisional teacher's license in the following areas:

- BA—Individually Structured Major Elementary Education Licensure
- BA—English Literature Secondary English Licensure
- BS—Mathematics Secondary Mathematics Licensure
- BA—History Secondary Social Science Licensure
- BA—Political Science Secondary Social Science Licensure
- BA—Spanish Secondary Spanish Licensure
- BA—French Secondary French Licensure

Program Distinctions

Program Structure

The School of Education & Human Development teacher education program admits teacher candidates in two cohort groups: one in the summer/fall and one in the spring. The initial professional teacher education program includes a 12- or 15-month licensure plan. Students will be taking course work at the university and field-based work in one of UC Denver's partner schools. By enrolling in several courses together, elementary and secondary teacher candidates consider how students develop as learners over the entire K–12 school span. This collaborative approach applies to students in the general and special education program as well. This ensures that all elementary and secondary classroom teachers are well-prepared to work with students with special needs and that all special educators have a solid foundation in general education in curriculum and instruction.

Professional Development Schools

While in the licensure portion of the program, teacher candidates work in a partner school one to four days per week, depending on the internship. University courses are closely interrelated with the four internship experiences in which teacher candidates gradually assume responsibility for teaching. Elementary teacher candidates generally spend an entire academic year in a single partner elementary school, whereas secondary teacher candidates spend their four internships in one of the partner middle schools *and* one of the partner high schools. The partner schools are located in several Denver metropolitan districts with most serving large populations of low-income and/or minority students, as well as a sizeable number of students for whom English is a second language and students with special needs. Each partner school is supported by a site professor from the university one day per week and by a master teacher, called a site coordinator.

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The PBAs are:

1. Literacy Instruction & Assessment (elementary and secondary versions)
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4. Student Profile
5. Classroom Management
6. Student Academic Performance Sample (SAPS)
7. Internship Performance Rubric (used at the end of each internship)

Passing the PLACE or PRAXIS II Content examination prior to the final internship is also required before a candidate is eligible for a provisional teaching license in Colorado.

Undergraduate Advising

Undergraduate teacher candidates will have a team of individuals who work with them throughout the completion of their bachelor's degree and teacher licensure. The following are the members of the advising team:

College of Liberal Arts and Science (CLAS) Education Advisor

The CLAS advisor will assist you upon entry to the university through graduation. The CLAS advisor will monitor your progress through the core curriculum, pre-IPTE curriculum, eligibility requirements for the IPTE program and transfer credits. The CLAS advisor will also approve individually structured major-elementary education contracts for elementary education teacher candidates.

Faculty Advisor

A faculty advisor designated within the academic department works with undergraduate teacher education students pursuing secondary licensure regarding specific requirements within academic major (i.e., English, history, mathematics, Spanish, French, and political science). See the CLAS advisor for specific names and contact information.

School of Education and Human Development Advisor

An advisor in the School of Education and Human Development's Student Services Center (Lawrence St. Center Bldg., 701; 303-315-6300) is able to help with questions about prerequisite completion, taking the PRAXIS II/PLACE exam and other general questions.

IPTE Undergraduate Academic Planning Sheets

Developed in collaboration with the academic departments and IPTE program faculty, advisors will work with the teacher candidates on an academic planning sheet. There is little flexibility in the program course requirements as these requirements meet and exceed the Colorado Department of Education's teacher education professional and content standards.

IPTE Undergraduate Community College Articulation

UC Denver honors the community college articulation agreement to transfer the 60 designated semester hours from the community college to anyone admitted to the teacher licensure program. If the teacher candidate is a transfer student, he/she should work with his/her CLAS advisor early and often to ensure that all courses are transferred properly.

Programs of Study

Due to the complex nature of state mandated influences of teacher preparation courses and consistently evaluating this program for students, for the 2010-2011 term, please refer to the most current version of the teacher education program handbook for academic requirements for this program.

Requirements for Admission

The program rolling admissions each semester. Summer admission deadlines are January 15 & February 15; Fall admission deadline March 15. Spring admission deadlines are August 15, September 15 and October 15.

Teacher Education Information Sessions

All prospective teacher candidates are strongly encouraged to attend an information session before applying to the program. Information sessions are held twice a month lasting approximately 60-90 minutes. Advisors will be available to provide prospective students transcript reviews and pre-admission advising. To more effectively facilitate this process, please bring copies of all transcripts with you. A calendar of upcoming information sessions can be viewed on the Downtown Campus Web site. Go to www.ucdenver.edu/education to reserve a space under the menu item "Information Sessions" or call the school's Student Services Center at 303-315-6300.

Teacher Education Program Requirements

- Applicants to the IPTE program must hold at least a bachelor's degree with a minimum undergraduate cumulative GPA of 2.75 for admission.
- Graduate candidates with a GPA less than 2.75 are required to take the GRE, with a combined score of 1000 on the verbal and quantitative sections; or the Miller Analogies Test, with an average score of 400–600, before consideration for admittance.
- Registration verification of scheduled content knowledge exam or copy of official scores for PLACE or PRAXIS II.

- All elementary education candidates must have a liberal arts major or equivalent content courses that provide a broad background of knowledge. *
- All secondary education candidates must have a major or major equivalent of at least 30 semester hours in their desired teaching field. *
- Undergraduate candidates must have an individually structured elementary emphasis.
- A complete application which can be obtained at scheduled information sessions, downloaded online, or at the Student Services Center

*This is determined through transcript evaluations at information sessions.

Principal Licensure

Administrative Leadership and Policy Studies

Requirements for Principal Licensure, the MA and EdS degrees, and Executive Leadership Administrator Licensure Program

Office: Lawrence Street Center, 701

Telephone: 303-315-6300

Fax: 303-315-6311

E-mail: education@ucdenver.edu

Web site: www.ucdenver.edu/education/alps

Principal Licensure

Master of Arts Degree

Education Specialist Degree

Executive Leadership Administrator Licensure Program

Faculty

For information about faculty in this area, visit www.ucdenver.edu/education/alps.

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Students develop a portfolio during the principal licensure program. Portfolios not finalized by the end of the fourth semester must be completed within the two subsequent semesters (not including summer).

Note: Those already holding a principal license and master's degree should see the Executive Leadership Program (below) for pursuing administrator licensure.

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EDUC 5754 - Principal or Administrator Licensing IV. Semester Hours: 5 to 9

Total: 32 Hours

Distance-Learning Cohorts

Distance-learning cohorts start each summer in June with a weeklong boot camp in Denver, meet over several intensive weekends during the subsequent fall and spring semesters and end with a weekend the following summer. Online work is completed in between the in-person sessions. Distance-learning cohorts are delivered in **three 9-semester-hour courses and one 5-semester-hour course:**

EDUC 5751 - Principal/Administrator Licensing I. Semester Hours: 5 to 9
EDUC 5752 - Principal Administrator Licensing II. Semester Hours: 5 to 9
EDUC 5753 - Principal/Administrator Licensing III. Semester Hours: 5 to 9
EDUC 5754 - Principal or Administrator Licensing IV. Semester Hours: 5 to 9
Total: 32 Hours

MA Program

The MA is designed for those who do not already hold a graduate degree. Usually master's students will complete 9 semester hours beyond the 32 required in the licensure program, for a total of 41 semester hours of course work after the bachelor's degree.

For the MA degree, students must select at least one course in each of the following three areas:

Section A: Educational Research

RSEM 5100 - Basic Statistics Semester Hours: 3
RSEM 5200 - Introduction to Research Methods Semester Hours: 3
RSEM 5300 - Introduction to Measurement Semester Hours: 3

Section B: Educational Foundations/Multicultural Education

FNDS 5050 - Critical Issues in American Education. Semester Hours: 3
FNDS 5500 - Contemporary Philosophies of Education. Semester Hours: 3
FNDS 5410 - History and Philosophy of Modern Education. Semester Hours: 3
LALC 5140 - Multicultural Education Semester Hours: 3
LALC 5150 - Culture of the Classroom Semester Hours: 3
LALC 5160 - Historical and Legal Foundations of Bilingual Education Semester Hours: 3

Section C: Educational Psychology/Special Education

EDUC 5400 - Special Education Seminar for Principals. Semester Hours: 3
EPSY 5100 - Advanced Child Growth and Development. Semester Hours: 3
EPSY 5110 - Human Learning. Semester Hours: 3
EPSY 5140 - Advanced Adolescent Growth and Development. Semester Hours: 3
EPSY 5160 - Behavior Disorders in Exceptional Children. Semester Hours: 3
EPSY 5200 - Social Psychology of Learning. Semester Hours: 3
SPED 5140 - Advanced Assessment in Special Education. Semester Hours: 3
SPED 5180 - Curriculum Planning for Students with Special Needs. Semester Hours: 3

SPED 5400 - Advanced Seminar in Special Education. Semester Hours: 3

SPED 5600 - Special Education for School Professionals. Semester Hours: 3

Candidates must also successfully complete a comprehensive exam paper, reflecting on how the three MA classes will help them in the role of principal or administrator.

EdS Program

The EdS degree program affords the opportunity for advanced graduate study and is available to those who already hold a master's degree. Generally for the specialist degree students will complete 9 semester hours that constitute an area of focus, in addition to the 32 required in the licensure program. Candidates must also successfully complete a comprehensive exam paper, reflecting on how the three EdS classes will help them in the role of principal or administrator.

Administrator Licensure - Executive Leadership Program

Designed for the professional educator who, already holding a principal license and master's degree, wishes to obtain an initial administrator license in Colorado and prepare for a career as a superintendent or other district leader. This one-year, 12-semester-hour certificate program combines weekend meetings with online work and hands-on clinical practice—usually completed in participants' home districts. Learn more at www.ucdenver.edu/education/elp.

Additional Program Information

Individuals interested in any of these programs are encouraged to contact ALPS faculty. Conferences prior to application are encouraged and welcomed. Following admission, students are expected to maintain frequent contact with assigned advisors to plan, develop and complete their programs of study.

Special Education

Office: Lawrence Street Center, 701

Telephone: 303-315-6300

Fax: 303-315-6311

E-mail: education@ucdenver.edu

Web site: www.ucdenver.edu/education

Special Education Program Overview

The special education program within the initial professional teacher education division offers a special education generalist license and a special education endorsement as well as a master of arts degree in special education. All special education program options foster the development of critical reflection, inquiry about teaching and learning, as well as the breadth and depth in content knowledge necessary to work effectively in elementary and secondary classrooms. The program faculty promote the ability of teacher candidates to meet the needs of an increasingly diverse population of K–12 learners, as well as to participate productively in and lead school renewal.

The faculty in the program in special education value collaborative relationships between general and special educators, so we offer our teacher candidates the option of pursuing a dual endorsement in both general and special education to offer our teacher candidates the option of pursuing a dual endorsement in both general and special education.

Special Education Program Distinctions

Special Education Licensing Pathways

To be a licensed as a special education generalist for grades ages 5-21, a teacher candidate must hold a bachelor's degree from a four-year accepted institution of higher education, have completed the plan of study from one of the program options for the preparation of special education generalist, have passed the approved elementary content and special education assessments and have demonstrated all required state and national standards.

Program options for the special education generalist include: 1) initial licensure as a special education generalist; 2) dual licensure in either elementary or secondary education and as a special education generalist; and, 3) for those who already hold a Colorado teaching license, an added endorsement, which is also fully online. There is also an option to count these courses towards a masters in special education which will require an additional 9 semester hours of course work.

The time needed to complete the various special education generalist program options varies based on the needs of teacher candidates. In addition to traditional on-campus offerings, a wide selection of courses are available in online formats. During the academic year, core special education courses are scheduled in late afternoons, evenings and on Saturdays to avoid conflict with teaching responsibilities.

Professional Development Schools

While in the licensure portion of the program, teacher candidates work in a partner school one to four days per week, depending on the internship. University courses are closely interrelated with the four internship experiences in which teacher candidates gradually assume responsibility for teaching. Special education teacher candidates engage in a series of four internships from the beginning of the program to the end of the program. Dual teacher candidates engage in five internships that result in a general education license at the elementary or secondary level and then complete a fifth internship and additional course work; this can be done during an additional full time semester or can be worked out flexibly as the student assumes their first teaching position to complete their special education license. The partner schools are located in several Denver metropolitan districts with most serving large populations of low-income and/or minority students, as well as a sizeable number of students for whom English is a second language and students with special needs. Each partner school is supported by a site professor from the university one day per week and by a master teacher, called a site coordinator.

Assessment

In 2000, Senate Bill 154 required all Colorado teacher education institutions to become performance based. PBA stands for performance based assessment. PBAs are created that correspond to many of the teacher education courses and concurrent practice in the series of internships. In doing so, knowledge can be evaluated as a result of coursework and performance in schools simultaneously. As teacher candidates progress through the program, they will be introduced to Performance Based Assessments (PBAs) and will be guided and supported in both course work and internships. Students seeking dual licensure are responsible for four additional PBAs associated with their second endorsement in special education.

The PBAs are:

1. Literacy Instruction & Assessment (elementary and secondary versions)
2. Mathematics Instruction & Assessment (elementary)
3. Subject Matter Content (secondary)
4. Student Profile
5. Classroom Management
6. Student Academic Performance Sample (SAPS)
7. Internship Performance Rubric (used at the end of each internship)

The four additional PBAs that all teacher candidates in the special education program are expected to proficiently complete include:

1. Assessment
2. Collaboration & Positive Behavior Supports
3. Literacy Instruction for Students with Identified Special Needs
4. The Individualized Education Program (I.E.P.) Process

Passing the PLACE or PRAXIS II Content examinations prior to the final internship is also required before a candidate is eligible for a provisional teaching license in Colorado.

Programs of Study

Due to the complex nature of state mandated influences of teacher preparation courses and constantly evaluated the program to meet student's needs, for the 2010-2011 term, please refer to the most current version of the Special Education Handbook for academic requirements for this program.

Requirements for Admission

The program conducts rolling admissions each semester. Summer and fall admission deadlines are January 15 & February 15; Fall Admission March 15. Spring admission deadlines are August 15, September 15 and October 15.

Teacher Education Information Sessions

All prospective teacher candidates are strongly encouraged to attend an information session before applying to the program. Information sessions are held twice a month lasting approximately 60-90 minutes. Advisors will be available to provide prospective students transcript reviews and pre-admission advising. To more effectively facilitate this process, please bring copies of all transcripts with you. A calendar of upcoming information sessions can be viewed on the Downtown Campus Web site. Go to www.ucdenver.edu/education to reserve a space or call the school's Student Services Center at 303-315-6300.

Teacher Education Program Requirements

- Applicants to the IPTE program must hold at least a bachelor's degree with a minimum undergraduate cumulative GPA of 2.75 for admission.
- Graduate candidates with a GPA less than 2.75 are required to take the GRE, with a combined score of 1000 on the verbal and quantitative sections; or the

Miller Analogies Test, with an average score of 400–600, before consideration for admittance.

- All elementary education candidates must have a liberal arts major or equivalent content courses that provide a broad background of knowledge. *
- All secondary education candidates must have a major or major equivalent of at least 30 semester hours in their desired teaching field. *
- Registration verification of scheduled content knowledge exam or copy of official scores for PLACE or PRAXIS II.
- A complete application on file that can be obtained at information sessions, online or through the Student Services Center.

*This is determined through transcript evaluations at information sessions.

Undergraduate Teacher Licensure

Undergraduate Teacher Education Program

The undergraduate teacher education program at UC Denver is a joint effort between the College of Liberal Arts and Sciences and the School of Education & Human Development. Students earn a bachelor's degree through the College of Liberal Arts and Sciences and a teaching license through the School of Education & Human Development.

This undergraduate program is dedicated to quality teacher education. To that end, our admission standards are rigorous and there are a number of program “gates” that teacher candidates go through to complete licensure.

UC Denver has selective admission standards for entering freshmen, including a 93 institutional index that includes students who are typically in the top third of their class or have a 3.4 GPA or score above a 23 on the ACT or 1100 on the SAT. Students transferring from community colleges must have a minimum of a 2.5 GPA.

Please note: The admission into the School of Education & Human Development teacher education program is a separate process from admission to the university. Summer deadlines are January 15* February 15; the fall deadline is March 15. Spring admission deadlines are August 15, September 15 and October 15.

Undergraduate Teacher Education Pathways

Undergraduate teacher candidates can earn a BA and a Colorado provisional teacher's license in the following areas:

- BA—Individually Structured Major Elementary Education Licensure
- BA—English Literature Secondary English Licensure
- BS—Mathematics Secondary Mathematics Licensure
- BA—History Secondary Social Science Licensure
- BA—Political Science Secondary Social Science Licensure
- BA—Spanish Secondary Spanish Licensure
- BA—French Secondary French Licensure

Program Distinctions

Program Structure

The School of Education & Human Development teacher education program admits teacher candidates in two cohort groups: one in the summer/fall and one in the spring. The initial professional teacher education program includes a 12- or 15-month licensure plan. Students will be taking course work at the university and field-based work in one of UC Denver's partner schools. By enrolling in several courses together, elementary and secondary teacher candidates consider how students develop as learners over the entire K–12 school span. This collaborative approach applies to students in the general and special education program as well. This ensures that all elementary and secondary classroom teachers are well-prepared to work with students with special needs and that all special educators have a solid foundation in general education in curriculum and instruction.

Professional Development Schools

While in the licensure portion of the program, teacher candidates work in a partner school one to four days per week, depending on the internship. University courses are closely interrelated with the four internship experiences in which teacher candidates gradually assume responsibility for teaching. Elementary teacher candidates generally spend an entire academic year in a single partner elementary school, whereas secondary teacher candidates spend their four internships in one of the partner middle schools *and* one of the partner high schools. The partner schools are located in several Denver metropolitan districts with most serving large populations of low-income and/or minority students, as well as a sizeable number of students for whom English is a second language and students with special needs. Each partner school is supported by

a site professor from the university one day per week and by a master teacher, called a site coordinator.

Assessment

In 2000, Senate Bill 154 required all Colorado teacher education institutions to become performance based. PBA stands for performance based assessment. PBAs are created that correspond to many of the teacher education courses and concurrent practice in the series of internships. In doing so, knowledge can be evaluated as a result of coursework and performance in schools simultaneously. As teacher candidates progress through the program, they will be introduced to Performance Based Assessments (PBAs) and will be guided and supported in both coursework and internships. Students seeking dual licensure are responsible for four additional PBAs associated with their second endorsement in Special Education.

The PBAs are:

1. Literacy Instruction & Assessment (elementary and secondary versions)
2. Mathematics Instruction & Assessment (elementary)
3. Subject Matter Content (secondary)
4. Student Profile
5. Classroom Management
6. Student Academic Performance Sample (SAPS)
7. Internship Performance Rubric (used at the end of each internship)

Passing the PLACE or PRAXIS II Content examination prior to the final internship is also required before a candidate is eligible for a provisional teaching license in Colorado.

Undergraduate Advising

Undergraduate teacher candidates will have a team of individuals who work with them throughout the completion of their bachelor's degree and teacher licensure. The following are the members of the advising team:

College of Liberal Arts and Science (CLAS) Education Advisor

The CLAS advisor will assist you upon entry to the university through graduation. The CLAS advisor will monitor your progress through the core curriculum, pre-IPTE

curriculum, eligibility requirements for the IPTE program and transfer credits. The CLAS advisor will also approve individually structured major-elementary education contracts for elementary education teacher candidates.

Faculty Advisor

A faculty advisor designated within the academic department works with undergraduate teacher education students pursuing secondary licensure regarding specific requirements within academic major (i.e., English, history, mathematics, Spanish, French, and political science). See the CLAS advisor for specific names and contact information.

School of Education and Human Development Advisor

An advisor in the School of Education and Human Development's Student Services Center (Lawrence St. Center Bldg., 701; 303-315-6300) is able to help with questions about prerequisite completion, taking the PRAXIS II/PLACE exam and other general questions.

IPTE Undergraduate Academic Planning Sheets

Developed in collaboration with the academic departments and IPTE program faculty, advisors will work with the teacher candidates on an academic planning sheet. There is little flexibility in the program course requirements as these requirements meet and exceed the Colorado Department of Education's teacher education professional and content standards.

IPTE Undergraduate Community College Articulation

UC Denver honors the community college articulation agreement to transfer the 60 designated semester hours from the community college to anyone admitted to the teacher licensure program. If the teacher candidate is a transfer student, he/she should work with his/her CLAS advisor early and often to ensure that all courses are transferred properly.

Programs of Study

Due to the complex nature of state mandated influences of teacher preparation courses and consistently evaluating this program for students, for the 2010-2011 term, please refer to the most current version of the teacher education program handbook for academic requirements for this program.

Endorsement Programs

Early Childhood Special Education Specialist Endorsement

Early Childhood Education

Office: Lawrence Street Center, 701

Telephone: 303-315-6300

Fax: 303-315-6311

E-mail: education@ucdenver.edu

Web site: www.ucdenver.edu/education

Faculty

More information about faculty in this division is available online at www.ucdenver.edu/education.

Early Childhood Education Program

The early childhood education (ECE) program leads to a master's degree in early childhood education (early childhood accomplished teacher focus) and/or licensure in early childhood special education (early childhood special education specialist). The program prepares leaders who will enrich the life experience of young children (birth to 8) and their families through a variety of professional roles.

ECE Program students may select from three program options:

1. MA in early childhood education
2. ECSE specialist license (initial or added endorsement)
3. MA plus ECSE specialist license (initial or added endorsement)

The ECE program is interdisciplinary in focus, drawing on university resources and the clinical expertise of various community professionals. There is a strong emphasis on fieldwork and practicum experiences in both regular and special education concentrations. Field experiences are a part of each course and provide an opportunity for each student to gain knowledge, abilities and dispositions while interacting with children, families, program staff and community agencies. Practicum experiences are

designed to allow students to apply knowledge and practice skills in a closely supervised environment.

The early childhood accomplished teacher focus and the early childhood special education focus share course content in:

- literacy development and disorders
- child growth and development, differences and disorders
- learning approaches with young children
- measurement and evaluation
- basic statistics/research methods
- multicultural education
- research and current issues
- early childhood curriculum and program development for inclusive classrooms
- working collaboratively with parents and families
- program administration/leadership

The early childhood special education program provides specialized preparation in:

- screening and assessment of young children
- intervention strategies with infants and preschoolers
- behavior management
- working as a member of the transdisciplinary team
- cognitive and socio-emotional development and disorders
- treatment of children who have neurological impairment and chronic illness
- challenging behaviors and autism

Program Requirements

Semester Hour Requirements

Master's degree in ECE: 40 semester hours

ECSE specialist license: 40 semester hours

Master's degree plus ECSE specialist license: 49 semester hours

Master's degree plus ECSE specialist added endorsement: 40 semester hours
 ECSE specialist added endorsement: 25 semester hours

Fieldwork and Practicum Requirements

The master's degree in early childhood education includes a total of 425 hours of required fieldwork/practica. Approximately 200 hours of fieldwork are associated with course assignments; 225 hours of intense, culminating practica occur toward the end of the second year of study. Students completing the MA program take a written comprehensive exam (take home) during the final semester of their program (concurrently with courses at the end of the program sequence).

For the master's degree in early childhood education plus the ECSE specialist initial license, a total of 800 hours of fieldwork/practica is required. Approximately 290 hours of fieldwork are associated with course assignments; 510 hours of intense, culminating practica occur toward the end of the second year of study. Students seeking an added endorsement in ECSE specialist also complete 510 hours of practicum experiences.

Nine semester hours can be transferred for the master's degree; 15 semester hours can be transferred for the ECSE specialist license. These credits include courses taken through continuing education, from other institutions or as a nondegree student at the University of Colorado Denver before the term officially admitted.

Plans of Study

The following table delineates course work and program completion requirements for the MA degree and ECSE specialist license through various program options.

ECE Program Options Plans of Study	MA in ECE	ECSE Specialist License	MA in ECE and ECSE Specialist License	ECSE Specialist Endorsement for those holding Elementary or ECE License	MA in ECE and ECSE Specialist Endorsement for those holding Elementary or ECE License	ECSE Specialist Endorsement for those holding Special Education License	MA in ECE and ECSE Specialist Endorsement for those holding Special Education license
Course							

EPSY 5100 - Advanced Child Growth and Development	Required	Required	Required				
RSEM 5100 - Basic Statistics	Required		Required		Required		Required
ECED 5000 - The Early Childhood Profession	Required	Required	Required	Required	Required	Required	Required
ECED 6100 - Medical and Physiological Aspects of Developmental Disabilities	Required	Required	Required	Required	Required	Required	Required
ECED 5020 - Approaches to Young Children's Learning	Required	Required	Required		Required **	Required *	Required **
ECED 5070 - Cognitive, Social, Emotional Development and Disorders in Young Children or ECED 5202 - Stress, Violence, and Behavior Challenges in Young		Required	Required	Required	Required	Required *	Required *

Children's Lives							
ECED 5080 - Language and Literacy in Young Children	Required	Required	Required	Required	Required	Required *	Required*
ECED 5010 - Curriculum and Program Development in Early Childhood Education	Required	Required	Required	Required *	Required *	Required	Required
ECED 5060 - Working with Parents and Families	Required	Required	Required		Required **		Required **
ECED 5040 - Administrative Seminar	Required	Required	Required		Required **		Required **
ECED 5202 - Stress, Violence, and Behavior Challenges in Young Children's Lives	Required				Required **		Required **
ECED 6690 - Seminar: Research and Current Issues in Early	Required		Required		Required		Required

Childhood Education							
ECED 5140 - Measurement and Evaluation in Early Childhood Education	Required		Required		Required		Required
ECED 6010 - Literacy and Mathematics K-2	Required	Required	Required	Required*	Required*		
ECED 5200 - Screening and Assessment of Young Children		Required	Required	Required	Required	Required	Required
ECED 6200 - Early Intervention Strategies		Required	Required	Required	Required	Required	Required
ECED 6911 - Practicum in Early Childhood Education	Required						
ECED 6910 - Infant/Toddler Practicum in ECSE		Required	Required	Required	Required	Required	Required
ECED 6912 - Preschool in ECSE		Required	Required	Required	Required	Required	Required

Preschool Practicum							
ECED 6914 - Primary Practicum in ECSE		Required	Required	Required	Required	Required	Required
Total Semester Hours	40	40	49	25	40	25	40
Comprehensive Exam	Required		Required		Required		Required
PLACE Exam #27		Required	Required	Required	Required	Required	Required
				* choose one	* choose one	* choose two	* choose two
					** choose two		** choose two

Instructional Technology Endorsement

K–12 teachers may elect to complete a 24-semester-hour program leading to state endorsement in instructional technology at the teacher or specialist level. Teachers beginning their careers may complete the initial teacher licensing program, followed by 24 semester hours for teacher-level endorsement. More experienced teachers may complete 24 semester hours for the specialist-level endorsement.

Comprehensive Examination for All ILT Students

The comprehensive exam consists of a professional portfolio where in students demonstrate program competencies through work products and related accomplishments. The portfolio is created throughout the student's program and

submitted for faculty review the final semester. For more information, see the ILT Web site.

For complete details about ILT programs, endorsement requirements and certificates, see the ILT Web site.

Sample Plan for K-12 IT Endorsement			
	Fall	Spring	Summer
Year 1	INTE 6750 Current Trends and Issues in Instructional Technology INTE 5830 Information and Learning Technologies Workshop	INTE 6720 Research in Information and Learning Technologies	INTE 6515 Leadership for Learning Technologies Integration INTE 5710 Telecommunications and Networking in Education
Year 2	INTE 6930 Internship in Information and Learning Technologies INTE 6710 Creative Designs for Instructional Materials	INTE 6999 Leadership and Practice in Information and Learning Technologies	

Linguistically Diverse Education Endorsement

Linguistically Diverse Education

Requirements for LDE Program

(Degree/Endorsement or Certificates - TESOL, CIEL, CRUE)

Office: Lawrence Street Center, 701

Telephone: 303-315-6300

Fax: 303-315-6311

E-mail: education@ucdenver.edu

Web site: www.ucdenver.edu/education/lde

Faculty

Information about faculty in this program is available at www.ucdenver.edu/education/lde. The faculty of linguistically diverse education (LDE) believe that effective teaching requires an awareness of and the ability to respond to individual differences. LDE faculty also emphasize the importance of teachers as scholars and reflective practitioners. In particular, teachers must understand how linguistic and cultural diversity affect their teaching. Two themes run throughout all program offerings. The first concerns the importance of recognizing a variety of literacies—"home" literacies, school literacy, "mainstream" literacy, first and second language literacies—and to develop teaching practices that utilize an understanding of the complexity of literacy development across language contexts. The second theme involves the meaningful use of language and literacy to improve the quality of one's life. As an approach to teaching, this theme emphasizes the creation of diverse, rich environments in which learners experience oral and written language as part of authentic tasks, and where concern for the cultural and linguistic heritage of the students is evident.

Program Options

The LDE program offers options leading to the following:

- a Master of Arts in Curriculum and Instruction
- the Colorado Endorsement for Linguistically Diverse Education
- a Teaching English to Speakers of Other Languages (TESOL) certificate
- a Content Instruction for English Learners (CIEL) certificate
- a Culturally Responsive Urban Education (CRUE) certificate

The program is intended for:

- novice teachers who have completed their Colorado teaching credentials in UC Denver's graduate teacher education licensure program and are enrolled in the

MA in curriculum and instruction with an emphasis in LDE (see 27 semester-hour option)

- veteran elementary and secondary teachers returning to graduate studies for the master's degree (36 semester hours)
- veteran elementary and secondary teachers returning to acquire Colorado endorsement credentials (24 semester hours)
- individuals interested in teaching English abroad (TESOL: 15 semester hours)
- veteran elementary and secondary teachers returning to graduate studies for a certificate to aid them in helping their English language learners succeed (CIEL: 9 semester hours)
- elementary and secondary teachers who desire preparation in better meeting the needs of culturally diverse learners (CRUE: 9 semester hours)
- individuals interested in teaching adults (MA: 36 semester hours)

The MA is a field-based professional development program involving university faculty and practicing LDE instructors in public school and intensive English settings. Courses, laboratories and practica emphasize scholarly approaches to complex problems of practice and feature interactive, collaborative and practical approaches to working with English language learners.

We advocate a sociocultural approach to issues of language and learning, acknowledging the legitimacy of linguistic and cultural differences and recognizing that academic settings represent important socializing forces in students' lives. Because of this, we emphasize the "whole learner" in our teaching and in teacher education and teacher development, understanding that individuals do not merely add a language to their repertoire of communication but make fundamental identity adjustments as they progress in their studies. For this reason, all our course work, laboratories and practica experiences are field-based, putting our program participants in contact with veteran teachers and English language learners. We draw heavily on recent scholarship in collaborative approaches to school-university partnerships and systemic school change in developing classroom methods and materials, curricula and teacher development experiences.

The MA program also provides a foundation in teaching English in a variety of contexts in the United States and abroad. Teachers who work in LDE programs or in other content areas (such as art, language arts, math, music, science, social studies or technology), but who wish to integrate LDE principles and strategies into their instruction for their English language learners, will find the MA program relevant to their interests and goals.

Course work includes language teaching methodology, language acquisition, linguistic analysis of English, multicultural foundations, assessment, literacy and other areas. This program has been developed as an advanced course of study for practicing teachers or individuals with some teaching experience.

Applicants who are new to teaching, and who wish to teach in U.S. K–12 public school settings, should inquire about the teacher education licensure program. Applicants who are new to teaching, but who do not need a teaching license (certification) because they do not wish to teach in U.S. public schools, may consider the TESOL certificate to gain initial teaching experiences before applying for the MA.

Program Requirements and Courses

To complete the LDE program and earn a master's degree and/or endorsement, or to earn a TESOL certificate, students must complete the appropriate course work as outlined in the table below.

Requirements for LDE Program (Degree/Endorsement or TESOL Certificate)					
Course	MA without CDE Endorsement in LDE	MA and CDE Endorsement in LDE	CDE Endorsement in LDE Only	MA and CDE Endorsement in LDE (when added to UC Denver's graduate teacher education licensure program)	TESOL Certificate
LALC 5910 - Foundations of Language, Literacy and Culture	Required	Required	Required	Required	
<i>One course from culture options:</i> LALC 5140 - Multicultural	Select One	Select One	Select One	Select One	

Education LALC 5150 - Culture of the Classroom LALC 5160 - Historical and Legal Foundations of Bilingual Education					
LALC 5070 - Linguistic Analysis of English: Implications for Teaching	Required	Required	Required	Required	Required
LALC 5030 - Language/Literac y Acquisition Part I	Required	Required	Required	Required	Required
LALC 5820 - Techniques in Teaching English as a Second Language	Required	Required	Required	Required	Required
LALC 5050 - Linguistic and Cultural Issues in Linking Assessment and Instruction	Required	Required	Required	Required	Required
<i>One course from field-based teaching options:</i> LALC 5020 - Workshop in Literacy and Language Teaching	5826 preferred	Elem: 5825 preferred Sec: 5826 preferred	Elem: 5825 preferred Sec: 5826 preferred	Elem: 5825 preferred Sec: 5826 preferred	5826

LALC 5825 - Methods and Materials of Language Teaching LALC 5826 - Language Teaching Lab LALC 5730 - Language and Literacy Across the Curriculum LALC 5770 - Effective Literacy Instruction for Second Language Learners					
LALC 5035 - Language and Literacy: Acquisition, Processes, and Cognition, Part II	Required	Required			
LALC 6912 - Seminar and Practicum in Literacy and Language, ESL and Bilingual Education	Required	Required	Required	Required	
<i>One course from research and evaluation methodology:</i> RSEM 5050 - Assessment for Teachers RSEM 5080 -	Select One	Select One		Select One	

Research for Teachers					
One course from educational psychology: EPSY 5110 - Human Learning EPSY 5220 - Adult Learning and Education	Select One	Select One			
Graduate-level University of Colorado elective	Select One	Select One			
Cumulative online portfolio	Required	Required	Required	Required	
LDE PLACE Exam		Required	Required	Required	
Total Semester Hours	36	36	24	27	15

Content Instruction for English Learners (CIEL) Certificate Requirements

Students interested in the CIEL certificate must complete the following:

LALC 5030 - Language/Literacy Acquisition Part I Semester Hours: 3

-OR-

LALC 5070 - Linguistic Analysis of English: Implications for Teaching Semester Hours: 3

LALC 5050 - Linguistic and Cultural Issues in Linking Assessment and Instruction
Semester Hours: 3

-OR-

LALC 5820 - Techniques in Teaching English as a Second Language Semester Hours:
3

-OR-

LALC 5825 - Methods and Materials of Language Teaching Semester Hours: 3

-OR-

LALC 5826 - Language Teaching Lab Semester Hours: 3

LALC 6912 - Seminar and Practicum in Literacy and Language, ESL and Bilingual Education Semester Hours: 3

Total: 9 Hours

Culturally Responsive Urban Education (CRUE) Certificate Requirements

Those considering the CRUE certificate must complete the following:

LALC 5170 - Race, Class and Culture in Public Schools Semester Hours: 3

LALC 5180 - Working with Communities and Families Semester Hours: 3

LALC 5190 - Culturally Responsive Pedagogy and Practices Semester Hours: 3

Total: 9 Hours

Additional information about the CRUE certificate can be found at www.cruecenter.org/certificate.php.

Cumulative Portfolio of Performance Based Assessments (PBAS)

The portfolio is required for the CDE endorsement, counts as the comprehensive exam for the master's degree and permits you to document your development over the course of your program. Portfolios are reviewed by LDE faculty members. At least two faculty members must agree that the portfolio is acceptable in order to pass. The portfolio process is reviewed in every class as each of the PBAs is completed in the classes, helping students to update their portfolios throughout the program. For more portfolio guidelines, visit the Web site at www.ucdenver.edu/education/lde.

PLACE Exam for Linguistically Diverse Education Endorsement

To add the endorsement to their teaching license, students must pass the PLACE (Program for Licensing Assessments for Colorado Educators) exam for linguistically diverse education, secure and submit the appropriate paperwork from the Colorado

Department of Education, and pay fees required for the PLACE and for the endorsement paperwork. Information about PLACE is online at www.place.nesinc.com.

Course Scheduling

During the fall and spring semesters, most university courses are offered in the late afternoon and evening and meet for three hours once a week over a 16-week semester. Some alternative course schedules are available, such as meeting on five Friday-evening/all-day Saturday combinations. In the summer semester, three-to eight-week sessions are offered, and courses may be in the morning, afternoon or evening.

Planning

For practicing full-time teachers, we recommend taking one course each fall and spring semester and up to two courses each summer. Students may simultaneously complete requirements for the MA and the endorsement for linguistically diverse education. Support for course planning is available in LDE advising sessions—usually held once in fall and once in spring. These sessions help students build their programs around course sequences and availability (some courses are offered only once per year).

Active Status in the Graduate School

Students must complete their programs within seven years, maintaining a GPA of 3.0. Students typically take four courses each calendar year. Failure to enroll over three contiguous semesters will result in a requirement to resubmit part I of the application for admission and a letter of intent.

Reading Teaching Endorsement

Literacy, Language and Culturally Responsive Teaching

MA Requirements for the Reading and Writing Option and Secondary English Education Option, plus Reading Teacher Endorsement and Certificate Programs

Office: Lawrence Street Center, 701

Telephone: 303-315-6300

Fax: 303-315-6311

E-mail: education@ucdenver.edu

Web sites: www.ucdenver.edu/education/literacy and
www.ucdenver.edu/education/englished

Reading and Writing

Secondary English

Early and Adolescent Literacy Certificates

Faculty

Information about faculty in this program is available online at www.ucdenver.edu/education/literacy.

The faculty of literacy, language and culturally responsive teaching (L2CRT) believe that effective teaching requires an awareness of and the ability to respond to individual differences. L2CRT faculty also emphasize the importance of teachers as scholars and reflective practitioners. In particular, teachers must understand how linguistic and cultural diversity affect their teaching. Two themes run throughout all program offerings. The first concerns the importance of recognizing a variety of literacies—"home" literacies, school literacy, "mainstream" literacy, first and second language literacies—and to develop teaching practices that utilize an understanding of the complexity of literacy development across language contexts. The second theme involves the meaningful use of language and literacy to improve the quality of one's life. As an approach to teaching, this theme emphasizes the creation of diverse, rich environments in which learners experience oral and written language as part of authentic tasks, and where concern for the cultural and linguistic heritage of the students is evident.

Reading and Writing Option and Reading Teacher Endorsement

This master's program is designed for K-6 and 7-12 teachers. Those interested in elementary reading and writing should communicate with Professors Espinoza, Nathenson-Mejia or Taylor. Those interested in secondary and adult reading and writing should communicate with Professor Shanklin (see Web site for faculty contact information).

Reading is a credentialed program meeting the Colorado Department of Education requirements for reading teacher endorsement. Therefore, students who obtain a master's degree emphasizing reading education from UC Denver are certified to hold

positions in public and private schools as special developmental and remedial reading teachers in K–6 or 7–12. This program is also valuable for elementary and secondary teachers who wish to enhance reading and writing instruction in their classrooms.

By placing emphasis on the reading, writing and oral and visual language development of culturally, linguistically and academically diverse student populations, this master's program is at the forefront of the field. Language is approached from a socio-psycholinguistic perspective that emphasizes the learner's construction of meaning rather than the learning of isolated skills. Importance is placed on using theory, inquiry and personal reflection to inform classroom practice. The program prepares teachers to become decision makers capable of developing learner-centered curricula where each student's reading and writing abilities are assessed to address developmental or special needs.

Curriculum

Course offerings lead to an MA degree in curriculum and instruction with an emphasis in reading and writing, as well as a reading teacher endorsement, at one of two levels: K–6 or 7–12.

Those who have completed UC Denver's graduate teacher education licensure program must earn an additional 27 semester hours to obtain the MA and endorsement. Those who completed licensure through other means must earn an additional 36 semester hours to obtain the MA and endorsement.

Teachers may add a reading teacher endorsement to an already-earned master's degree in education by taking those courses listed under the chosen endorsement level. (In the state of Colorado, the reading teacher endorsement cannot simply be added to a bachelor's degree.) Electives and core courses are not required. Two additional courses must be taken in other areas specified by the Colorado Department of Education. In many cases, previous master's degree courses will satisfy this requirement.

Requirements for Reading and Writing Program (Degree/Endorsement Options)						
	ELEMENTARY (K-6)			SECONDARY (7-12)		
Course	MA & CDE Endorsement	MA & CDE Endorsement (when added)	CDE Endorsement Only	MA & CDE Endorsement	MA & CDE Endorsement (when added to UC Denv	CDE Endorsement Only

		<i>to UC Denver's graduate teacher education licensure program)</i>			<i>er's graduate teacher education licensure program)</i>	
LALC 5020 - Workshop in Literacy and Language Teaching	Required		Required	Required	Required	Required
LALC 5810 - Workshop in Language Acquisition and Development	Required	Required	Required	Required	Required	Required
LALC 5910 - Foundations of Language, Literacy and Culture	Required	Required	Required	Required	Required	Required
LALC 5710 - Primary Literacy: Pre-3rd Grade	Required	Required	Required			
LALC 5720 - Writing: Process, Development, and Teaching Grades 3-12	Required	Required	Required	Required	Required	Required

LALC 5730 - Language and Literacy Across the Curriculum	Required		Required	Required		Required
Children's literature course, per advisor approval	Select one	Select one	Select one			
LALC 5740 - Adolescent Literature				Required	Required (<i>waived if taken as part of English Licensure</i>)	Required
LALC 6910 - Seminar and Practicum in Literacy and Language, K-6	Required	Required	Required			
LALC 6911 - Seminar and Practicum in Literacy and Language, 7-12+				Required	Required	Required
LALC 5055 - Linking Assessment and Instruction in Language and	Required	Required	Required	Required	Required	Required

Literacy, Part I						
LALC 6915 - Seminar and Practicum in Literacy Professiona l Developme nt	Required	Required		Required	Required	Required
Core course in Research and Evaluation Methodolog y - see list below	Select one	5080		Select one	5080	
Interdiscipli nary core course - see list below	Select one			Select one		
Graduate- level School of Education and Human Developme nt elective				Select one		
Portfolio	Required	Required		Required	Required	
PLACE Exam	Required	Required	Required	Required	Required	Required
Total Semester Hours	36	27	27	36	27	27

Secondary English Education Option

The master's program in secondary English education is designed to enhance the preparation of middle and high school English/language arts teachers. Students complete course work in language development, assessment and field experiences. With the help of their advisor, they also select specific courses from the English Department or within the School of Education and Human Development that provide a well-rounded repertoire of knowledge and skills to fulfill the needs of an English educator. Special consideration is given to working with diverse ethnic populations. Students interested in English education should see Professor Shanklin (see Web site for faculty contact information).

Program Requirements

To earn a master of arts degree in curriculum and instruction with an emphasis in secondary English education, students must complete the following:

- 30 graduate semester hours in English education
- 6 graduate semester hours of core courses
- performance-based assessments that culminate in a portfolio finalized in the last semester of the program as fulfillment of the MA comprehensive exam requirement

Each student's course plan is developed in conjunction with his/her advisor. Please review www.ucdenver.edu/education/englished for recommended course sequence.

LALC 5055 - Linking Assessment and Instruction in Language and Literacy, Part I
Semester Hours: 3

LALC 5740 - Adolescent Literature Semester Hours: 3

LALC 5760 - Theory and Methods of English Education Semester Hours: 3

-OR-

LALC 5835 - Special Topics: Literacy and Language Semester Hours: 3

LALC 5810 - Workshop in Language Acquisition and Development Semester Hours: 3

LALC 5910 - Foundations of Language, Literacy and Culture Semester Hours: 3

LALC 6911 - Seminar and Practicum in Literacy and Language, 7-12+ Semester Hours:
3

Research and Evaluation Methodology core course (see list below).

Interdisciplinary core course (see list below).

Four electives, per advisor approval, from the English department and/or the School of Education & Human Development. The following are recommended:

LALC 5720 - Writing: Process, Development, and Teaching Grades 3-12 Semester
Hours: 3

-OR-

ENGL 5110 - Denver Writing Project Semester Hours: 3

Courses in working with English language learners and in instructional technology may also be helpful. For a technology course, please contact the professor about prerequisite knowledge.

Total: 36 semester hours

Program Requirements--When Added to UC Denver's Graduate Teacher Education Licensure Program

MA in curriculum and instruction with emphasis in secondary content leadership (English), when added to UC Denver's graduate teacher education licensure program:

- 18 graduate semester hours
- performance-based assessments that culminate in a portfolio finalized in the last semester of the program as fulfillment of the MA comprehensive exam requirement

Each student's course plan is developed in conjunction with his/her advisor. Please review www.ucdenver.edu/education/englished for recommended course sequence.

FNDS 5050 - Critical Issues in American Education Semester Hours: 3

-OR-

IPTE 5080 - Principles and Practice of Change Semester Hours: 3

-OR-

SPED 5300 - Collaborating In Schools and Communities Semester Hours: 3

RSEM 5080 - Research for Teachers Semester Hours: 3

Four electives, per advisor approval, from the English Department and/or the School of Education and Human Development. The following are recommended:

LALC 5720 - Writing: Process, Development, and Teaching Grades 3-12 Semester Hours: 3

-OR-

ENGL 5110 - Denver Writing Project Semester Hours: 3

Courses in working with English language learners and in instructional technology may also be helpful. For a technology course, please contact the professor about prerequisite knowledge.

Total: 18 semester hours

Core Courses

Research and Evaluation Methodology

RSEM 5000 - Orientation to Research and Measurement in Education Semester Hours: 3

RSEM 5050 - Assessment for Teachers Semester Hours: 3
RSEM 5080 - Research for Teachers Semester Hours: 3
RSEM 5100 - Basic Statistics Semester Hours: 3
RSEM 5200 - Introduction to Research Methods Semester Hours: 3
RSEM 5300 - Introduction to Measurement Semester Hours: 3

Interdisciplinary

EPSY 5100 - Advanced Child Growth and Development Semester Hours: 3
EPSY 5140 - Advanced Adolescent Growth and Development Semester Hours: 3
EPSY 5220 - Adult Learning and Education Semester Hours: 3
EPSY 6200 - Human Development Over the Life Span Semester Hours: 3
FNDS 5050 - Critical Issues in American Education Semester Hours: 3
FNDS 5420 - History and Philosophy of Education: Twentieth Century America
Semester Hours: 3
LALC 5140 - Multicultural Education Semester Hours: 3
LALC 5150 - Culture of the Classroom Semester Hours: 3
LALC 5160 - Historical and Legal Foundations of Bilingual Education Semester Hours: 3
LALC 5820 - Techniques in Teaching English as a Second Language Semester Hours:
3

Cumulative Portfolio

The MA portfolio counts as the comprehensive exam for the master's degree. The portfolio is an accumulation of the performance based assessments completed during program courses and reflects on the student's development over the course of the degree program. Reading and writing students must include confirmation of Reading Teacher PLACE exam registration in their portfolios. Information about the PLACE is online at www.place.nesinc.com.

Course Scheduling

During the fall and spring semesters, most university courses are offered in the late afternoon and evening and meet for three hours once a week over a 16-week semester. Some alternative course schedules are available, such as meeting on five Friday-evening/all-day Saturday combinations. In the summer semester, three- to eight-week sessions are offered, and courses may be in the morning, afternoon or evening. A current schedule of courses is available online at <http://courses.cudenver.edu>.

Planning

For practicing full-time teachers, we recommend taking one course each fall and spring semester, and up to two courses each summer. Plan carefully because courses are intended to build upon each other, and some courses are only offered once a year.

Active Status in the Graduate School

Students must complete their programs within seven years, maintaining a GPA of 3.0. Students typically take four courses each calendar year. Failure to enroll over three contiguous semesters will result in a requirement to resubmit part I of the application for admission and a letter of intent.

Early and Adolescent Literacy Certificates

The early literacy certificate and adolescent literacy certificate each include three graduate-level courses (for a total of 9 semester hours) and are conveniently offered entirely online. They are specifically designed to help licensed teachers develop the skills necessary to reach student readers. To find out more, please visit www.ucdenver.edu/education or email cpe@ucdenver.edu.

To learn about how these certificate credits may apply toward one of the above programs in reading and writing, contact education@ucdenver.edu.

School Library Endorsement

School Library and Instructional Leadership MA

Office: Lawrence Street Center, 701

Telephone: 303-315-6300

Fax: 303-315-6311

E-mail: education@ucdenver.edu

Web site: www.ucdenver.edu/education/schoollibrary

Faculty

Information about SLIL faculty is available online at www.ucdenver.edu/education/schoollibrary.

Program Overview

The school library and instructional leadership program within the ILT master's degree program is a nationally recognized NCATE-AASL revised and approved school library media education program that leads to the Colorado Department of Education endorsement for school libraries. The program integrates information literacy standards through the use of collaborative planning, as approved by the American Association of School Libraries. Technology and library resources are seen as tools to increase student achievement by integrating the information literacy standards with the content standards of the classroom teacher. The program adheres to the constructivist theory of resource-based learning and promotes an appreciation of children's and adolescent literature. The program believes that school librarians require education as a teacher as well as a librarian, as advocated by the American Library Association and the International Association of School Libraries. As a school librarian, you will provide collaborative instruction, information access and leadership through the management of your library program and the library resources. Courses are offered in a completely online program, or a monthly Saturday cohort scheduled in communities across Colorado.

Once admitted, students begin a plan of study that typically takes about two years to complete. Consult the SLIL Web site for more information about specific plans of study, course offerings and expectations of cohort groups.

Admission Requirements

Admission decisions are based on undergraduate and graduate grades, external letters of recommendation and fit with the program as reflected in a letter of intent. In some cases, results of a test (GRE) are also required. Prospective students should consult the SLIL program Web site for complete admission procedures and requirements.

Professional Expectations

All students in the SLIL program are expected to show a strong commitment to the program and to maintain high academic, professional and ethical standards. Inappropriate or unprofessional conduct is cause for discipline or dismissal from the program.

Technology Expectations

The SLIL program uses computers and related technologies either as a focus or a tool for learning. Students are expected to obtain an e-mail account and check it frequently. In addition to on-campus facilities, SLIL students need convenient access to Internet-

connected computers off campus, either at their place of work or at home. In addition to textbooks, software purchases may be required or recommended for specific classes.

Program Requirements

School library students also have a choice between endorsement-only and full master's programs. The master's program requires a minimum of 36 graduate semester hours. Students complete a plan of study consisting of courses and professional field experience. To receive Colorado teacher endorsement, students are required to pass the PLACE test in school library. This is a Colorado Department of Education requirement.

An Example of Two-Year Plan for School Library Program

Courses are offered only in certain semesters and courses should be taken in a particular sequence based on when you start the program. Advising is required prior to enrolling in a course, even as a non-degree student, in order to ensure the most effective course sequencing and availability of courses.

Typical First Year

Fall	Spring	Summer
SCHL 5530 - Foundations of School Librarianship* LALC 5790 - Children's Literature Through the Ages***	SCHL 5020 - Collection Development	SCHL 5110 - Integrating Instructional Technology Practices in School Libraries (MA only) LALC 5740 - Adolescent Literature . ***

Second Year

Fall	Spring	Summer
SCHL 5160 - Managing School Library Programs RSEM 5080 - Research for Teachers *** SCHL 5911 - School Library Field Experience-Elementary **	SCHL 5030 - Information Literacy and Reference SCHL 5912 - School Library Field Experience-Secondary ** Elective (2 semester hours) (MA only)****	SCHL 5040 - Information Storage and Utilization SCHL 6999 - Leadership and Practice in School

		Libraries (MA Only)

* SCHL 5530 Foundations in School Librarianship should be taken as the first course in your program.

** 80 hours of field experience hours are required. Field experience may be completed over the course of a year; online seminar hours will be completed during the field experience timeframe. Field experiences are completed within a pre-approved school library. See Field Experience Policy for more information.

*** LALC 5740; LALC 5790; and RSEM 5080 are offered on-campus in other semesters as well.

****Electives are usually attendance at Colorado Association of Libraries (CAL) conference in the fall; CASL in the spring; or TIE in the summer.

Comprehensive Examination for All SLIL Students

The comprehensive exam consists of a professional portfolio where in students demonstrate program competencies through work products and related accomplishments. The portfolio is created throughout the student's program and submitted for faculty review the final semester. For more information, see the ILT Web site. For complete details about the SLIL program and endorsement requirements, see the ILT Web site at www.ucdenver.edu/education/schoollibrary.

Undergraduate Certificate Programs

Applied German Language Skills Undergraduate Certificate

Certificate Description

The undergraduate certificate in applied German language skills is designed for students of any discipline who wish to acquire and demonstrate to potential employers that they possess a fluid working knowledge of the German language and understanding of the cultures in which German is spoken. The completion of the requirements for this certificate can also serve as a means for nondegree-seeking professionals to develop a working competency in the German language and culture for use in such areas as international business, education, genealogy, transatlantic travel, academic research, translation and many other fields.

Admission

All currently enrolled students at UC Denver (undergraduate or graduate) in good standing (including nondegree-seeking students) are eligible for admission into the program. Any student who already possesses an undergraduate degree is also qualified for admission into the program, but must apply to the university as a nondegree-seeking student. Students working toward a baccalaureate degree who are currently enrolled in a college-level institution other than UC Denver are also eligible for certification.

Course Requirements

Twenty-four (24) semester hours of course work with UC Denver faculty (15 of which must be upper division), distributed as follows:

German Language Skills (15 credit hours): Students must complete a minimum of 15 semester credit hours of upper-division German language skills courses. These courses are defined as those areas of study in which grammar, vocabulary, pronunciation and/or communicative abilities in German are the primary focus of instruction. Up to six credit hours of upper-division German skills courses may be applied as transfer credit from outside, college-level institutions. Alternately, students may apply up to nine credit hours of officially recognized study abroad credit toward this requirement.

German Culture (9 credit hours): Students must complete a minimum of nine semester credit hours of German culture courses where the primary focus of instruction addresses any facet of Austrian, German and/or Swiss culture. These courses may be completed at any level (lower or upper division as well as graduate) and in any combination of disciplines, provided that the student supplies evidence that a significant portion of each course is devoted to Austrian, German and/or Swiss culture. This includes but is not limited to history, philosophy, political science, literature (in German or in translation) and other German cultural topics. Up to three credit hours of culture courses may be applied as transfer credit from outside, college-level institutions. Alternately, students may apply up to six credit hours of officially recognized, documented university-level course work (or the equivalent) in a German-speaking country.

Proficiency Exam: Successful completion of an internationally recognized German language proficiency exam. At any point prior to the awarding of the certificate, students must submit documentation that they have passed an internationally recognized German language skills examination. Such proficiency exams (some of which are administered locally in Denver and Boulder) include but are not limited to the TestDaF (Test Deutsch als Fremdsprache), Zertifikat Deutsch (ZD), Zertifikat Deutsch für den Beruf (ZDfB) or Prüfung Wirtschaftsdeutsch (PWD). Students must receive approval from German

faculty at UC Denver to ensure that their exam scores are valid and applicable toward certification.

Students must obtain approval from UC Denver German faculty for all of the above and maintain a minimum 3.0 GPA in all course work applied to the certificate.

Transfer Credit

A significant portion of the certificate program is based on language proficiency. Consequently, students who have developed language skills through course work at institutions outside of UC Denver, including study abroad, may apply a limited number of previously earned semester hours toward the program. Please make an appointment with an advisor in the department to discuss details. All transfer credits must be approved by UC Denver German faculty.

Application of Course Work

The course work applied toward certification is meant as a proficiency requirement and not as a total semester hour amount. As a result, students who are working toward a degree may apply course work in German certification as credit toward other programs such as a minor, general education requirements or their major. Students are encouraged to inform their major advisor that they are working toward certification in German for help in coordinating their overall academic curriculum.

Further Information

Students are encouraged to hold a personal conference with a departmental advisor before applying to the certificate program. Phone 303-556-4893 for contact information.

Applied Statistics Undergraduate Certificate

Coordinator: Stephanie Santorico:

Telephone: 303-556-2547

E-mail: Stephanie.Santorico@ucdenver.edu

Web site: http://math.ucdenver.edu/statistics/ugrad_cert.shtml

Entrance Requirements

All undergraduate students in good standing (including nondegree-seeking students) will be admitted to the program. For students in the College of Liberal Arts and Sciences,

this requires a cumulative grade point average of 2.0. Some mathematical background (including calculus and linear algebra) is recommended.

To apply, see Undergraduate Applied Statistics Certificate

Curriculum

There are three parts to the requirements:

Required Courses

MATH 2830 - Introductory Statistics

Summer 2010 Registration **MATH 2830**

Basic statistical concepts, summarizing data, probability concepts, distributions, confidence intervals, hypothesis testing. Prereq: intermediate algebra. **Semester Hours:** 3to 3**GT Pathways Category Key:** GT-MA1

Registration is changing. Visit our website for details ucdenver.edu/registration.

Basic Methods (choose one):

MATH 4820 - Statistics

Summer 2010 Registration **MATH 4820**

Point and confidence interval estimation, principles of maximum likelihood, sufficiency and completeness, tests of simple and composite hypothesis, linear models and multiple regression, analysis of variance. Prereq: MATH 3800. MATH 4810 highly recommended, but not required. Cross-listed with MATH 5320. **Semester Hours:** 3to 3**When Offered:** *SPRING*

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 4830 - Applied Statistics

Summer 2010 Registration **MATH 4830**

Review of estimation, confidence intervals and hypothesis testing; Anova; categorical data analysis; non-parametric tests; linear and logistic regression. Prereq: an introductory course in statistics such as MATH 2830 or permission of instructor. Cross-listed with MATH 5830. **Semester Hours:** 3to 3**When Offered:** *SPRING*

Registration is changing. Visit our website for details ucdenver.edu/registration.

Advanced Methods (choose one):

MATH 4387 - Regression Analysis, Modeling and Time Series

Summer 2010 Registration **MATH 4387**

Topics include linear and multiple regression, basic experimental designs, one-way analysis of variance. Emphasis is on practical aspects and applications of linear models to the analysis of data in business engineering, behavioral, biological and physical sciences. Prereq: MATH 3191 and 3800/4820. Cross-listed with MATH 5387. **Semester Hours: 3 to 3** **When Offered: FALL**

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 4394 - Experimental Designs

Summer 2010 Registration **MATH 4394**

Infrequent. Completely randomized block designs factorial and fractional factorial experiments, balanced incomplete block designs, responses surface methods. Prereq: MATH 4387. Cross-listed with MATH 5394. **Semester Hours: 3 to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

Elective (choose one):

MATH 4101 - Applied Statistics Using SAS and SPSS I

Summer 2010 Registration **MATH 4101**

Teaches the practical statistical tools social scientists use to analyze real-world problems. Course split into four modules, each taught by a different instructor. The first module introduces SAS and SPSS; modules 2-4 are problem-based and cover topics such as ANOVA, multivariate regression, and cluster analysis. Prereq: any statistics course. **Semester Hours: 3 to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

or any statistics course in the math department at the 4000 level or higher

ECON 4150 - Economic Forecasting

Summer 2010 Registration **ECON 4150**

Teaches forecasting techniques used in business and government to project trends and short-term fluctuations. Actual data are employed in instruction and labs. State-of-the-art spreadsheet and algorithms are introduced as part of the course work. Prereq:

Undergraduate statistics or permission of instructor. Cross-listed with ECON

5150. **Semester Hours: 3 to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 4811 - Introduction to Econometrics

Summer 2010 Registration **ECON 4811**

Introduces econometric methods and their applications to quantitative economic problems. Simple and multiple regression models and problems encountered in their

applications are developed in lectures and applied computer projects. Prereq: ECON 3811 or equivalent. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4770 - Applied Statistics for the Natural Sciences

Summer 2010 Registration **GEOG 4770**

Surveys statistical techniques including: quick review of basic statistics, tests for normality and outliers, display of data; simple and multiple regression; ANOVA and its relation to regression. Emphasis on computer or stat-pak analysis and interpretation of statistical results. Prereq: College algebra and GEOG 3080, or consent of instructor. Cross-listed with ENVS 5600, GEOL 4770, 5770. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOL 4770 - Applied Statistics for the Natural Sciences

Summer 2010 Registration **GEOL 4770**

Surveys statistical techniques including: quick review of basic statistics, tests for normality and outliers, display of data; simple and multiple regression; Anova and its relation to regression. Emphasis on computer or stat-pak analysis and interpretation of statistical results. Prereq: College algebra and GEOG 3080, or consent of instructor. Cross-listed with GEOL 5770, GEOG 4770, ENVS 5600. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

SOCY 5183 - Seminar: Quantitative Data Analysis

Summer 2010 Registration **SOC 5183**

A research-oriented seminar stressing the utilization of social data already collected in the test or generation of sociological theory. Note: Required for M.A. graduate students in sociology. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.
Equivalent course pre-approved by the certificate coordinator

Project

An independent data analysis project with a report and presentation to demonstrate proficiency with data analysis techniques and a statistical computing software package. Enroll for one hour of MATH 4840 (Independent Study) or in an equivalent course pre-approved by the certificate coordinator.

Certificate Total: 13 Hours

Grade Requirements

Students must maintain a 3.0 GPA in these courses with no credit given for courses with grades below *B-*.

Residency Requirements

Since a certificate is a University of Colorado Denver certification of a student's specialized knowledge in an advanced subject area, all courses in the certificate program are expected to be taken in residency at the University of Colorado Denver.

Cultural Diversity Studies Undergraduate Certificate

The undergraduate certificate in cultural diversity studies is designed to appeal to undergraduate students with a background in any major. It will allow students to demonstrate to potential employers that they possess the multicultural skills and knowledge necessary to succeed in the workplace. Students will enroll in department courses that focus on the historical context in which race and culture have emerged in the United States.

This certificate is also targeted to nondegree-seeking professionals who seek to acquire multicultural knowledge and the skills necessary to ensure their success in professional environments. Students will be encouraged to think critically about race and race relations. Their expanded understandings of the implications of race and culture in work environments will ensure employers that they offer the highest quality employees opportunities in employment or advancement.

A certificate in cultural diversity studies offers students an enduring intellectual value based on classic articles, book excerpts and scholars who have shaped the study and understanding of race and ethnicity in contemporary society. Our courses provide the opportunity for students to encounter many of the greatest thinkers in race and ethnicity firsthand. Course curriculum includes carefully edited selections from the works of the most distinguished observers of race and ethnicity, past and present. Students will appreciate the broad range of coverage, the logic of course organization and the accessibility of material covered.

The undergraduate certificate in cultural diversity studies requires 12 semester hours (four courses).

Certificate Requirements

Required Course

ETST 2000 - Introduction to Ethnic Studies

Summer 2010 Registration **ETST 2000**

Multi-disciplinary survey of contemporary and historical research analyses of the diverse social, economic, political, and cultural facets of African American, American Indian, Asian American, and Latino communities and cultures. **Semester Hours:** 3to 3**GT**

Pathways Category Key: GT-SS3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 3 Hours

Electives

Choose three courses from any ethnic studies department courses, including the following:

ETST 2155 - African American History

Summer 2010 Registration **ETST 2155**

Surveys the history of African Americans. Study interpretations, and analysis of major problems, issues, and trends affecting the African American population from pre-slavery to the present. **Semester Hours:** 3to 3**GT Pathways Category Key:** GT-HI1

Registration is changing. Visit our website for details ucdenver.edu/registration.

ETST 2294 - Race and the Media

Summer 2010 Registration **ETST 2294**

Virtually all Americans are susceptible to the blatant and subtle socializing and conditioning effects of the modern media (film, television, the internet). Explains the variety of cultural values transmitted through the media, with particular emphasis on racial issues. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ETST 3254 - Race and Ethnicity in the Inner City

Summer 2010 Registration **ETST 3254**

This dynamic course combines aspects of urban studies and sociology. Contemporary cultural factors of the minority ghetto experience are investigated as elements in urban crisis. Emphasis is placed on possible solutions through government agencies and community organization. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ETST 3297 - Social History of Asian Americans

Summer 2010 Registration **ETST 3297**

Introductory-level course surveys the social history of Asian American groups from the mid-19th century to the present. Examines immigration patterns, the development of communities, social and economic problems, and anti-Asian movements and activities.

Cross-listed with SOCY 3297. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ETST 3396 - History of the American Indian

Summer 2010 Registration **ETST 3396**

Indigenous nations in North America comprise hundreds of diverse cultures. This course examines U.S. Indian policy and how indigenous nations responded; how they creatively adapted, and resisted cultural change; and how they continue to persist culturally, socially, and politically. Cross-listed with HIST 3396. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ETST 3704 - Culture, Racism and Alienation

Summer 2010 Registration **ETST 3704**

The effects of racism on the personality of participants in racist cultures. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ETST 4558 - Chicano and Latino Politics

Summer 2010 Registration **ETST 4558**

Analysis of the social, cultural, and economic factors that affect political behavior of Latinos. Special attention is paid to the Mexican American cultural heritage and to relations between Mexican Americans and Anglo Americans. Cross-listed with PSCI 4554. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 9 Hours

Certificate Total: 12 Hours

There are crosslisted courses in a variety of departments, including history, political science and sociology. Any crosslisted course is acceptable. You must register for it under ETST numbers. A complete listing of department offerings and crosslisted courses can be obtained every semester from the ethnic studies department Web page or by calling our office at 303-556-2700 for a copy.

A minimum grade of *B-* must be earned in each of the four courses completed as part of the certificate. All credits for the certificate must be earned at the Downtown Campus.

Additional information about the undergraduate certificate in cultural diversity studies may be obtained from ethnic studies Director Donna Langston, Lawrence Street Center, 480, 303-556-2726, Donna.Langston@ucdenver.edu.

Ethics Undergraduate Certificate

The certificate in ethics is designed for students currently enrolled in a degree program as well as nondegree students.

A total of 15 semester hours is required for an ethics certificate. Students are required to write a capstone paper in an area of ethics directly related to their career and/or field of study (PHIL 3840).

Certificate Requirements

PHIL 1020 - Introduction to Ethics and Society: The Person and the Community

Summer 2010 Registration **PHIL 1020**

Studies some of the traditional problems in ethics that tend to be focused on individual morality within the larger context of social and political philosophy. Some specific contemporary moral and social problems may be addressed, such as AIDS, abortion, famine, and individual rights versus the collective rights of society. **Semester Hours:** 3to 3**GT Pathways Category Key:** GT-AH3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Choose four:

PHIL 3002 - Ancient Greek Philosophy

Summer 2010 Registration **PHIL 3002**

History of ancient Greek thought, including traditional myth, pre-Socratic fragments, Plato's dialogues, and Aristotle's systematic philosophy. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 3150 - History of Ethics

Summer 2010 Registration **PHIL 3150**

Surveys the ethical thought of major figures in the history of philosophy, beginning with Plato and ending with the 19th century. Examples: Aristotle, Hume, Kant and Mill. (Class readings of primary philosophical texts.) **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 3200 - Social and Political Philosophy

Summer 2010 Registration **PHIL 3200**

Examines basic issues in social and political philosophy, including justice, freedom, individuality, power and community. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 3250 - Business Ethics

Summer 2010 Registration **PHIL 3250**

Surveys some of the major moral problems which arise in business, such as the nature and scope of the moral responsibilities of corporations, affirmative action, and truth in advertising. Begins with a study of moral reasoning, ethical theory, and the challenges of applying ethical theory. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 3500 - Ideology and Culture: Racism and Sexism

Summer 2010 Registration **PHIL 3500**

Surveys the nature and role of racism and sexism. Topics may include ideology theory, naturalism, the equal protection clause, recent scientific discussion, sociolegal history, and social constructionism. Cross-listed with WGST 3500. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 3840 - Independent Study

Summer 2010 Registration **PHIL 3840**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 4150 - Twentieth Century Ethics

Summer 2010 Registration **PHIL 4150**

Surveys representative philosophers, methods, and/or problems in 20th century ethics. Prereq: PHIL 3002 or 3022, a minimum grade of "C" in each previous philosophy course, or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 4242 - Bioethics

Summer 2010 Registration **PHIL 4242**

Examines some of the major moral issues confronting the nation's health care system. The class will search for solutions to such problems as financing health care for those unable to do so on their own, determining the extent of a patient's right to both refuse and demand certain types of medical treatment, and allocating scarce medical resources such as lifesaving vital organs. The springboard for examining these issues will be the doctor or patient relationship framed by the moral principles of respect for persons and beneficence. Prereq: PHIL 3002 or 3022, a minimum grade of "C" in each previous philosophy course, or permission of instructor. Cross-listed with PHIL 5242, SSCI 5242, HUMN 5242. **Semester Hours:** 3 to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Certificate Total: 15 Hours

Geographic Information Science Undergraduate Certificate

GISci Certificate Advisor: Rafael Moreno

Office: North Classroom, 3524

Telephone: 303-352-3762

E-mail: rafael.moreno@ucdenver.edu

The intention of this certificate is to provide undergraduates with a mechanism for demonstrating capabilities in spatial techniques in the social and/or physical sciences. The focus of this certificate is on a broad array of geotechniques, including geographic information systems, remote sensing, cartography and statistics, which give students additional analytical skills to take into the workplace or on to graduate school. This certificate is designed for geography majors as well as nonmajors.

Upon successful completion of the certificate, students will be able to:

- understand basic theoretical underpinnings of spatial analysis
- apply geo-spatial technologies to real-world problems

- have a basic knowledge of how to operate at least three types of software used for spatial analysis

Students must have a 3.0 GPA average in all approved geographic technology courses to earn the certificate. The certificate will be awarded when the student graduates with the bachelor's degree. For those who already have a bachelor's degree, the certificate will be awarded upon completion of the program.

Application

Students may begin the program in any semester or during the summer by making arrangements with Dr. Rafael Moreno, the GISci certificate coordinator, and completing and signing the **Application for GISci Certificate**. This should be done once you have elected to pursue the certificate. Those who are not current students must apply for non-degree admission (go to Information for Undergraduate Students and click on Nondegree Students link at top of page) before registering for any classes.

Curriculum

To obtain the certificate, students must complete four core courses, one elective, and a 1-hour independent study, totaling 16 hours. Although the four core courses may be taken in any order, it is advisable to begin with GEOG 3080, Introduction to Mapping and Map Analysis, since this course familiarizes students with many key concepts used in the other classes. Of the four core requirements, only the statistics class has prerequisites, including algebra and introductory calculus. Because of the technical nature of the GIS and remote sensing course work, however, some mathematical experience is desirable prior to beginning the program. All core courses are offered on a yearly basis. Any alterations to the program MUST be approved by the GISci Coordinator.

Course Requirements

Core Courses:

GEOG 4060 - Remote Sensing I: Introduction to Environmental Remote Sensing

Summer 2010 Registration **GEOG 4060**

An in-depth treatment of the use of aerial photographs and other forms of imagery for the analysis of urban-industrial patterns, vegetation, agriculture, landforms, and geologic structure. Prereq: GEOG 3080 or permission of instructor. Cross-listed with GEOG 5060, GEOL 4060, GEOL 5060. **Semester Hours:** 3 to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

GEOG 5060 - Remote Sensing I: Introduction to Environmental Remote Sensing

Summer 2010 Registration **GEOG 5060**

An in-depth treatment of the use of aerial photographs and other forms of imagery for the analysis of urban-industrial patterns, vegetation, agriculture, landforms, and geologic structure. Prereq: GEOG 3080 or permission of instructor. Cross-listed with GEOG 4060, GEOL 4060, 5060. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

(May also take as GEOL 4060 or 5060)

GEOG 4080 - Introduction to GIS

Summer 2010 Registration **GEOG 4080**

Introduces various aspects of geographic information systems (GIS), including justification, definition of hardware/software, database design, and data conversion. GIS is a computer-based mapping system providing a graphical interface to locational and relational attribute data on facilities and land. Includes hands-on use of a geographic information system workstation. Prereq: GEOG 3080 or permission of instructor. Cross-listed with GEOG 5080. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

GEOG 5080 - Introduction to GIS

Summer 2010 Registration **GEOG 5080**

Introduces various aspects of geographic information systems (GIS), including justification, definition of hardware/software, database design, and data conversion. GIS is a computer-based mapping system providing a graphical interface to locational and relational attribute data on facilities and land. Includes hands-on use of a geographic information system workstation. Cross-listed with GEOG 4080. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOL 4770 - Applied Statistics for the Natural Sciences

Summer 2010 Registration **GEOL 4770**

Surveys statistical techniques including: quick review of basic statistics, tests for normality and outliers, display of data; simple and multiple regression; Anova and its relation to regression. Emphasis on computer or stat-pak analysis and interpretation of statistical results. Prereq: College algebra and GEOG 3080, or consent of instructor. Cross-listed with GEOL 5770, GEOG 4770, ENVS 5600. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

GEOL 5770 - Applied Statistics for the Natural Sciences

Summer 2010 Registration **GEOL 5770**

Surveys statistical techniques including: quick review of basic statistics, tests for normality and outliers, display of data; simple and multiple regression; Anova and its relation to regression. Emphasis on computer or stat-pak analysis and interpretation of statistical results. Prereq: College algebra and GEOG 3080, or consent of an instructor. Cross-listed with GEOL 4770, GEOG 4770, ENVS 5600. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

OR equivalent course approved by the GISci Certificate Coordinator

Lab Requirement (to be taken at the end of the program):

Independent Study in GEOG or GEOL with a geographic technology professor (Moreno, Thomas, Wyckoff, or instructor approved by GISci coordinator). The independent project must also demonstrate a proficiency in GIS in the student's area of interest (1 credit hour) **or** take CVEN 5386. GIS Laboratory (3 credit hours). See below for course numbers/descriptions.

GEOG 4840 - Independent Study: GEOG

Summer 2010 Registration **GEOG 4840**

Independent research primarily for undergraduate majors. Prereq: Permission of department. **Semester Hours:** 1to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOL 4840 - Independent Study: GEOL

Summer 2010 Registration **GEOL 4840**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 5386 - GIS Laboratory

Summer 2010 Registration **C E 5386**

Provides in-depth experience with use and programming of a particular GIS software, including Arc GIS and related object-oriented programming languages. Advanced functionality for user authoring of software interface, data management and analysis functions and output generation. Exact content will vary by semester. Prereq: Computing

and Introduction to GIS or their equivalent. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

Elective (choose one from the following):

GEOG 4070 - Remote Sensing II: Advanced Remote Sensing

Summer 2010 Registration **GEOG 4070**

Focuses on digital image processing of satellite and aerial images. Students explore the nature of digital image data, gain an understanding of image analysis using PCs, and learn about the use of analysis products in the development of GIS databases. Prereq: GEOG 4060/5060 or GEOL 4060/5060 or permission of instructor. Cross-listed with GEOG 5070, GEOL 4070, 5070. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

GEOG 5070 - Remote Sensing II: Advanced Remote Sensing

Summer 2010 Registration **GEOG 5070**

Focuses on digital image processing of satellite and aerial images. Students explore the nature of digital image data, gain an understanding of image analysis using PCs, and learn about the use of analysis products in the development of GIS databases. Prereq: GEOG 5060/4060 or GEOL 5060/4060 or permission of instructor. Cross-listed with GEOG 4070, GEOL 5070, 4070. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

(May also take as GEOL 4070 or 5070)

GEOG 4081 - Introduction to Cartography and Computer Mapping

Summer 2010 Registration **GEOG 4081**

Provides an introduction to the art and science of cartography (map making). Students will learn about design principles, tools and techniques of map production, culminating in the creation of a high-quality map through hands-on exercises. Prereq: GEOG 3080. Cross-listed with GEOG 5081. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

GEOG 5081 - Introduction to Cartography and Computer Mapping

Summer 2010 Registration **GEOG 5081**

Provides an introduction to the art and science of cartography (map making). Students will learn about design principles, tools and techniques of map production, culminating in the creation of a high-quality map through hands-on exercises. Prereq: GEOG 3080.

Cross-listed with GEOG 4081. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4085 - GIS Applications for the Urban Environment

Summer 2010 Registration **GEOG 4085**

Takes a more detailed look at basic concepts presented in the introductory GIS course, concentrating on how GIS is used to solve real-world geographic problems. Various GIS applications within both the natural and social sciences are highlighted. The selection of specific topics is flexible, based on the interests of enrolled students. Prereq: GEOG 4080 or GEOG 5080 or permission of instructor. Cross-listed with GEOG

5085. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

GEOG 5085 - GIS Applications for the Urban Environment

Summer 2010 Registration **GEOG 5085**

Takes a more detailed look at basic concepts presented in the introductory GIS course, concentrating on how GIS is used to solve real-world geographic problems. Various GIS applications within both the natural and social sciences are highlighted. The selection of specific topics is flexible, based on the interests of enrolled students. Prereq: GEOG 4080 or GEOG 5080 or permission of instructor. Cross-listed with GEOG

4085. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4090 - Environmental Modeling with Geographic Information Systems

Summer 2010 Registration **GEOG 4090**

Expands the basic knowledge of GIS to spatial models. Establishes a comprehensive framework that can be used to address a wide range of applications in natural and built environments. Prereq: GEOG 4080 or GEOG 5080 or permission of instructor. Cross-listed with GEOG 5090. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

GEOG 5090 - Environmental Modeling with Geographic Information Systems

Summer 2010 Registration **GEOG 5090**

Expands the basic knowledge of GIS to spatial models. Establishes a comprehensive framework that can be used to address a wide range of applications in natural and built environments. Prereq: GEOG 4080 or GEOG 5080 or permission of instructor. Cross-listed with GEOG 4090. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4095 - Deploying GIS Functionality on the Web

Summer 2010 Registration **GEOG 4095**

Covers the core principles and technologies that allow the deployment of geographic information system (GIS) functionality over the World Wide Web. Hands-on exercises make use of the latest commercial software as well as open source technologies.

Prereq: GEOG 4080 or GEOG 5080, computer science background, or permission of instructor. Cross-listed with GEOG 5095. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

GEOG 5095 - Deploying GIS Functionality on the Web

Summer 2010 Registration **GEOG 5095**

Covers the core principles and technologies that allow the deployment of geographic information system (GIS) functionality over the World Wide Web. Hands-on exercises make use of the latest commercial software as well as open source technologies.

Prereq: GEOG 4080 or GEOG 5080, computer science background, or permission of instructor. Cross-listed with GEOG 4095. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4235 - GIS Applications in the Health Sciences

Summer 2010 Registration **GEOG 4235**

Examines how GIS is used throughout the health care industry and public health. Covers environmental health, disease surveillance, and health services research. Students critically review current literature and gain hands-on experience with GIS software.

Prereq: GEOG 4080 or GEOG 5080, public health background, or consent of instructor. Cross-listed with GEOG 5235, HBSC 7235. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

GEOG 5235 - GIS Applications in the Health Sciences

Summer 2010 Registration **GEOG 5235**

Examines how GIS is used throughout the health care industry and public health. Covers environmental health, disease surveillance, and health services research. Students critically review current literature and gain hands-on experience with GIS software.

Prereq: GEOG 4080 or GEOG 5080, public health background, or consent of instructor. Cross-listed with GEOG 4235, HBSC 7235. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 5382 - GIS Spatial Database Development

Summer 2010 Registration **C E 5382**

This second GIS course builds on the introductory course and addresses principles and technologies for development and conversion of spatial databases, including photogrammetry, surveying and geodesy, coordinate systems and transformations, and remote sensing. Prereq: Graduate and/or upper division standing; completion of CVEN 5381 (or equivalent) and MEng-GIS program prerequisites (especially surveying, mapping and computing); background in algebra, calculus fundamentals and facility to compute DOS/UNIX, spreadsheet, and FORTRAN; familiarity with various CAD (e.g. AutoCAD) and GIS (e.g. Arc Info, GRASS) software is also required. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 5385 - GIS Relational Database Systems

Summer 2010 Registration **C E 5385**

Introduces relational database management system concepts with emphasis on GIS. Includes examination of relational database systems from conceptual design through relational schema design and physical implementation. Topics include SQL, database design and implementation for large database systems, transaction management, concurrency control, distributed database management systems and the interaction and progressive integration of GIS technologies and RDBMS technologies. Prereq: Graduate and/or upper division standing; completion of CVEN 5381 or equivalent and completion of MEng-GIS program prerequisites. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

OR an elective approved by the GISci Certificate Coordinator.

Mediation Undergraduate Certificate

Mediation entails a third-party intervention designed to assist parties in managing conflict. Trained mediators are impartial process experts who learn to utilize communication and conflict philosophy and theories to increase the probability of more favorable outcomes between parties in conflict. The undergraduate certificate is designed for communication majors or any student interested in developing practical skills in alternative dispute resolution. The courses in this certificate focus on alternative dispute processes that include strategies for managing conflict in personal, public, legal, political, governmental and corporate contexts.

Certificate Requirements

The undergraduate certificate in mediation requires 12 semester hours (four courses).

Core Courses

COMM 4262 - Mediation

Summer 2010 Registration **CMMU 4262**

Explores theoretical and practical aspects of mediation in a variety of contexts ranging from divorce mediation to labor-management disputes. Cross-listed with COMM 5262. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Students must complete at least one of the following two courses (those who take both classes take one elective rather than two; those who take only one class must select two electives):

COMM 4255 - Negotiations and Bargaining

Summer 2010 Registration **CMMU 4255**

Designed to allow students to study theories and apply concepts that explain the influences of various forms of mediating, reducing, and/or resolving conflict among individuals, groups, organizations, nations and cultures. Cross-listed with COMM 5255. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 4260 - Communication and Conflict

Summer 2010 Registration **CMMU 4260**

Studies the influence of communication on intrapersonal, interpersonal, intragroup and intergroup conflict situations. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Electives

COMM 3271 - Communication and Diversity

Summer 2010 Registration **CMMU 3271**

Explores the complexities of communication across diverse identities such as race, ethnicity, and gender. Course attempts to seek solutions via sharing meaning and discovering common ground. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 4015 - Communication and Civility

Summer 2010 Registration **CMMU 4015**

Examines the central role of communication in the creation of a civil and humane society. The definition, understanding, and practices of civility in public discourse and in professional, social, and personal relationships are explored. Film, literature, music, and other texts are utilized to illustrate key concepts and serve as catalysts for discussion.

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 4140 - Argumentation

Summer 2010 Registration **CMMU 4140**

Examines classical through contemporary theories, with special attention to types of propositions, burden of proof, analysis of issues, evidence, reasoning, fallacies, case construction, refutation and ethics.

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 4681 - Communication Issues in Trial Court Practices and Processes

Summer 2010 Registration **CMMU 4681**

Introduces students to communication and language research aimed at improving the fairness, reliability, and validity of court and judicial processes, including lawyer-client interviews, interrogatories, jury selection, jury instructions, witness examination, and the use of language evidence in court. Prereq: ENGL 2030 or equivalent. Cross-listed with COMM 5681.

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 12 Hours

Students may be allowed to take courses other than those on this list to fulfill the requirements for the certificate, if those courses better fit their professional goals.

Professional Writing Certificate

The certificate consists of 12 semester hours that may be completed in one or two semesters. Enrollment is open to undergraduates, graduates, working professionals and returning students, and the certificate has no prerequisites.

Courses

Required Courses

ENGL 2070 - Grammar, Rhetoric and Style

Summer 2010 Registration **ENGL 2070**

Teaches the basics of English grammar in order to develop a rhetorical and stylistic confidence in reading and writing, using an approach that is more descriptive than prescriptive. Teaches students how to evaluate the grammatical choices of established writers and how to develop flexibility in the grammatical choices they make in their own writing. Prereq: ENGL 1020 or equivalent. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

ENGL 2154 - Introduction to Creative Writing

Summer 2010 Registration **ENGL 2154**

Reading, discussing, writing short fiction and poetry in a workshop setting. Prereq: ENGL 1020. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 3154 - Technical Writing

Summer 2010 Registration **ENGL 3154**

Introduces the study and writing of technical documents. Emphasizes the processes, style, structure, and forms of technical writing. Attention is paid to audience analysis, organization, clarity and precision. Prereq: ENGL 1020. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

ENGL 3170 - Business Writing

Summer 2010 Registration **ENGL 3170**

Focuses on the strategies and techniques of business writing, with emphasis on reader, message and form. Prereq: ENGL 1020. ENGL 2030 highly recommended. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 3084 - Advanced Composition

Summer 2010 Registration **ENGL 3084**

Focuses on the rhetorical examination and production of visual and textual documents in such areas as politics, education, art, culture and advertising. Equal focus on developing individual student writing skills at advanced levels. Prereq: ENGL 2030. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

ENGL 4701 - Multimedia in the Community

Summer 2010 Registration **ENGL 4701**

Produce dossier-quality multimedia shorts by researching and writing digital compositions for selected community organizations. Topics for research range across numerous social issues and involve all disciplines. Prereq: ENGL 2030, 3154, and 3170 or permission of instructor. Cross-listed with ENGL 5701. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

ENGL 5701 - Multimedia in the Community

Summer 2010 Registration **ENGL 5701**

Produce dossier-quality multimedia shorts by researching and writing digital compositions for selected community organizations. Topics for research range across numerous social issues and involve all disciplines. Prereq: ENGL 2030, 3154, and 3170 or permission of instructor. Cross-listed with ENGL 4701. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 9 Hours

Elective

ENGL 3084 - Advanced Composition

Summer 2010 Registration **ENGL 3084**

Focuses on the rhetorical examination and production of visual and textual documents in such areas as politics, education, art, culture and advertising. Equal focus on developing individual student writing skills at advanced levels. Prereq: ENGL 2030. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 3154 - Technical Writing

Summer 2010 Registration **ENGL 3154**

Introduces the study and writing of technical documents. Emphasizes the processes, style, structure, and forms of technical writing. Attention is paid to audience analysis, organization, clarity and precision. Prereq: ENGL 1020. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 3170 - Business Writing

Summer 2010 Registration **ENGL 3170**

Focuses on the strategies and techniques of business writing, with emphasis on reader,

message and form. Prereq: ENGL 1020. ENGL 2030 highly recommended. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 3416 - Magazine Writing

Summer 2010 Registration **ENGL 3416**

An intensive, practical course in writing non-fiction with an emphasis on journalistic approaches for daily, weekly, and monthly publications. Prereq: ENGL 1020. **Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 3939 - Internship/Cooperative Education

Summer 2010 Registration **ENGL 3939**

Employment situations designed and supervised by members of the faculty; concepts and skills developed in the classroom are used in business and public service contexts. Prereq: Junior standing and 2.75 grade-point average. Before enrolling, students should contact the Career Center. Note: Up to six hours may be counted toward the major. **Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 4180 - Argumentation and Logic

Summer 2010 Registration **ENGL 4180**

Explores the history of logic and its role in argumentation, studies various types of logical structures, and analyzes current uses of argumentation, with attention to writing arguments on current public issues. Prereq: ENGL 1020, 2030 and 2070. **Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 4190 - Special Topics in Rhetoric and Writing

Summer 2010 Registration **ENGL 4190**

Focuses on particular issues in rhetoric and writing as they pertain to reading and writing, including language and gender, language and culture, and language of political action. Prereq: Must have 30 semester hours or permission of the instructor. Cross-listed with ENGL 5190. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 4280 - Proposal and Grant Writing

Summer 2010 Registration **ENGL 4280**

Focuses on research, design, composition, and editing original proposals. Includes idea

development, identification of funding sources, and the creation of persuasive documents. Prereq: ENGL 1020. Cross-listed with ENGL 5280. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

Other writing electives may be taken as offered, with advisor approval.

Total: 3 Hours

Total: 12 Hours

Public Relations Undergraduate Certificate

Public relations has been defined as the management function that entails planning, research, publicity, promotion and collaborative decision-making to help any organization's ability to listen to, appreciate and respond appropriately to those persons and groups whose mutually beneficial relationships the organization needs to foster as it strives to achieve its mission and vision. The undergraduate certificate in public relations is designed for undergraduate communication majors who wish to demonstrate to potential employers that they possess skills and knowledge in the area of public relations. It also is useful for non-degree-seeking working professionals without bachelor's degrees who plan to enter or re-enter the workplace and who seek to acquire the skills and knowledge necessary to perform public relations in their professional environments.

Certificate Requirements

The undergraduate certificate in public relations requires 12 semester hours (four courses). Students must complete the following three courses:

COMM 4635 - Principles of Public Relations

Summer 2010 Registration **CMMU 4635**

Introduces theory and practice in the field of public relations, including topics such as effects upon society, public opinion, target audiences, adaptation to the media, uses, laws and ethics. Cross-listed with COMM 5635. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 4640 - Advanced Public Relations

Summer 2010 Registration **CMMU 4640**

Examines key public relations practices in private, not-for-profit and public sectors. Strategic planning processes, research methods, evaluation, reports, and collateral development are addressed, with an emphasis on the intersection of theory and practice. Prereq: COMM 4635. Cross-listed with COMM 5640. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 4665 - Principles of Advertising

Summer 2010 Registration **CMMU 4665**

Provides a fundamental understanding and appreciation of advertising in today's global society, including consumer motivation, buying behavior, research, creative development and media planning. Cross-listed with COMM 5665. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

Additionally, students choose one course from the following:

COMM 3680 - Mass Communication Skills

Summer 2010 Registration **CMMU 3680**

Instruction in writing and editing skills associated with the production of print, radio, television and film. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 4240 - Organizational Communication

Summer 2010 Registration **CMMU 4240**

Relationships among such communication factors as flow, media, channel, diversity, information delivery and organization functioning, morale, and productivity. Cross-listed with COMM 5240. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 12 Hours

Students may be permitted to take courses other than those listed above to fulfill the requirements for the certificate if those courses fit their professional goals better (CMMU 4635, Principles of Public Relations may not be substituted, however). Requests for approval of substitute courses, including an explanation for the substitution, must be made in writing to Hamilton Bean.

Grade and Residency Requirements

A grade of *B* must be earned in each course completed as part of the certificate. All of the credit hours for the certificate must be earned at the University of Colorado Denver.

Application Procedures and Additional Information

Students should apply for the undergraduate certificate in public relations after the completion of the required courses. To apply, students must complete the certificate application and return it to Hamilton Bean in his mailbox in room 102-A of the Plaza Building or mail to Department of Communication; P. O. Box 173364, Campus Box 176; University of Colorado Denver; Denver, CO 80217-3364. The approved certificate is mailed to the student.

Students who are not already enrolled at UCD must also complete an Application for Non-Degree Admission prior to registering for courses. The form should be returned to the Office of Admissions in the annex of the CU Building.

Additional information about the undergraduate certificate in public relations may be obtained from Hamilton Bean, Department of Communication, Plaza 102-V, 303-352-3876, Hamilton.Bean@ucdenver.edu.

Scientific Foundations of Technical Innovation Certificate

The goal of this certificate is to give students and working professionals an opportunity to broaden their technical knowledge while contributing to regional economic development. Two real-world projects—one for a client and one for the student's own pursuits—are combined with a series of six short courses to provide both context and substance for gaining knowledge needed to create technical prototypes. The model is based on the method by which most physical science graduate students learn technical domains on a “just-in-time” basis. It is also a method by which many corporations quickly bring new project team members up to speed on project knowledge. Entry into the certificate program requires prior completion of two semesters of calculus-based physics and two semesters of calculus **or** permission of the certificate advisor.

Undergraduate required courses

PHYS 4850 - Physics for Design and Innovation I

Summer 2010 Registration **PHYS 4850**

A service-learning project using fundamental physical principles to design a prototype scientific instrument, technical device, or technical process for a real-world client.

Includes instruction on project management, intellectual property, and market analysis. Cross-listed with PHYS 5850. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 4852 - Physics for Design and Innovation II

Summer 2010 Registration **PHYS 4852**

A capstone project using fundamental physical principles to prototype a scientific instrument, technical device or technical process. The focus is on the student's own product idea. Includes online guided readings on the wider context of product development. Students should consult with instructor on necessary physics and mathematics preparation for the project. Prereq: PHYS 4850. Cross-listed with PHYS 5852. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 12 Hours

Graduate required courses

Graduate versions of the courses (5000-level) require an undergraduate degree and additional work on technical analysis or connection to professional practice.

PHYS 5850 - Physics for Design and Innovation I

Summer 2010 Registration **PHYS 5850**

A service-learning project using fundamental physical principles to design a prototype scientific instrument, technical device, or technical process for a real-world client. Includes instruction on project management, intellectual property, and market analysis. Cross-listed with PHYS 4850. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 5852 - Physics for Design and Innovation II

Summer 2010 Registration **PHYS 5852**

A capstone project using fundamental physical principles to prototype a scientific instrument, technical device or technical process. The focus is on the student's own product idea. Includes online guided readings on the wider context of product development. Students should consult with instructor on necessary physics and mathematics preparation for the project. Prereq: PHYS 4850 or 5850. Cross-listed with PHYS 4852. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 12 Hours

Technical and Professional Communication Undergraduate Certificate

The undergraduate certificate in technical and professional communication is designed for several types of students:

- working adults who are employed or who are seeking employment in the field of technical communication but who are not seeking an undergraduate degree
- students who are majoring in communication and want to enhance their technical communication abilities
- students pursuing a major other than communication who want to enhance their technical communication abilities

Students enrolled in this certificate receive state-of-the-art training in core professional skills, including technical writing, technical editing and web design. The certificate is especially helpful for those who plan to enter (or re-enter) the workplace and who want to acquire the knowledge and skills necessary to contribute to technical documentation projects.

Certificate Requirements

The undergraduate certificate in technical and professional communication requires 12 semester hours (four courses), as follows:

Required Core

COMM 3120 - Technical Communication

Summer 2010 Registration **CMMU 3120**

Develops students' abilities to prepare and communicate information in diverse media, including written, spoken, graphic and electronic. Technical communication focuses on communication used on the job as opposed to communication in academic settings. Students prepare communications in response to real-world cases and demonstrate the integration of communication through these different media. Prereq: ENGL

1020.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Electives

Students must complete any three of the following courses:

COMM 4120 - Writing Technical Reports

Summer 2010 Registration **CMMU 4120**

Studies various aspects of technical reports, including the theoretical applications behind making reports persuasive. Topics include informal and formal reports, progress reports, feasibility reports, empirical reports and recommendation reports. Prereq: COMM 3120.

Cross-listed with COMM 5120.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 4290 - Web Design

Summer 2010 Registration **CMMU 4290**

Covers writing web pages in HTML, beginning Photoshop, style sheets, bitmapped animations, issues of usable layout, navigability, structure, typography, and color on the web. Projects require students to develop static web sites. Prereq: COMM 3120 or permission of instructor. Cross-listed with COMM 5290.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 4300 - Multimedia Authoring

Summer 2010 Registration **CMMU 4300**

Analysis and evaluation of components of multimedia development and hands-on instruction featuring computer animation for advertising, training, and educational projects. Cross-listed with COMM 5300.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 4410 - Science Writing

Summer 2010 Registration **CMMU 4410**

An intensive practice in composing for diverse science publication genres and venues and practice in analyzing the ways consumers obtain and process information about scientific developments and controversies. Prereq: at least one writing or composition course at the 3000 level or above. Cross-listed with COMM 5410.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 4805 - Graphics

Summer 2010 Registration **CMMU 4805**

Instructs technical communicators in designing information that communicates visually as well as verbally. Students focus on document design; illustration; information retrieval; desktop publishing using Quark Xpress; and working with typesetters, printers and graphic artists. Prereq: COMM 3120. Cross-listed with COMM 5805. **Semester Hours:**

3 to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 12 Hours

Grade and Residency Requirements

A grade of *B* or higher must be earned in each course completed as part of the Certificate (a grade of *B-* is not acceptable). All of the credit hours for the certificate must be earned at the University of Colorado Denver.

Application Procedures

Students should apply for the undergraduate certificate in technical and professional communication **after the completion of the required courses**. To apply, students must complete the certificate application.

The form should be returned to Jim Stratman, located in the Plaza Building, room 102-F, or put in his mailbox in room PL 102-A, or mailed to him at the Communication Department; Campus Box 176, P. O. Box 173364; Denver, CO 80217-3364. Once the certificate is processed, it will be mailed to the student unless other arrangements have been made by the student to pick up the certificate from the program assistant in PL 102C.

Students need to be registered at the University of Colorado Denver as full-time students, part-time students or as non-degreed students in order to register for these classes. To apply as a non-degreed student, fill out the Application for Non-Degree Admission. Return the form, along with your fee, to the Office of Admissions in the Annex of the CU Building, located at the corner of 14th and Larimer.

Additional Information

Additional information about the undergraduate certificate in technical and professional communication may be obtained from the director of the technical communication

program, Jim Stratman, Department of Communication, Plaza Building, room 102-F,
303-556-2884, James.Stratman@ucdenver.edu

Graduate Certificate Programs

Applied Statistics Graduate Certificate

Coordinator: Stephanie Santorico:

Telephone: 303-556-2547

E-mail: Stephanie.Santorico@ucdenver.edu

Web site: http://math.ucdenver.edu/statistics/grad_cert.shtml

Entrance Requirements

Students are expected to have a bachelor's degree and be admitted to the graduate school as either a degree-seeking or nondegree-seeking student. Students are expected to have completed an introductory statistics course (such as MATH 2830 or the equivalent) or an introductory course in probability. At least one semester of calculus and a course containing linear algebra are also recommended.

To apply, see Graduate Applied Statistics Certificate

Curriculum

There are three parts to the requirements:

Required Courses

Basic methods (choose one):

MATH 4820 - Statistics

Summer 2010 Registration **MATH 4820**

Point and confidence interval estimation, principles of maximum likelihood, sufficiency and completeness, tests of simple and composite hypothesis, linear models and multiple regression, analysis of variance. Prereq: MATH 3800. MATH 4810 highly recommended, but not required. Cross-listed with MATH 5320. **Semester Hours:** 3to 3**When Offered:**
SPRING

Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

MATH 4830 - Applied Statistics

Summer 2010 Registration **MATH 4830**

Review of estimation, confidence intervals and hypothesis testing; Anova; categorical data analysis; non-parametric tests; linear and logistic regression. Prereq: an introductory course in statistics such as MATH 2830 or permission of instructor. Cross-listed with MATH 5830. **Semester Hours:** 3to 3**When Offered:** *SPRING*
Registration is changing. Visit our website for details ucdenver.edu/registration.

-OR-

MATH 5320 - Statistics

Summer 2010 Registration **MATH 5320**

Point and confidence interval estimation, principles of maximum likelihood, sufficiency and completeness, tests of simple and composite hypothesis, linear models and multiple regression, analysis of variance. Prereq: MATH 3800. MATH 4810 highly recommended, but not required. Cross-listed with MATH 4820. **Semester Hours:** 3to 3**When Offered:** *SPRING*
Registration is changing. Visit our website for details ucdenver.edu/registration.

Advanced methods (choose two):

MATH 5387 - Regression Analysis, Modeling and Time Series

Summer 2010 Registration **MATH 5387**

Topics include linear and multiple regression, basic experimental designs, one-way analysis of variance. Emphasis is on practical aspects and applications of linear models to the analysis of data in business engineering and behavioral, biological and physical sciences. Prereq: MATH 3191 and 3800/4820. Cross-listed with MATH 4387. **Semester Hours:** 3to 3**When Offered:** *FALL*
Registration is changing. Visit our website for details ucdenver.edu/registration.

-AND/OR-

MATH 5394 - Experimental Designs

Summer 2010 Registration **MATH 5394**

Infrequent. Completely randomized block designs, factorial and fractional factorial experiments, balanced incomplete block designs, response surface methods. Prereq: MATH 4387 and 5387. Cross-listed with MATH 4394. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

-AND/OR-

MATH 6360 - Exploratory Data Analysis

Summer 2010 Registration **MATH 6360**

Every other year. Philosophy and techniques associated with exploratory (vs. confirmatory) data analysis, both as originally presented (John Turkey) and current computer-based implementations. Graphical displays, robust-resistant methods (lines, two-way fits), diagnostic plots, standardization. Prereq: Previous statistics course or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Elective (choose one):

Any statistics course in the math department at the 5000 level or higher

ECON 5150 - Economic Forecasting

Summer 2010 Registration **ECON 5150**

Teaches forecasting techniques used in business and government to project trends and short-term fluctuations. Actual data are employed in instruction and labs. State-of-the-art spreadsheet and algorithms are introduced as part of the course work. Prereq: ECON 3811. Cross-listed with ECON 4150. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 5813 - Econometrics I

Summer 2010 Registration **ECON 5813**

Theory and application of statistical techniques used to analyze economic problems. Topics include simple and multiple regression models, simultaneous equation models, and the problems encountered in their application. Students formulate models, obtain data, estimate models, interpret results and, forecast. Prereq: ECON 4811 or equivalent. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 5823 - Econometrics II

Summer 2010 Registration **ECON 5823**

Second course in the econometrics sequence, covering intermediate topics in cross-section and time series analysis. Topics include limited dependent variables, autoregressive and distributed lag models, longitudinal data analysis and unit roots, co-integration and other time-series topics. Prereq: ECON 5083 and 5813. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENVS 5600 - Applied Statistics for the Natural Sciences

Summer 2010 Registration **ENVS 5600**

Surveys statistical techniques including: quick review of basic statistics, tests for normality and outliers, display of data; simple and multiple regression; ANOVA and its relation to regression. Emphasis on computer or stat-pak analysis and interpretation of statistical results. Prereq: College algebra and GEOG 3080, or consent of an instructor. Cross-listed with GEOG 4770, GEOL 4770, 5770. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOL 5770 - Applied Statistics for the Natural Sciences

Summer 2010 Registration **GEOL 5770**

Surveys statistical techniques including: quick review of basic statistics, tests for normality and outliers, display of data; simple and multiple regression; Anova and its relation to regression. Emphasis on computer or stat-pak analysis and interpretation of statistical results. Prereq: College algebra and GEOG 3080, or consent of an instructor. Cross-listed with GEOL 4770, GEOG 4770, ENVS 5600. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 5713 - Advanced Statistics

Summer 2010 Registration **PSY 5713**

Experimental design and analysis of controlled interventions and evaluations. Emphasis on multifactor analysis of variance, orthogonal contrasts, post-hoc tests, multiple regression, and analysis of co-variance. Prereq: Admission to the Psychology MA, Clinical program or the Clinical Health Psychology Ph.D. program or with permission of instructor and graduate program director. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

SOCY 5183 - Seminar: Quantitative Data Analysis

Summer 2010 Registration **SOC 5183**

A research-oriented seminar stressing the utilization of social data already collected in the test or generation of sociological theory. Note: Required for M.A. graduate students in sociology. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Equivalent course pre-approved by the certificate coordinator

Project

An independent data analysis project with a report and presentation to demonstrate proficiency with data analysis techniques and a statistical computing software package.

Enroll for one hour of MATH 5840 (Independent Study) or in an equivalent course preapproved by the certificate coordinator.

Certificate Total: 13 Hours

Grade Requirements

Students must maintain a 3.0 GPA in these courses with no credit given for courses with grades below *B-*.

Residency Requirements

Since a certificate is a University of Colorado Denver certification of a student's specialized knowledge in an advanced subject area, all courses in the certificate program are expected to be taken in residency at the University of Colorado Denver.

Content Instruction for English Learners (CIEL) Graduate Certificate

Linguistically Diverse Education

Requirements for LDE Program

(Degree/Endorsement or Certificates - TESOL, CIEL, CRUE)

Office: Lawrence Street Center, 701

Telephone: 303-315-6300

Fax: 303-315-6311

E-mail: education@ucdenver.edu

Web site: www.ucdenver.edu/education/lde

Faculty

Information about faculty in this program is available at www.ucdenver.edu/education/lde. The faculty of linguistically diverse education (LDE) believe that effective teaching requires an awareness of and the ability to respond to individual differences. LDE faculty also emphasize the importance of teachers as scholars and reflective practitioners. In particular, teachers must understand how linguistic and cultural diversity affect their teaching. Two themes run throughout all program offerings. The first concerns the importance of recognizing a variety of literacies—"home" literacies, school literacy, "mainstream" literacy, first and second language literacies—and to develop teaching practices that utilize an understanding of the complexity of literacy development across language contexts. The second theme involves the meaningful use of language and literacy to improve the quality of one's life. As an approach to teaching, this theme emphasizes the creation of diverse, rich environments in which learners experience oral and written language as part of authentic tasks, and where concern for the cultural and linguistic heritage of the students is evident.

Program Options

The LDE program offers options leading to the following:

- a Master of Arts in Curriculum and Instruction
- the Colorado Endorsement for Linguistically Diverse Education
- a Teaching English to Speakers of Other Languages (TESOL) certificate
- a Content Instruction for English Learners (CIEL) certificate
- a Culturally Responsive Urban Education (CRUE) certificate

The program is intended for:

- novice teachers who have completed their Colorado teaching credentials in UC Denver's graduate teacher education licensure program and are enrolled in the MA in curriculum and instruction with an emphasis in LDE (see 27 semester-hour option)
- veteran elementary and secondary teachers returning to graduate studies for the master's degree (36 semester hours)

- veteran elementary and secondary teachers returning to acquire Colorado endorsement credentials (24 semester hours)
- individuals interested in teaching English abroad (TESOL: 15 semester hours)
- veteran elementary and secondary teachers returning to graduate studies for a certificate to aid them in helping their English language learners succeed (CIEL: 9 semester hours)
- elementary and secondary teachers who desire preparation in better meeting the needs of culturally diverse learners (CRUE: 9 semester hours)
- individuals interested in teaching adults (MA: 36 semester hours)

The MA is a field-based professional development program involving university faculty and practicing LDE instructors in public school and intensive English settings. Courses, laboratories and practica emphasize scholarly approaches to complex problems of practice and feature interactive, collaborative and practical approaches to working with English language learners.

We advocate a sociocultural approach to issues of language and learning, acknowledging the legitimacy of linguistic and cultural differences and recognizing that academic settings represent important socializing forces in students' lives. Because of this, we emphasize the "whole learner" in our teaching and in teacher education and teacher development, understanding that individuals do not merely add a language to their repertoire of communication but make fundamental identity adjustments as they progress in their studies. For this reason, all our course work, laboratories and practica experiences are field-based, putting our program participants in contact with veteran teachers and English language learners. We draw heavily on recent scholarship in collaborative approaches to school-university partnerships and systemic school change in developing classroom methods and materials, curricula and teacher development experiences.

The MA program also provides a foundation in teaching English in a variety of contexts in the United States and abroad. Teachers who work in LDE programs or in other content areas (such as art, language arts, math, music, science, social studies or technology), but who wish to integrate LDE principles and strategies into their instruction for their English language learners, will find the MA program relevant to their interests and goals.

Course work includes language teaching methodology, language acquisition, linguistic analysis of English, multicultural foundations, assessment, literacy and other areas. This program has been developed as an advanced course of study for practicing teachers or individuals with some teaching experience.

Applicants who are new to teaching, and who wish to teach in U.S. K–12 public school settings, should inquire about the teacher education licensure program. Applicants who

are new to teaching, but who do not need a teaching license (certification) because they do not wish to teach in U.S. public schools, may consider the TESOL certificate to gain initial teaching experiences before applying for the MA.

Program Requirements and Courses

To complete the LDE program and earn a master's degree and/or endorsement, or to earn a TESOL certificate, students must complete the appropriate course work as outlined in the table below.

Requirements for LDE Program (Degree/Endorsement or TESOL Certificate)					
Course	MA without CDE Endorsement in LDE	MA and CDE Endorsement in LDE	CDE Endorsement in LDE Only	MA and CDE Endorsement in LDE (when added to UC Denver's graduate teacher education licensure program)	TESOL Certificate
LALC 5910 - Foundations of Language, Literacy and Culture	Required	Required	Required	Required	
One course from culture options: LALC 5140 - Multicultural Education LALC 5150 - Culture of the Classroom LALC 5160 - Historical and	Select One	Select One	Select One	Select One	

Legal Foundations of Bilingual Education					
LALC 5070 - Linguistic Analysis of English: Implications for Teaching	Required	Required	Required	Required	Required
LALC 5030 - Language/Literacy Acquisition Part I	Required	Required	Required	Required	Required
LALC 5820 - Techniques in Teaching English as a Second Language	Required	Required	Required	Required	Required
LALC 5050 - Linguistic and Cultural Issues in Linking Assessment and Instruction	Required	Required	Required	Required	Required
<i>One course from field-based teaching options:</i> LALC 5020 - Workshop in Literacy and Language Teaching LALC 5825 - Methods and Materials of Language Teaching LALC 5826 -	5826 preferred	Elem: 5825 preferred Sec: 5826 preferred	Elem: 5825 preferred Sec: 5826 preferred	Elem: 5825 preferred Sec: 5826 preferred	5826

Language Teaching Lab LALC 5730 - Language and Literacy Across the Curriculum LALC 5770 - Effective Literacy Instruction for Second Language Learners					
LALC 5035 - Language and Literacy: Acquisition, Processes, and Cognition, Part II	Required	Required			
LALC 6912 - Seminar and Practicum in Literacy and Language, ESL and Bilingual Education	Required	Required	Required	Required	
<i>One course from research and evaluation methodology:</i> RSEM 5050 - Assessment for Teachers RSEM 5080 - Research for Teachers	Select One	Select One		Select One	
<i>One course from educational psychology:</i> EPSY 5110 - Human Learning	Select One	Select One			

EPSY 5220 - Adult Learning and Education					
Graduate-level University of Colorado elective	Select One	Select One			
Cumulative online portfolio	Required	Required	Required	Required	
LDE PLACE Exam		Required	Required	Required	
Total Semester Hours	36	36	24	27	15

Content Instruction for English Learners (CIEL) Certificate Requirements

Students interested in the CIEL certificate must complete the following:

LALC 5030 - Language/Literacy Acquisition Part I Semester Hours: 3

-OR-

LALC 5070 - Linguistic Analysis of English: Implications for Teaching Semester Hours: 3

LALC 5050 - Linguistic and Cultural Issues in Linking Assessment and Instruction

Semester Hours: 3

-OR-

LALC 5820 - Techniques in Teaching English as a Second Language Semester Hours:

3

-OR-

LALC 5825 - Methods and Materials of Language Teaching Semester Hours: 3

-OR-

LALC 5826 - Language Teaching Lab Semester Hours: 3

LALC 6912 - Seminar and Practicum in Literacy and Language, ESL and Bilingual

Education Semester Hours: 3

Total: 9 Hours

Culturally Responsive Urban Education (CRUE) Certificate Requirements

Those considering the CRUE certificate must complete the following:

LALC 5170 - Race, Class and Culture in Public Schools Semester Hours: 3

LALC 5180 - Working with Communities and Families Semester Hours: 3

LALC 5190 - Culturally Responsive Pedagogy and Practices Semester Hours: 3

Total: 9 Hours

Additional information about the CRUE certificate can be found at www.cruecenter.org/certificate.php.

Cumulative Portfolio of Performance Based Assessments (PBAS)

The portfolio is required for the CDE endorsement, counts as the comprehensive exam for the master's degree and permits you to document your development over the course of your program. Portfolios are reviewed by LDE faculty members. At least two faculty members must agree that the portfolio is acceptable in order to pass. The portfolio process is reviewed in every class as each of the PBAs is completed in the classes, helping students to update their portfolios throughout the program. For more portfolio guidelines, visit the Web site at www.ucdenver.edu/education/lde.

PLACE Exam for Linguistically Diverse Education Endorsement

To add the endorsement to their teaching license, students must pass the PLACE (Program for Licensing Assessments for Colorado Educators) exam for linguistically diverse education, secure and submit the appropriate paperwork from the Colorado Department of Education, and pay fees required for the PLACE and for the endorsement paperwork. Information about PLACE is online at www.place.nesinc.com.

Course Scheduling

During the fall and spring semesters, most university courses are offered in the late afternoon and evening and meet for three hours once a week over a 16-week semester. Some alternative course schedules are available, such as meeting on five Friday-

evening/all-day Saturday combinations. In the summer semester, three-to eight-week sessions are offered, and courses may be in the morning, afternoon or evening.

Planning

For practicing full-time teachers, we recommend taking one course each fall and spring semester and up to two courses each summer. Students may simultaneously complete requirements for the MA and the endorsement for linguistically diverse education. Support for course planning is available in LDE advising sessions—usually held once in fall and once in spring. These sessions help students build their programs around course sequences and availability (some courses are offered only once per year).

Active Status in the Graduate School

Students must complete their programs within seven years, maintaining a GPA of 3.0. Students typically take four courses each calendar year. Failure to enroll over three contiguous semesters will result in a requirement to resubmit part I of the application for admission and a letter of intent.

Culturally Responsive Urban Education (CRUE) Graduate Certificate

Linguistically Diverse Education

Requirements for LDE Program

(Degree/Endorsement or Certificates - TESOL, CIEL, CRUE)

Office: Lawrence Street Center, 701

Telephone: 303-315-6300

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Program Options

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- the Colorado Endorsement for Linguistically Diverse Education
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- novice teachers who have completed their Colorado teaching credentials in UC Denver's graduate teacher education licensure program and are enrolled in the MA in curriculum and instruction with an emphasis in LDE (see 27 semester-hour option)
- veteran elementary and secondary teachers returning to graduate studies for the master's degree (36 semester hours)
- veteran elementary and secondary teachers returning to acquire Colorado endorsement credentials (24 semester hours)
- individuals interested in teaching English abroad (TESOL: 15 semester hours)

- veteran elementary and secondary teachers returning to graduate studies for a certificate to aid them in helping their English language learners succeed (CIEL: 9 semester hours)
- elementary and secondary teachers who desire preparation in better meeting the needs of culturally diverse learners (CRUE: 9 semester hours)
- individuals interested in teaching adults (MA: 36 semester hours)

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The MA program also provides a foundation in teaching English in a variety of contexts in the United States and abroad. Teachers who work in LDE programs or in other content areas (such as art, language arts, math, music, science, social studies or technology), but who wish to integrate LDE principles and strategies into their instruction for their English language learners, will find the MA program relevant to their interests and goals.

Course work includes language teaching methodology, language acquisition, linguistic analysis of English, multicultural foundations, assessment, literacy and other areas. This program has been developed as an advanced course of study for practicing teachers or individuals with some teaching experience.

Applicants who are new to teaching, and who wish to teach in U.S. K–12 public school settings, should inquire about the teacher education licensure program. Applicants who are new to teaching, but who do not need a teaching license (certification) because they do not wish to teach in U.S. public schools, may consider the TESOL certificate to gain initial teaching experiences before applying for the MA.

Program Requirements and Courses

To complete the LDE program and earn a master's degree and/or endorsement, or to earn a TESOL certificate, students must complete the appropriate course work as outlined in the table below.

Requirements for LDE Program (Degree/Endorsement or TESOL Certificate)					
Course	MA without CDE Endorsement in LDE	MA and CDE Endorsement in LDE	CDE Endorsement in LDE Only	MA and CDE Endorsement in LDE (when added to UC Denver's graduate teacher education licensure program)	TESOL Certificate
LALC 5910 - Foundations of Language, Literacy and Culture	Required	Required	Required	Required	
<i>One course from culture options:</i> LALC 5140 - Multicultural Education LALC 5150 - Culture of the Classroom LALC 5160 - Historical and Legal Foundations of	Select One	Select One	Select One	Select One	

Bilingual Education					
LALC 5070 - Linguistic Analysis of English: Implications for Teaching	Required	Required	Required	Required	Required
LALC 5030 - Language/Literacy Acquisition Part I	Required	Required	Required	Required	Required
LALC 5820 - Techniques in Teaching English as a Second Language	Required	Required	Required	Required	Required
LALC 5050 - Linguistic and Cultural Issues in Linking Assessment and Instruction	Required	Required	Required	Required	Required
<i>One course from field-based teaching options:</i> LALC 5020 - Workshop in Literacy and Language Teaching LALC 5825 - Methods and Materials of Language Teaching LALC 5826 - Language Teaching Lab	5826 preferred	Elem: 5825 preferred Sec: 5826 preferred	Elem: 5825 preferred Sec: 5826 preferred	Elem: 5825 preferred Sec: 5826 preferred	5826

LALC 5730 - Language and Literacy Across the Curriculum LALC 5770 - Effective Literacy Instruction for Second Language Learners					
LALC 5035 - Language and Literacy: Acquisition, Processes, and Cognition, Part II	Required	Required			
LALC 6912 - Seminar and Practicum in Literacy and Language, ESL and Bilingual Education	Required	Required	Required	Required	
<i>One course from research and evaluation methodology:</i> RSEM 5050 - Assessment for Teachers RSEM 5080 - Research for Teachers	Select One	Select One		Select One	
<i>One course from educational psychology:</i> EPSY 5110 - Human Learning EPSY 5220 -	Select One	Select One			

Adult Learning and Education					
Graduate-level University of Colorado elective	Select One	Select One			
Cumulative online portfolio	Required	Required	Required	Required	
LDE PLACE Exam		Required	Required	Required	
Total Semester Hours	36	36	24	27	15

Content Instruction for English Learners (CIEL) Certificate Requirements

Students interested in the CIEL certificate must complete the following:

LALC 5030 - Language/Literacy Acquisition Part I Semester Hours: 3

-OR-

LALC 5070 - Linguistic Analysis of English: Implications for Teaching Semester Hours: 3

LALC 5050 - Linguistic and Cultural Issues in Linking Assessment and Instruction
Semester Hours: 3

-OR-

LALC 5820 - Techniques in Teaching English as a Second Language Semester Hours:
3

-OR-

LALC 5825 - Methods and Materials of Language Teaching Semester Hours: 3

-OR-

LALC 5826 - Language Teaching Lab Semester Hours: 3

LALC 6912 - Seminar and Practicum in Literacy and Language, ESL and Bilingual
Education Semester Hours: 3

Total: 9 Hours

Culturally Responsive Urban Education (CRUE) Certificate Requirements

Those considering the CRUE certificate must complete the following:

LALC 5170 - Race, Class and Culture in Public Schools Semester Hours: 3

LALC 5180 - Working with Communities and Families Semester Hours: 3

LALC 5190 - Culturally Responsive Pedagogy and Practices Semester Hours: 3

Total: 9 Hours

Additional information about the CRUE certificate can be found at
www.cruecenter.org/certificate.php.

Cumulative Portfolio of Performance Based Assessments (PBAS)

The portfolio is required for the CDE endorsement, counts as the comprehensive exam for the master's degree and permits you to document your development over the course of your program. Portfolios are reviewed by LDE faculty members. At least two faculty members must agree that the portfolio is acceptable in order to pass. The portfolio process is reviewed in every class as each of the PBAs is completed in the classes, helping students to update their portfolios throughout the program. For more portfolio guidelines, visit the Web site at www.ucdenver.edu/education/lde.

PLACE Exam for Linguistically Diverse Education Endorsement

To add the endorsement to their teaching license, students must pass the PLACE (Program for Licensing Assessments for Colorado Educators) exam for linguistically diverse education, secure and submit the appropriate paperwork from the Colorado Department of Education, and pay fees required for the PLACE and for the endorsement paperwork. Information about PLACE is online at www.place.nesinc.com.

Course Scheduling

During the fall and spring semesters, most university courses are offered in the late afternoon and evening and meet for three hours once a week over a 16-week semester. Some alternative course schedules are available, such as meeting on five Friday-

evening/all-day Saturday combinations. In the summer semester, three-to eight-week sessions are offered, and courses may be in the morning, afternoon or evening.

Planning

For practicing full-time teachers, we recommend taking one course each fall and spring semester and up to two courses each summer. Students may simultaneously complete requirements for the MA and the endorsement for linguistically diverse education. Support for course planning is available in LDE advising sessions—usually held once in fall and once in spring. These sessions help students build their programs around course sequences and availability (some courses are offered only once per year).

Active Status in the Graduate School

Students must complete their programs within seven years, maintaining a GPA of 3.0. Students typically take four courses each calendar year. Failure to enroll over three contiguous semesters will result in a requirement to resubmit part I of the application for admission and a letter of intent.

Design Build Graduate Certificate

Contact: Erik (Rick) Sommerfeld

Telephone: 303-556-6160

E-mail: sommere@colorado.edu

The College of Architecture and Planning offers a graduate certificate in the emerging area of design build as an extension of the MArch program. It requires a total of 18 semester hours, some of which also count toward the MArch program, some of which do not. Course work in this extension emphasizes the designer's point of view.

Certificate Requirements

Five courses totaling 18 semester hours can be applied to the MArch graduation requirements:

ARCH 6370 - Introduction To Design Build

Summer 2010 Registration **ARCH 6370**

Introduction to Design Build project delivery methods important to architects. Lecture, research on the industry and an individual student project are the methods used to introduce ethical questions, role of the architect, owner, consultant and subcontractors.

Work leads to studio project or case study. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ARCH 6371 - Maintaining Quality and Managing Risks: Design Build

Summer 2010 Registration **ARCH 6371**

A lecture and seminar on approaches to risk management including contracts, insurance, financial analysis, dispute resolution and client relationships. Utilizing case study approach, quality assurance will be defined and studied in the design and building phase of workings. Prereq: ARCH 6370. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ARCH 6372 - Architecture in a Single Source Project Delivery

Summer 2010 Registration **ARCH 6372**

Directed to the practice of architecture with design build and other single source delivery systems. This course examines requirements of codes, zoning, building systems and legal questions for the architect. Prereq: ARCH 6370. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ARCH 6373 - Construction in Design Build

Summer 2010 Registration **ARCH 6373**

Using a single project, students fully explore the design phase, estimating, scheduling and project management skills in traditional construction. Course is concurrent with an advanced studio and builds a project on a site. Prereq: ARCH 6370. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ARCH 6170 - Advanced Design Studio

Summer 2010 Registration **ARCH 6170**

Students enter the advanced design studio after successfully completing the four core design studios and comprehensive studio (ARCH 6150). Students must take two advanced studios (unless they wish to undertake a thesis; see ARCH 6950). Topics vary according to faculty interests. Prereq: ARCH 6150 and ARCH 6151. Coreq: ARCH 6171. **Semester Hours:** 4to 4
Registration is changing. Visit our website for details ucdenver.edu/registration.
taken with

ARCH 6171 - Advanced Design Seminar

Summer 2010 Registration **ARCH 6171**

Supports fuller discussion of key themes and concepts in ARCH 6170. Students must

take two advanced design seminars (unless they wish to undertake a thesis; see ARCH 6950). Prereq: ARCH 6150, ARCH 6151. Coreq: ARCH 6170. **Semester Hours:** 2 to 2
Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 18 Hours

Designing E-learning Environments Graduate Certificate

The DeE certificate is an 15-semester-hour program offered entirely online that focuses specifically on the skills needed to design and facilitate online learning opportunities for learners in K–12, higher education and corporate settings. This program is perfect for educators who are not interested in a graduate degree. More information is available at www.ucdenver.edu/academics/colleges/SchoolOfEducation/Academics/MASTERS/ILT/Pages/eLearning.aspx.

Sample plan for eLearning Certificate

Year 1

Fall: INTE 5660 - Designing and Teaching in eLearning Environments

Spring: INTE 5670 - Developing eLearning Instruction

Summer: INTE 5680 - Integrating Media in eLearning Environments

Comprehensive Examination for All ILT Students

The comprehensive exam consists of a professional portfolio where in students demonstrate program competencies through work products and related accomplishments. The portfolio is created throughout the student's program and submitted for faculty review the final semester.

For more information or for complete details about ILT programs, see the ILT Web site.

Digital Storytelling Graduate Certificate

A 9-semester-hour certificate in digital storytelling includes face-to-face workshops as well as a 4-semester-hour online course. Participants develop digital stories using

nonlinear video editing programs and other presentation tools. They learn to integrate digital storytelling methods into existing courses and curricula for all ages.

Domestic Violence Graduate Certificate

Certificate Requirements

Students take the four specified courses below and one elective.

PUAD 5910 - Women and Violence: A Sociological Perspective

Summer 2010 Registration **P AD 5910**

This course is a sociological, feminist analysis of violence against women and girls that addresses the intersection of sexism and other forms of oppression such as racism, classism and heterosexism within historical, cultural, social and institutional contexts. Topics covered focus on overt and covert forms of sexual coercion, harassment and assault, battering and stalking. Cross-listed with PUAD 7910, CRJU 5910 and 7910. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 5920 - Psychology of Violence Against Women

Summer 2010 Registration **P AD 5920**

This class addresses the contributions and the limitations of current empirical and clinical psychological literatures about domestic violence. Topics covered include: distinguishing among mental health professionals regarding work with DV clients; the psychological impacts of domestic violence; services useful for responding to the needs of women and children; and an introduction to the psychology and treatment of batterers. Cross-listed with PUAD 7920, CRJU 5920 and 7920. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 5930 - Battered Women and the Legal System

Summer 2010 Registration **P AD 5930**

This course provides a practical understanding of how the following relate to battered women and their children: (a) major developments in federal, state, tribal, administrative, statutory and case law; (b) the role and responses of law enforcement, judges, attorneys, victim assistance providers and other legal system agents; and (c) the role and process of victim advocacy. Cross-listed with PUAD 5930, CRJU 5930 and

7930. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 5940 - Domestic Violence Social Change and Advocacy

Summer 2010 Registration **P AD 5940**

This course provides students information on the theories and strategies behind contemporary social change movements and the skills necessary to organize and implement actions to influence public awareness and policy. The values of American society are complex and require advocates/activists to develop a heightened sense of self, community and an ethical framework while confronting sexism, racism and other forms of oppression. Cross-listed with PUAD 7940, CRJU 5940 and 7940. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 15 Hours

Early and Adolescent Literacy Certificates

Literacy, Language and Culturally Responsive Teaching

MA Requirements for the Reading and Writing Option and Secondary English Education Option, plus Reading Teacher Endorsement and Certificate Programs

Office: Lawrence Street Center, 701

Telephone: 303-315-6300

Fax: 303-315-6311

E-mail: education@ucdenver.edu

Web sites: www.ucdenver.edu/education/literacy and
www.ucdenver.edu/education/englished

Reading and Writing

Secondary English

Early and Adolescent Literacy Certificates

Faculty

Information about faculty in this program is available online at www.ucdenver.edu/education/literacy.

The faculty of literacy, language and culturally responsive teaching (L2CRT) believe that effective teaching requires an awareness of and the ability to respond to individual differences. L2CRT faculty also emphasize the importance of teachers as scholars and reflective practitioners. In particular, teachers must understand how linguistic and cultural diversity affect their teaching. Two themes run throughout all program offerings. The first concerns the importance of recognizing a variety of literacies—"home" literacies, school literacy, "mainstream" literacy, first and second language literacies—and to develop teaching practices that utilize an understanding of the complexity of literacy development across language contexts. The second theme involves the meaningful use of language and literacy to improve the quality of one's life. As an approach to teaching, this theme emphasizes the creation of diverse, rich environments in which learners experience oral and written language as part of authentic tasks, and where concern for the cultural and linguistic heritage of the students is evident.

Reading and Writing Option and Reading Teacher Endorsement

This master's program is designed for K-6 and 7-12 teachers. Those interested in elementary reading and writing should communicate with Professors Espinoza, Nathenson-Mejia or Taylor. Those interested in secondary and adult reading and writing should communicate with Professor Shanklin (see Web site for faculty contact information).

Reading is a credentialed program meeting the Colorado Department of Education requirements for reading teacher endorsement. Therefore, students who obtain a master's degree emphasizing reading education from UC Denver are certified to hold positions in public and private schools as special developmental and remedial reading teachers in K-6 or 7-12. This program is also valuable for elementary and secondary teachers who wish to enhance reading and writing instruction in their classrooms.

By placing emphasis on the reading, writing and oral and visual language development of culturally, linguistically and academically diverse student populations, this master's program is at the forefront of the field. Language is approached from a socio-psycholinguistic perspective that emphasizes the learner's construction of meaning rather than the learning of isolated skills. Importance is placed on using theory, inquiry and personal reflection to inform classroom practice. The program prepares teachers to

become decision makers capable of developing learner-centered curricula where each student's reading and writing abilities are assessed to address developmental or special needs.

Curriculum

Course offerings lead to an MA degree in curriculum and instruction with an emphasis in reading and writing, as well as a reading teacher endorsement, at one of two levels: K–6 or 7–12.

Those who have completed UC Denver's graduate teacher education licensure program must earn an additional 27 semester hours to obtain the MA and endorsement. Those who completed licensure through other means must earn an additional 36 semester hours to obtain the MA and endorsement.

Teachers may add a reading teacher endorsement to an already-earned master's degree in education by taking those courses listed under the chosen endorsement level. (In the state of Colorado, the reading teacher endorsement cannot simply be added to a bachelor's degree.) Electives and core courses are not required. Two additional courses must be taken in other areas specified by the Colorado Department of Education. In many cases, previous master's degree courses will satisfy this requirement.

Requirements for Reading and Writing Program (Degree/Endorsement Options)						
	ELEMENTARY (K-6)			SECONDARY (7-12)		
Course	MA & CDE Endorsement	MA & CDE Endorsement (when added to UC Denver's graduate teacher education licensure program)	CDE Endorsement Only	MA & CDE Endorsement	MA & CDE Endorsement (when added to UC Denver's graduate teacher education licensure program)	CDE Endorsement Only
LALC 5020 - Workshop	Required		Required	Required	Required	Required

in Literacy and Language Teaching						
LALC 5810 - Workshop in Language Acquisition and Development	Required	Required	Required	Required	Required	Required
LALC 5910 - Foundations of Language, Literacy and Culture	Required	Required	Required	Required	Required	Required
LALC 5710 - Primary Literacy: Pre-3rd Grade	Required	Required	Required			
LALC 5720 - Writing: Process, Development, and Teaching Grades 3-12	Required	Required	Required	Required	Required	Required
LALC 5730 - Language and Literacy Across the Curriculum	Required		Required	Required		Required
Children's literature course, per	Select one	Select one	Select one			

advisor approval						
LALC 5740 - Adolescent Literature				Required	Required (waived if taken as part of English Licensure)	Required
LALC 6910 - Seminar and Practicum in Literacy and Language, K-6	Required	Required	Required			
LALC 6911 - Seminar and Practicum in Literacy and Language, 7-12+				Required	Required	Required
LALC 5055 - Linking Assessment and Instruction in Language and Literacy, Part I	Required	Required	Required	Required	Required	Required
LALC 6915 - Seminar and Practicum in Literacy Professional	Required	Required		Required	Required	Required

Development						
Core course in Research and Evaluation Methodology - see list below	Select one	5080		Select one	5080	
Interdisciplinary core course - see list below	Select one			Select one		
Graduate-level School of Education and Human Development elective				Select one		
Portfolio	Required	Required		Required	Required	
PLACE Exam	Required	Required	Required	Required	Required	Required
Total Semester Hours	36	27	27	36	27	27

Secondary English Education Option

The master's program in secondary English education is designed to enhance the preparation of middle and high school English/language arts teachers. Students complete course work in language development, assessment and field experiences. With the help of their advisor, they also select specific courses from the English Department or within the School of Education and Human Development that provide a well-rounded repertoire of knowledge and skills to fulfill the needs of an English educator. Special consideration is given to working with diverse ethnic populations. Students interested in English education should see Professor Shanklin (see Web site for faculty contact information).

Program Requirements

To earn a master of arts degree in curriculum and instruction with an emphasis in secondary English education, students must complete the following:

- 30 graduate semester hours in English education
- 6 graduate semester hours of core courses
- performance-based assessments that culminate in a portfolio finalized in the last semester of the program as fulfillment of the MA comprehensive exam requirement

Each student's course plan is developed in conjunction with his/her advisor. Please review www.ucdenver.edu/education/englished for recommended course sequence.

LALC 5055 - Linking Assessment and Instruction in Language and Literacy, Part I

Semester Hours: 3

LALC 5740 - Adolescent Literature Semester Hours: 3

LALC 5760 - Theory and Methods of English Education Semester Hours: 3

-OR-

LALC 5835 - Special Topics: Literacy and Language Semester Hours: 3

LALC 5810 - Workshop in Language Acquisition and Development Semester Hours: 3

LALC 5910 - Foundations of Language, Literacy and Culture Semester Hours: 3

LALC 6911 - Seminar and Practicum in Literacy and Language, 7-12+ Semester Hours: 3

Research and Evaluation Methodology core course (see list below).

Interdisciplinary core course (see list below).

Four electives, per advisor approval, from the English department and/or the School of Education & Human Development. The following are recommended:

LALC 5720 - Writing: Process, Development, and Teaching Grades 3-12 Semester Hours: 3

-OR-

ENGL 5110 - Denver Writing Project Semester Hours: 3

Courses in working with English language learners and in instructional technology may also be helpful. For a technology course, please contact the professor about prerequisite knowledge.

Total: 36 semester hours

Program Requirements--When Added to UC Denver's Graduate Teacher Education Licensure Program

MA in curriculum and instruction with emphasis in secondary content leadership (English), when added to UC Denver's graduate teacher education licensure program:

- 18 graduate semester hours
- performance-based assessments that culminate in a portfolio finalized in the last semester of the program as fulfillment of the MA comprehensive exam requirement

Each student's course plan is developed in conjunction with his/her advisor. Please review www.ucdenver.edu/education/englished for recommended course sequence.

FNDS 5050 - Critical Issues in American Education Semester Hours: 3

-OR-

IPTE 5080 - Principles and Practice of Change Semester Hours: 3

-OR-

SPED 5300 - Collaborating In Schools and Communities Semester Hours: 3

RSEM 5080 - Research for Teachers Semester Hours: 3

Four electives, per advisor approval, from the English Department and/or the School of Education and Human Development. The following are recommended:

LALC 5720 - Writing: Process, Development, and Teaching Grades 3-12 Semester Hours: 3

-OR-

ENGL 5110 - Denver Writing Project Semester Hours: 3

Courses in working with English language learners and in instructional technology may also be helpful. For a technology course, please contact the professor about prerequisite knowledge.

Total: 18 semester hours

Core Courses

Research and Evaluation Methodology

RSEM 5000 - Orientation to Research and Measurement in Education Semester Hours: 3

RSEM 5050 - Assessment for Teachers Semester Hours: 3

RSEM 5080 - Research for Teachers Semester Hours: 3

RSEM 5100 - Basic Statistics Semester Hours: 3

RSEM 5200 - Introduction to Research Methods Semester Hours: 3

RSEM 5300 - Introduction to Measurement Semester Hours: 3

Interdisciplinary

EPSY 5100 - Advanced Child Growth and Development Semester Hours: 3
EPSY 5140 - Advanced Adolescent Growth and Development Semester Hours: 3
EPSY 5220 - Adult Learning and Education Semester Hours: 3
EPSY 6200 - Human Development Over the Life Span Semester Hours: 3
FNDS 5050 - Critical Issues in American Education Semester Hours: 3
FNDS 5420 - History and Philosophy of Education: Twentieth Century America
Semester Hours: 3
LALC 5140 - Multicultural Education Semester Hours: 3
LALC 5150 - Culture of the Classroom Semester Hours: 3
LALC 5160 - Historical and Legal Foundations of Bilingual Education Semester Hours: 3
LALC 5820 - Techniques in Teaching English as a Second Language Semester Hours:
3

Cumulative Portfolio

The MA portfolio counts as the comprehensive exam for the master's degree. The portfolio is an accumulation of the performance based assessments completed during program courses and reflects on the student's development over the course of the degree program. Reading and writing students must include confirmation of Reading Teacher PLACE exam registration in their portfolios. Information about the PLACE is online at www.place.nesinc.com.

Course Scheduling

During the fall and spring semesters, most university courses are offered in the late afternoon and evening and meet for three hours once a week over a 16-week semester. Some alternative course schedules are available, such as meeting on five Friday-evening/all-day Saturday combinations. In the summer semester, three- to eight-week sessions are offered, and courses may be in the morning, afternoon or evening. A current schedule of courses is available online at <http://courses.cudenver.edu>.

Planning

For practicing full-time teachers, we recommend taking one course each fall and spring semester, and up to two courses each summer. Plan carefully because courses are intended to build upon each other, and some courses are only offered once a year.

Active Status in the Graduate School

Students must complete their programs within seven years, maintaining a GPA of 3.0. Students typically take four courses each calendar year. Failure to enroll over three

contiguous semesters will result in a requirement to resubmit part I of the application for admission and a letter of intent.

Early and Adolescent Literacy Certificates

The early literacy certificate and adolescent literacy certificate each include three graduate-level courses (for a total of 9 semester hours) and are conveniently offered entirely online. They are specifically designed to help licensed teachers develop the skills necessary to reach student readers. To find out more, please visit www.ucdenver.edu/education or email cpe@ucdenver.edu.

To learn about how these certificate credits may apply toward one of the above programs in reading and writing, contact education@ucdenver.edu.

Emergency Management and Homeland Security Graduate Certificate

Certificate Requirements

Students take two required courses as well as three elective courses approved by their advisor. The emergency management and homeland security concentration/certificate allows students to choose electives organized in the following tracks: policy and management, spatial analysis and quantitative assessment, public safety, homeland security and justice or public and environmental health. Students may choose courses in one track to create a more focused concentration or pick from among the tracks to fulfill their elective course requirements.

GEOG 5230 - Hazard Mitigation and Vulnerability Assessment

Summer 2010 Registration **GEOG 5230**

Examines hazard mitigation and its planning and policy implications, emphasizing how vulnerability assessments play an integral role. Students explore how mitigation minimizes the impacts from hazards and use GIS to conduct a local study. Prereq: GEOG 2202 or permission of instructor. Cross-listed with GEOG 4230. **Semester Hours:** 3 to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 5650 - Disaster and Emergency Management Policies

Summer 2010 Registration **P AD 5650**

Examines policies for the management of hazards, emergencies and disasters. Focuses on a series of case studies concerning major disasters and on management principles drawn from those cases. Examines the role of institutional processes, government organizations and nongovernmental organizations in emergency management. Cross-listed with PUAD 7650. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Electives approved by advisor (3) (6-9 semester hours)

Total: 15 Hours

The emergency management and homeland security certificate requires the completion of three electives chosen from a preapproved, multidisciplinary list of courses relevant to emergency management. Students may choose electives in one of three tracks: policy and management; spatial analysis, planning and quantitative assessment; or public safety, homeland security and justice.

Environmental Policy, Management and Law Graduate Certificate

Certificate Requirements

Students take at least two of the three courses listed below:

PUAD 5631 - Seminar in Environmental Politics and Policy

Summer 2010 Registration **P AD 5631**

Examines the fundamental principles of politics and policy that shape strategies of environmental protection. Focuses on the role of institutional processes, government organizations and nongovernmental organizations in environmental politics and policy. Cross-listed with PUAD 7631. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 5632 - Seminar in Environmental Management

Summer 2010 Registration **P AD 5632**

Examines the practical challenges facing environmental managers today, using a series of case studies. Focuses on the role of institutional processes, government organizations and nongovernmental organizations in the practice of environmental

management. Cross-listed with PUAD 7632. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 5633 - Seminar in Natural Resource and Environmental Health Law

Summer 2010 Registration **P AD 5633**

Administrative law aspects of environmental policy implementation and enforcement, the role of courts in both stimulating and limiting statutory reform, and regulatory innovation. Focus on the legal aspects of both natural resource allocation and management, and environmental protection. Alternatives to traditional processes for environmental dispute resolution. Cross-listed with PUAD 7633. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 15 Hours

Environmental Sciences Graduate Certificate

The graduate-level certificate in environmental sciences has seven options: air quality, ecosystems, environmental health, environmental science education, geospatial analysis, hazardous waste and water quality. Each option comprises four courses and is designed to approach an environmental issue from various disciplines. To earn a certificate, students are required to satisfactorily complete the courses in the option of their interest. These courses may be taken as electives within an MS degree program or through nondegree admission. Students must have the prerequisites for each course and must meet the requirements listed. Contact the option advisor for the particular option of interest before starting. A certificate will be issued upon proof of satisfactory completion of the courses. For an MS degree, students must coordinate the option courses with electives in their program. The listings of courses in each option are in the electives section of the master's program information.

Geographic Information Systems Graduate Certificate

This certificate is for students who want to get a taste of the geographic information systems (GIS) specialty area before applying for a graduate degree and for professionals who need a working knowledge of GIS. To earn the certificate in GIS, students must complete four of the core GIS classes, equaling 12 semester hours of work. Students can complete this certificate as a master's student or as a nondegree

student. Students must already have a baccalaureate degree and must complete any course-specific prerequisites.

Geospatial Information Science Graduate Certificate

Contact: Brian Muller

Telephone: 303-556-5967

E-mail: brian.muller@ucdenver.edu

The College of Architecture and Planning offers a certificate in geospatial information science through participating departments. The emphasis of this certificate is on applications of GIS in urban and environmental planning and design fields. The certificate is available to any student earning one of our graduate degrees; to students earning cognate degrees, for example in the School of Public Affairs, College of Engineering and Applied Science or from the Department of Geography; and to nondegree students who have already earned such a degree.

Certificate Requirements

1. A minimum of 18 semester hours (with at least 12 related planning and design hours to be earned in residence at UC Denver or University of Colorado at Boulder);
2. A minimum B (3.0) average and a minimum grade of B- (2.7) in any course, as outlined in the certificate curriculum:
 - *One required introductory class:* Introduction to GIS (both theory and methods) (3 semester hours)
 - *At least three additional courses in GIS or remote sensing methods* to be approved in advance by the GIS committee (9 semester hours). Such courses may include:
 - Cartography (Boulder and Denver, geography)
 - GIS Analysis (Denver, civil engineering)
 - GIS II (Boulder, geography)
 - Advanced GIS Workshops (Boulder and Denver, multiple departments)

- GIS Management (Denver, civil engineering)
- Quantitative Methods in Geography (Boulder, geography)
- Remote Sensing (Boulder and Denver, multiple departments)
- *Applications Option 1*: Studio or thesis project involving application of planning and design GIS-based methods to be approved by the faculty GIS committee (6 semester hours)
- *Applications Option 2*: Internship or other work experience is strongly encouraged for all students and may at the discretion of the committee be substituted for other courses (6 semester hours)

It is not possible or desirable to specify every course that should count toward a certificate. CAP and other participating programs will continue to generate new GIS-related courses as the curriculum evolves, and CAP delivers much of its instruction through studio courses that vary in content each semester. A certificate program must include an ongoing structure for managing course requirements and determining when individual students have met them.

Historic Preservation Graduate Certificate

Contact: Christopher Koziol

Telephone: 303-556-6516

E-mail: christopher.koziol@ucdenver.edu

The College of Architecture and Planning together with the Department of History in the College of Liberal Arts and Sciences offers a graduate certificate in historic preservation. The goal is to instill a culture of interdisciplinary collaboration through course work (and beyond the classroom), through engagement with the community. This certificate builds upon the extraordinary preservation community and opportunities in Colorado. It requires a total of 18 semester hours.

Certificate Requirements

The historic preservation certificate can be earned as part of any of the following degrees:

- Master in History (Public History)

- Master of Architecture
- Master of Landscape Architecture
- Master of Urban Design
- Master of Urban and Regional Planning
- PhD in Design and Planning

The certificate requires a total of 18 semester hours, including:

- Two required core courses (3 semester hours each) on preservation theory and practice from the architect's and planner's perspective of intervening through design and regulation and from the historian's perspective of how the past might guide the future:
 - HIST 5232 HIST 5232 - Historic Preservation
 - URPL 6634 URPL 6634 - Preservation Theory and Practice
- At least three credits in history of architecture, landscape architecture or historic places. Among recent and current offerings:
 - ARCH 5220, 5230: History of Architecture I, II
 - LDAR 5521: History of Landscape Architecture
 - HIST 5229: Colorado Historic Places
- At least three credits in preservation methods, including preservation technology, documentation of sites and structures, visual research methods, and other subjects. Among recent and current offerings:
 - HIST 5240: National Parks History
 - ARCH 6490: Historic Ranch Documentation & Preservation
 - ARCH 6290: Chautauqua Historic Preservation
 - DSPL 7686: International Preservation Practice
 - ARCH 6490: Vernacular Stuff
 - ARCH 6520: Documentation (summer program in Rome)
 - ARCH 6520: Historic Materials (summer program in Rome)

- A thesis or preservation studio (6 semester hours) is required. Preservation studio rotates among architecture, landscape architecture and planning and Urban Design.

Students are encouraged to take an internship in preservation. New offerings and special topics courses are added each semester. Students may work with an advisor in their specialized field to develop a program appropriate to individual interests (which must be approved by the Faculty Preservation Committee).

Required Core Courses

HIST 5232 - Historic Preservation

Summer 2010 Registration **HIST 5232**

Introduces the history, methodology, and goals of historic preservation. Guest speakers, field trips, research projects, and book reports. Cross-listed with HIST 4232.

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

URPL 6634 - Preservation Theory and Practice

Summer 2010 Registration **URP 6634**

Philosophical questions in preservation practice; balancing significance in the environment with natural decay and demands for change. Policy issues as well as preservation and adaptation design.

Semester Hours: 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 6 Hours

Local Government Graduate Certificate

Certificate Requirements

Students take at least two of the three courses listed below:

PUAD 5625 - Local Government Management

Summer 2010 Registration P AD 5625

Relates the systems, processes, and principles of public management to the local government environment. Public management concepts such as strategic planning, bureaucracy, formal and informal organizational structures, human resource planning, management control, systems theory, and administrative behavior are explored within the context of local government. Cross-listed with PUAD 7625. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 5626 - Local Government Politics and Policy

Summer 2010 Registration P AD 5626

Examines local government from the perspective of politics and public policy making. The course focuses on local government political structures, policy analysis and formulation, political forces in administrative decision making, and the relationships between professional administrators and elected officials. Cross-listed with PUAD 7626. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 5628 - Urban Social Problems

Summer 2010 Registration P AD 5628

Examines local government from the perspective of sociology and group dynamics. Course could include some or all of the following subjects: neighborhoods and community groups, class and race relations, community crime, social service issues, immigration, the underclass in American society, and related urban social problems. Cross-listed with PUAD 7628. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.
Electives approved by advisor (3) (6-9 semester hours)

Total: 15 Hours

Nonprofit Management Graduate Certificate

Certificate Requirements

Students take two required courses as well as electives approved by advisor.

PUAD 5110 - Seminar in Nonprofit Management

Summer 2010 Registration **P AD 5110**

This course provides an overview of the principles and concepts that are unique to nonprofit management. Topics include executive management, funding diversity, human resource management, marketing, volunteer management and ethics. Students are also given an introduction to the history and the importance of the nonprofit sector. Cross-listed with PUAD 7110. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 5140 - Nonprofit Financial Management

Summer 2010 Registration **P AD 5140**

Financial management is one of the core competencies of effective nonprofit managers. Every nonprofit organization needs money to sustain or advance its mission. This course provides a grounding in financial management for the "non-accountant" by focusing on an array of knowledge and management skill areas necessary for allocating and controlling resources and for analyzing, reporting and protecting the fiscal health of the organization. Topics include key accounting principles, understanding and using financial statements, the budget development process, cash flow analysis, banking relationships, using the audit report, maximizing investment policy and strategy, and understanding the boundaries of tax exemption. Cross-listed with PUAD 7140. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Additional electives (3): **Semester Hours:** 9

Total: 15 Hours

Public Relations Graduate Certificate

Public Relations has been defined as the management function that entails planning, research, publicity, promotion and collaborative decision-making to help any organization's ability to listen to, appreciate and respond appropriately to those persons and groups whose mutually beneficial relationships the organization needs to foster as it strives to achieve its mission and vision. The graduate certificate in public relations is designed to provide students with the principles and theories that guide the work of public relations practitioners in commercial, public and non-profit contexts.

The graduate certificate in public relations is designed for working professionals who already have earned bachelor's degrees but who would like to enhance or upgrade their skills in the area of public relations. Non-degree students who enroll in the MA program following completion of the certificate may transfer up to 12 hours of credits earned for the certificate into credits for the MA degree. The certificate also is designed for students enrolled in a UCD master's program, including the Department of Communication's MA program. For such students, the certificate can be completed as part of or in addition to

the course work required for the master's degree (recipients of the undergraduate certificate in public relations are ineligible to complete this certificate).

Certificate Requirements

The graduate certificate in public relations requires four courses (12 semester hours):

COMM 5240 - Organizational Communication

Summer 2010 Registration **CMMU 5240**

Relationships among such communication factors as flow, media, channel, diversity, information delivery and organization functioning, morale, and productivity. Prereq: Undergraduates with senior standing may enroll with permission of instructor. Cross-listed with COMM 4240. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 5635 - Principles of Public Relations

Summer 2010 Registration **CMMU 5635**

Introduces theory and practice in the field of public relations, including topics such as effects upon society, public opinion, target audiences, adaptation to the media, uses, laws and ethics. Prereq: Undergraduates with senior standing may enroll with permission of instructor. Cross-listed with COMM 4635. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 5640 - Advanced Public Relations

Summer 2010 Registration **CMMU 5640**

Examines key public relations practices in private, not-for-profit and public sectors. Strategic planning processes, research methods, evaluation, reports, and collateral development are addressed, with an emphasis on the intersection of theory and practice. Prereq: COMM 4635 or COMM 5635. Undergraduates with senior standing may enroll with permission of instructor. Cross-listed with COMM 4640. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 5665 - Principles of Advertising

Summer 2010 Registration **CMMU 5665**

Provides a fundamental understanding and appreciation of advertising in today's global society, including consumer motivation, buying behavior, research, creative development and media planning. Prereq: Undergraduates with senior standing may enroll with

permission of instructor. Cross-listed with COMM 4665. **Semester Hours:** 3 to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 12 Hours

Students may be permitted to take courses other than those listed above to fulfill the requirements for the certificate if those courses fit their professional goals better (CMMU 5635, Principles of Public Relations may not be substituted, however). Requests for approval of substitute courses, including an explanation for the substitution, must be made in writing to Hamilton Bean.

Grade and Residency Requirements

A grade of *B* must be earned in each course completed as part of the certificate. All of the credit hours for the certificate must be earned at the University of Colorado Denver.

Application Procedures and Additional Information

Students should apply for the graduate certificate in public relations after the completion of the required courses. To apply, students must complete the certificate application and return it to Hamilton Bean in his mailbox in room 102-A of the Plaza Building or mail to Department of Communication; P. O. Box 173364, Campus Box 176; University of Colorado Denver; Denver, CO 80217-3364. The approved certificate is mailed to the student.

Students who are not already enrolled at UCD must also complete an Application for Non-Degree Admission prior to registering for courses. The form should be returned to the Office of Admissions in the annex of the CU Building.

Additional information about the graduate certificate in public relations may be obtained from Hamilton Bean, Department of Communication, Plaza 102-V, 303-352-3876, Hamilton.Bean@ucdenver.edu.

Sustainable Urban Infrastructure Graduate Certificate

This certificate is for students and working professionals who seek an interdisciplinary curriculum in the broad field of sustainable infrastructure to address complex water, energy, built environment and transportation challenges using engineering and social science strategies. Students must already have a baccalaureate degree.

Teaching English to Speakers of Other Languages (TESOL) Graduate Certificate

Linguistically Diverse Education

Requirements for LDE Program

(Degree/Endorsement or Certificates - TESOL, CIEL, CRUE)

Office: Lawrence Street Center, 701

Telephone: 303-315-6300

Fax: 303-315-6311

E-mail: education@ucdenver.edu

Web site: www.ucdenver.edu/education/lde

Faculty

Information about faculty in this program is available at www.ucdenver.edu/education/lde. The faculty of linguistically diverse education (LDE) believe that effective teaching requires an awareness of and the ability to respond to individual differences. LDE faculty also emphasize the importance of teachers as scholars and reflective practitioners. In particular, teachers must understand how linguistic and cultural diversity affect their teaching. Two themes run throughout all program offerings. The first concerns the importance of recognizing a variety of literacies—"home" literacies, school literacy, "mainstream" literacy, first and second language literacies—and to develop teaching practices that utilize an understanding of the complexity of literacy development across language contexts. The second theme involves the meaningful use of language and literacy to improve the quality of one's life. As an approach to teaching, this theme emphasizes the creation of diverse, rich environments in which learners experience oral and written language as part of authentic tasks, and where concern for the cultural and linguistic heritage of the students is evident.

Program Options

The LDE program offers options leading to the following:

- a Master of Arts in Curriculum and Instruction
- the Colorado Endorsement for Linguistically Diverse Education
- a Teaching English to Speakers of Other Languages (TESOL) certificate
- a Content Instruction for English Learners (CIEL) certificate
- a Culturally Responsive Urban Education (CRUE) certificate

The program is intended for:

- novice teachers who have completed their Colorado teaching credentials in UC Denver's graduate teacher education licensure program and are enrolled in the MA in curriculum and instruction with an emphasis in LDE (see 27 semester-hour option)
- veteran elementary and secondary teachers returning to graduate studies for the master's degree (36 semester hours)
- veteran elementary and secondary teachers returning to acquire Colorado endorsement credentials (24 semester hours)
- individuals interested in teaching English abroad (TESOL: 15 semester hours)
- veteran elementary and secondary teachers returning to graduate studies for a certificate to aid them in helping their English language learners succeed (CIEL: 9 semester hours)
- elementary and secondary teachers who desire preparation in better meeting the needs of culturally diverse learners (CRUE: 9 semester hours)
- individuals interested in teaching adults (MA: 36 semester hours)

The MA is a field-based professional development program involving university faculty and practicing LDE instructors in public school and intensive English settings. Courses, laboratories and practica emphasize scholarly approaches to complex problems of practice and feature interactive, collaborative and practical approaches to working with English language learners.

We advocate a sociocultural approach to issues of language and learning, acknowledging the legitimacy of linguistic and cultural differences and recognizing that academic settings represent important socializing forces in students' lives. Because of this, we emphasize the "whole learner" in our teaching and in teacher education and teacher development, understanding that individuals do not merely add a language to their repertoire of communication but make fundamental identity adjustments as they progress in their studies. For this reason, all our course work, laboratories and practica

experiences are field-based, putting our program participants in contact with veteran teachers and English language learners. We draw heavily on recent scholarship in collaborative approaches to school-university partnerships and systemic school change in developing classroom methods and materials, curricula and teacher development experiences.

The MA program also provides a foundation in teaching English in a variety of contexts in the United States and abroad. Teachers who work in LDE programs or in other content areas (such as art, language arts, math, music, science, social studies or technology), but who wish to integrate LDE principles and strategies into their instruction for their English language learners, will find the MA program relevant to their interests and goals.

Course work includes language teaching methodology, language acquisition, linguistic analysis of English, multicultural foundations, assessment, literacy and other areas. This program has been developed as an advanced course of study for practicing teachers or individuals with some teaching experience.

Applicants who are new to teaching, and who wish to teach in U.S. K–12 public school settings, should inquire about the teacher education licensure program. Applicants who are new to teaching, but who do not need a teaching license (certification) because they do not wish to teach in U.S. public schools, may consider the TESOL certificate to gain initial teaching experiences before applying for the MA.

Program Requirements and Courses

To complete the LDE program and earn a master's degree and/or endorsement, or to earn a TESOL certificate, students must complete the appropriate course work as outlined in the table below.

Requirements for LDE Program (Degree/Endorsement or TESOL Certificate)					
Course	MA without CDE Endorsement in LDE	MA and CDE Endorsement in LDE	CDE Endorsement in LDE Only	MA and CDE Endorsement in LDE (when added to UC Denver's graduate teacher education licensure	TESOL Certificate

				program)	
LALC 5910 - Foundations of Language, Literacy and Culture	Required	Required	Required	Required	
One course from culture options: LALC 5140 - Multicultural Education LALC 5150 - Culture of the Classroom LALC 5160 - Historical and Legal Foundations of Bilingual Education	Select One	Select One	Select One	Select One	
LALC 5070 - Linguistic Analysis of English: Implications for Teaching	Required	Required	Required	Required	Required
LALC 5030 - Language/Literac y Acquisition Part I	Required	Required	Required	Required	Required
LALC 5820 - Techniques in Teaching English as a Second Language	Required	Required	Required	Required	Required
LALC 5050 - Linguistic and	Required	Required	Required	Required	Required

Cultural Issues in Linking Assessment and Instruction					
<i>One course from field-based teaching options:</i> LALC 5020 - Workshop in Literacy and Language Teaching LALC 5825 - Methods and Materials of Language Teaching LALC 5826 - Language Teaching Lab LALC 5730 - Language and Literacy Across the Curriculum LALC 5770 - Effective Literacy Instruction for Second Language Learners	5826 preferred	Elem: 5825 preferred Sec: 5826 preferred	Elem: 5825 preferred Sec: 5826 preferred	Elem: 5825 preferred Sec: 5826 preferred	5826
LALC 5035 - Language and Literacy: Acquisition, Processes, and Cognition, Part II	Required	Required			
LALC 6912 - Seminar and Practicum in Literacy and Language, ESL	Required	Required	Required	Required	

and Bilingual Education					
One course from research and evaluation methodology: RSEM 5050 - Assessment for Teachers RSEM 5080 - Research for Teachers	Select One	Select One		Select One	
One course from educational psychology: EPSY 5110 - Human Learning EPSY 5220 - Adult Learning and Education	Select One	Select One			
Graduate-level University of Colorado elective	Select One	Select One			
Cumulative online portfolio	Required	Required	Required	Required	
LDE PLACE Exam		Required	Required	Required	
Total Semester Hours	36	36	24	27	15

Content Instruction for English Learners (CIEL) Certificate Requirements

Students interested in the CIEL certificate must complete the following:
LALC 5030 - Language/Literacy Acquisition Part I Semester Hours: 3

-OR-

LALC 5070 - Linguistic Analysis of English: Implications for Teaching Semester Hours: 3

LALC 5050 - Linguistic and Cultural Issues in Linking Assessment and Instruction
Semester Hours: 3

-OR-

LALC 5820 - Techniques in Teaching English as a Second Language Semester Hours:
3

-OR-

LALC 5825 - Methods and Materials of Language Teaching Semester Hours: 3

-OR-

LALC 5826 - Language Teaching Lab Semester Hours: 3

LALC 6912 - Seminar and Practicum in Literacy and Language, ESL and Bilingual
Education Semester Hours: 3

Total: 9 Hours

Culturally Responsive Urban Education (CRUE) Certificate Requirements

Those considering the CRUE certificate must complete the following:

LALC 5170 - Race, Class and Culture in Public Schools Semester Hours: 3

LALC 5180 - Working with Communities and Families Semester Hours: 3

LALC 5190 - Culturally Responsive Pedagogy and Practices Semester Hours: 3

Total: 9 Hours

Additional information about the CRUE certificate can be found at
www.cruecenter.org/certificate.php.

Cumulative Portfolio of Performance Based Assessments (PBAS)

The portfolio is required for the CDE endorsement, counts as the comprehensive exam for the master's degree and permits you to document your development over the course of your program. Portfolios are reviewed by LDE faculty members. At least two faculty members must agree that the portfolio is acceptable in order to pass. The portfolio process is reviewed in every class as each of the PBAs is completed in the classes,

helping students to update their portfolios throughout the program. For more portfolio guidelines, visit the Web site at www.ucdenver.edu/education/lde.

PLACE Exam for Linguistically Diverse Education Endorsement

To add the endorsement to their teaching license, students must pass the PLACE (Program for Licensing Assessments for Colorado Educators) exam for linguistically diverse education, secure and submit the appropriate paperwork from the Colorado Department of Education, and pay fees required for the PLACE and for the endorsement paperwork. Information about PLACE is online at www.place.nesinc.com.

Course Scheduling

During the fall and spring semesters, most university courses are offered in the late afternoon and evening and meet for three hours once a week over a 16-week semester. Some alternative course schedules are available, such as meeting on five Friday-evening/all-day Saturday combinations. In the summer semester, three-to eight-week sessions are offered, and courses may be in the morning, afternoon or evening.

Planning

For practicing full-time teachers, we recommend taking one course each fall and spring semester and up to two courses each summer. Students may simultaneously complete requirements for the MA and the endorsement for linguistically diverse education. Support for course planning is available in LDE advising sessions—usually held once in fall and once in spring. These sessions help students build their programs around course sequences and availability (some courses are offered only once per year).

Active Status in the Graduate School

Students must complete their programs within seven years, maintaining a GPA of 3.0. Students typically take four courses each calendar year. Failure to enroll over three contiguous semesters will result in a requirement to resubmit part I of the application for admission and a letter of intent.

Teaching of English to Speakers of Other Languages (CTESOL)

Program Description

To meet the increasing needs of individuals seeking advanced training in teaching English as a second language, the English department at UC Denver offers a graduate certificate in the teaching of English to speakers of other languages (CTESOL).

The certificate program is designed to build the necessary skills to teach English as a second language through focused preparation. It is primarily aimed at native speakers of English who want to teach overseas, but may serve the needs of international students wanting to teach English in their home country or other countries.

Upon successful completion of the program, CTESOL participants will be able to:

- Discuss the theoretical basis of second language instruction
- Demonstrate a variety of effective ESL teaching techniques
- Explain, in pedagogically relevant ways, the linguistic structures of the English language

Curriculum

The curriculum consists of 12 semester hours (9 semester hours of required courses, and three semester hours of electives). The required courses must be taken at UC Denver. A GPA of 3.0 or better is required for all graduate courses.

Required Courses

ENGL 5171 - Language Theory

Summer 2010 Registration **ENGL 5171**

Introduces linguistic theory to the beginning graduate student. Builds upon the material included in the undergraduate class, by adding materials pertaining to the teaching of writing and graduate language studies. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 5601 - Principles and Practices of Second Language Acquisition

Summer 2010 Registration **ENGL 5601**

Overview of basic principles and practices in the learning and teaching of English as a second language. Cross-listed with ENGL 4601. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 5651 - Second Language Writing

Summer 2010 Registration **ENGL 5651**

Topics include the similarities between first and second language writing, the processes of composition and revision, teacher response to student writing, student processing of feedback, writing assessment, and the reading or writing connection. Cross-listed with ENGL 4651. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Total: 9 Hours

Elective Courses

ENGL 5093 - Teaching of Writing

Summer 2010 Registration **ENGL 5093**

Deals with the analysis of rhetorical theory with an emphasis on practical applications in the classroom, with attention to alternative pedagogies in teaching. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.
or an alternative elective approved by the program advisor

Total: 3 Hours

Total: 12 Hours

Additional Information

LENGTH OF TIME

The course of study will typically last one academic year, including the summer session.

WHEN YOU MAY BEGIN

You may begin in any semester. There is no fixed deadline for application for admission.

PREREQUISITES

All applicants must have a bachelor's degree or the equivalent to be accepted to the program. Graduate students at UC Denver will also be permitted to apply for the certificate while they are concurrently completing another graduate degree. Permission may not be granted to graduate students in applied linguistics.

Non-native speakers of English are required to submit an official TOEFL (Test of English as a Foreign Language) report showing a score of at least 580. Those who score below 580 but above 525 on the TOEFL may be admitted conditionally to the program. Under these conditions, students will have their English language skills assessed by the faculty of the program immediately after they arrive on campus to determine whether further

courses are needed to develop English language proficiency. After assessment, the students may be assigned to full-time language study in an intensive English program, permitted to take graduate-level classes on a conditional basis along with further designated language study or permitted to begin graduate study without further restrictions.

CONTACT INFORMATION

Hongguang (Ian) Ying, Associate Professor
Office: 1050 Ninth Street Park, Room 100
Phone: 303-556-6728
Email: Hongguang.Ying@ucdenver.edu

Water Resources Graduate Certificate

This certificate is for graduate students who seek an interdisciplinary curriculum in the field of hydrologic and hydraulic engineering to analyze water-related problems and obtain knowledge pertaining to watershed hydrology, groundwater modeling, urban storm water management, flood mitigation and river mechanics. Students must already have a baccalaureate degree

Reserve Officers' Training Corps (ROTC)

Aerospace Studies - Air Force ROTC

Contact: Lynda Smith
Office: CU-Boulder Folsom Stadium, Room 218
Telephone: 303-492-8351
Fax: 303-492-8353
Web site: www.colorado.edu/AFROTC/
E-mail: Det105@colorado.edu

Mailing Address

AFROTC Det 105
University of Colorado
371 UCB
Boulder, CO 80309-0371

The Reserve Officers' Training Corps (Air Force, Army and Navy) programs offer students the opportunity to receive a commission as an officer in the United States Air Force, United States Army, United States Navy and United States Marine Corps. This program is in conjunction with a students' major course of study and is similar to an academic minor. Both the Army ROTC and the Air Force ROTC programs offer two-year and four-year programs with options for undergraduate and graduate students, active duty and reserve. The Naval ROTC program offers the same with the exception that there is no support available for graduate students. All offer competitive scholarships and a varying degree of course credit. For more information, contact the ROTC offices on the Boulder or Downtown Campus.

Aerospace Studies

U.S. Air Force ROTC offers several programs leading to a commission in the U.S. Air Force upon receipt of at least a baccalaureate degree.

Standard Four-Year Program

This standard program is designed for incoming freshmen, or any student with four years remaining until degree completion. It consists of three parts: the general military course for lower-division students (normally freshmen and sophomores); the professional officer course for upper-division students (normally juniors and seniors); and leadership laboratory (attended by all cadets). Completion of a four-week summer training course is required prior to commissioning.

Modified Two-Year Program

All undergraduate and graduate students are eligible for these programs. They are offered to full-time, regularly enrolled degree students and require at least two years of full-time college (undergraduate or graduate level, or a combination). Those selected for this program must complete a six-week field training program during the summer months as a prerequisite for entry into the professional officer course the following fall semester.

Leadership Laboratory

All AFROTC cadets must attend leadership laboratory (two hours per week). The laboratory involves a study of Air Force customs and courtesies, drill and ceremonies, career opportunities and the life and work of an Air Force junior officer.

Other AFROTC Programs

Other programs are frequently available based on current Air Force needs. Any AFROTC staff member in Boulder (303-492-8351) can discuss best alternatives. Interested students should make initial contact as early as possible, as selection is on a competitive basis. There is no obligation until a formal contract is entered.

Air Force College Scholarship Program

A scholarship board is held at the end of each semester for students who have at least one semester of full-time college credit and a 2.5 GPA. Students selected for this program are placed on scholarships that pay tuition, book allowance, nonrefundable educational fees, and subsistence of \$300–\$500 per month, tax-free. These scholarships are available in all academic disciplines and are two to three years in length. All cadets enrolled in the professional officer course receive \$450–\$500 per month subsistence during the regular academic year.

Flight Opportunities

Prior to entering the fourth year of the AFROTC program, qualified AFROTC students can compete for pilot and navigator allocations. Cadets receiving a pilot or navigator allocation will begin flight training after completion of their degree and commissioning as a second lieutenant. All cadets are eligible to fly with the Civil Air Patrol while enrolled in AFROTC.

USAF Nursing Programs

Qualified nursing students can compete for nursing scholarships. This scholarship can lead to a rewarding career as an Air Force officer, serving as a doctor or nurse. The prehealth scholarship pays for an undergraduate degree and medical school.

AFROTC Course Credit

AFROTC credit for graduation varies with each college. Students should contact the appropriate college for determination of credit.

Registration

The AFROTC program is offered through the University of Colorado-Boulder. Students at the UC Denver Downtown Campus may register for AFROTC classes through the concurrent registration process. Contact your dean's office for the appropriate forms. AFROTC classes begin with the AIRR prefix.

Military Science - Army ROTC

Contact

UC Denver Office

CPT Byron Elliott
Auraria Campus
S. Classroom Bldg 213 A/B
Telephone: 303-352-7079
Fax: 303-556-2159

CU-Boulder Office

Nancy McMillin
Folsom Stadium, Room 215
Telephone: 303-492-6495

Web site: www.Colorado.edu/AROTC/

E-mail: arotc@colorado.edu

Mailing Address

AROTC
University of Colorado
370 UCB
Boulder, CO 80309-0370

The Reserve Officers' Training Corps (Air Force, Army and Navy) programs offer students the opportunity to receive a commission as an officer in the United States Air Force, United States Army, United States Navy and United States Marine Corps. This program is in conjunction with a students' major course of study and is similar to an academic minor. Both the Army ROTC and the Air Force ROTC programs offer two-year and four-year programs with options for undergraduate and graduate students, active duty and reserve. The Naval ROTC program offers the same with the exception that there is no support available for graduate students. All offer competitive scholarships and a varying degree of course credit. For more information, contact the ROTC offices on the Boulder or Downtown Campus.

Military Science

Army ROTC is an elective program that can lead to a commission as an officer in the active Army, the Army Reserve or the Army National Guard. All Army ROTC classes are offered at UC Denver for freshmen, sophomores and juniors, at the University of

Colorado at Boulder (UCB) and at Colorado School of Mines (CSM). Students interested in Army ROTC classes should contact the Department of Military Science at UC Denver. The Department of Military Science offers two programs for students.

Standard Four-Year Program

The four-year program consists of two phases: the basic course (freshman and sophomore years) and the advanced course (junior and senior years).

Basic

The basic course offers a 2- or 3-semester-hour class each semester covering Army history and organization as well as military leadership and management. Laboratory sessions provide the opportunity to apply leadership skills while learning basic military skills. Enrollment in the basic course incurs no military obligation except for Army scholarship recipients.

Advanced

The advanced course covers leadership, tactics and unit operations, training techniques, military law and professional ethics, and includes a leadership practicum each semester. A 35-day summer advanced camp at Fort Lewis, Washington, provides challenging leadership training and is a prerequisite for commissioning. The advanced course students must have completed the basic course and obtain permission from the professor of military science.

Two-Year Program

The two-year program for academic juniors and graduate students consists of the advanced course, preceded by a four-week summer ROTC basic course at Fort Knox, Kentucky. Veterans or students who have participated in three years of Junior ROTC or Civil Air Patrol may be eligible to enroll in the advanced course without attendance at basic camp or completion of the basic course. Inquiries on advanced placement should be directed to the Department of Military Science. The advanced course students must obtain permission from the professor of military science.

Scholarship Programs

Four-year college scholarships are available to high school seniors, who should apply before December 1 of their senior year. Competition for two- and three-year scholarships is open to all University of Colorado students whether or not they are currently enrolled in ROTC. Scholarship students receive full tuition and laboratory fees, a \$1,200 per-year book allowance and an allowance of \$350-\$500 per month during the academic year. Students interested in the scholarship program should contact the enrollment officer no

later than the beginning of the spring semester to apply for the following academic year. Contact the enrollment and scholarship officer at 303-492-3549 or armyrotc@colorado.edu.

Activities and Leadership Laboratories

Students may participate in activities with the Buffalo Battalion's Charlie Company located on the Auraria Campus, to include color guard, intramural sports, running club and ranger challenge. Weekly or Saturday leadership labs provide cadets with practical leadership experience and performance-oriented, hands-on instruction outside the classroom. Leadership labs are compulsory for enrolled cadets. PT is conducted three times a week with the purpose of developing muscular strength, endurance and cardio-respiratory endurance.

Army Nursing Program

Qualified nursing students can compete for nursing scholarships. This scholarship can lead to a rewarding career as an Army Nurse Corps officer. Contact the Army ROTC enrollment officer at 303-492-3549 for information and benefits.

Registration

Students who wish to register for Army ROTC classes sign up for them through the normal course registration process. AROTC classes begin with the MILR prefix. For more information about Army ROTC, contact the Department of Military Science office, which is conveniently located in the CCD Administration Building at South Classroom Building, Room 213 A/B, Auraria Campus, 303-352-7079.

Courses

MILR 1011 - Adventures in Leadership

Summer 2010 Registration **MILR 1011**

Introduces fundamentals of leadership and the U.S. Army. Examines Army organization, customs and history as well as its current relevance and purpose. Students also investigate basic leadership and management skills necessary to be successful in both military and civilian settings. Includes fundamentals of Army leadership doctrine, team-building concepts, cartography, marksmanship and basic military tactics. Note: lab fee, 3 hour lecture, 2 hour lab, 3 hours of PT per week and 80 hours of field training. **Semester Hours: 2to 2**

Registration is changing. Visit our website for details ucdenver.edu/registration.

MILR 1021 - Adventures in Leadership II

Summer 2010 Registration **MILR 1021**

Covers selected leadership topics in small military organizations such as troop leading procedures, military first aid and casualty evacuation concepts, ethical work climates, Army organizations and installations, and basic military tactics. Introduces students to effective military writing styles. Note: Lab fee. 2 hour lecture, 2 hours lab, and 3 hours PT per week. 80 hours field training. Prereq: Milr 1011. **Semester Hours:** 2 to 2
Registration is changing. Visit our website for details ucdenver.edu/registration.

MILR 2031 - Leadership and Management I

Summer 2010 Registration **MILR 2031**

Comprehensively reviews advanced leadership and management concepts including motivation, attitudes, communication skills, problem solving, human needs and behavior and leadership self development. Students continue to refine effective written and oral communication skills and to explore topics such as unit light infantry tactics and are prepared to perform as midlevel leaders in the cadet organization. Note: lab fee, 3 hour lecture, 2 hour lab, 3 hours of PT per week and 80 hours of field training. **Semester Hours:** 3 to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MILR 2041 - Leadership and Management II

Summer 2010 Registration **MILR 2041**

Focuses on leadership and management functions in military and corporate environments. Covers various components of Army leadership, risk management and planning theory, and leadership evaluation. Continues to refine written and oral communication skills. Note: Lab fee. 3 hour lecture, 2 hours lab, and 3 hours PT per week. 80 hours field training. Prereq: MILR 2031. **Semester Hours:** 3 to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MILR 3052 - Operations and Training I

Summer 2010 Registration **MILR 3052**

Further explores the theory of managing and leading small military units at the squad platoon levels. Students examine leadership styles and techniques related to advanced small unit tactics. Familiarizes students cartography, land navigation, field craft and weapons systems. Involves multiple, evaluated leadership opportunities in field settings and hands-on experience with actual military equipment. Students are given maximum leadership opportunities in weekly labs. Note: lab fee, 3 hour lecture, 2 hour lab, 3 hours of PT per week and 80 hours of field training. Prereq: permission of professor of Military

Science. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MILR 3062 - Leadership and Development II

Summer 2010 Registration **MILR 3062**

Focuses on managing personnel and resources, military decision making, operations order, and oral communication. Exposes students to tactical unit leadership in preparation for the summer advance camp experience. Note: Lab fee. 3 hour lecture, 2 hours lab, and 3 hours PT per week. 80 hours field training. Prereq: Consent of the Professor of Military Science, MILR 3052. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MILR 4072 - Officer Leadership I

Summer 2010 Registration **MILR 4072**

Examine management and leadership concepts and techniques at company and higher echelons. Includes analyses of professional ethics, effective training procedures, subordinate counseling and staff officer briefing techniques. Also investigates counter terrorism, modern peacekeeping missions and the impact of the information revolution on the art of land warfare. Conducted with multiple practical leadership opportunities to organize cadet training and activities. Note: lab fee, 3 hour lecture, 2 hour lab, 3 hours of PT per week and 80 hours of field training. Prereq: permission of professor of Military Science. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Naval Studies – Naval ROTC (U.S. Navy and Marine Corps)

Contact: LT Ricardo Leyva

Office: CU-Boulder Folsom Stadium, Room 233

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NROTC Recruiting Officer

University of Colorado

374 UCB

Boulder, CO 80309-0374

The Reserve Officers' Training Corps (Air Force, Army, and Navy) programs..... as an officer in the United States Air Force, United States Army, United States Navy and United States Marine Corps. Both the Army ROTC and the Air Force ROTC programs offer two-year and four-year programs with options for undergraduate and graduate students, active duty, and reserve. The Naval ROTC program offers the same, with the exception that there is no support available for graduate students. All offer competitive scholarships and a varying degree of course credit. For more information, contact the ROTC offices on the Boulder or Downtown campus.

Naval Studies

U.S. Naval ROTC provides several programs all leading to a commission in the U.S. Navy or U.S. Marine Corps upon receipt of a baccalaureate degree.

Standard Four-Year Program

Incoming freshmen can receive full tuition funding (8 semesters) for their undergraduate education. This is the “normal” pathway by which students enter the program. Applications need to be completed online via the national NROTC Web site (www.nrotc.navy.mil) well before the student matriculates, typically the January prior to fall admission. Students are highly encouraged to apply early. Scholarships are awarded based on high school GPA, ACT/SAT scores and extracurricular activity levels. Students interested in engineering or nursing degrees may be eligible for up to nine semesters of funding. If interested in nursing, please contact the recruiting officer for more detail.

Two-Year Program

Students can apply for a four-semester scholarship in the spring semester of their sophomore year. Scholarships are awarded based on college GPA, personal interview and recommendation by the NROTC unit. Please contact the recruiting officer for more information.

College Program

The main prerequisite for joining the NROTC unit is that the student is currently admitted to UC Denver. Anyone in this status has a very good chance of being allowed to participate with the NROTC unit in a nonscholarship (a.k.a. college program) status, and to eventually commission as an officer in the U.S. Navy or Marine Corps. After participating in the NROTC unit in a nonscholarship status for at least one semester, the NROTC unit may recommend that students be considered for a full-tuition scholarship. A scholarship board is held at the end of each semester for these students. Chances for being awarded a full-tuition scholarship for as many as seven semesters are very good if the student has a cumulative college GPA of 3.0 or higher. High school GPA and

ACT/SAT scores are not considered in the scholarship selection process. This is a great opportunity for students who either missed the deadline for applying to NROTC, who are already in college or who perhaps didn't perform well enough in high school to earn a scholarship through the standard four-year program.

NROTC Course Credit

NROTC credit for graduation varies with each college. Students should contact the appropriate college for determination of credit.

Registration

The NROTC program is offered through the University of Colorado-Boulder. Students at the UC Denver Downtown Campus may register for NROTC classes through the concurrent registration process. Contact your dean's office for the appropriate forms. NROTC classes begin with the NAVR prefix.

Requirements

SEHD Degree Programs and Associated State Licenses

School of Education and Human Development Degree Programs and Associated State Licenses

Programs	Approved Degrees	Licenses and Endorsements
ALPS: Administrative Leadership and Policy Studies	Master of Arts: Administrative Leadership and Policy Studies Educational Specialist (EdS): Administrative Leadership and Policy Studies	Principal License Administrator License

C&P: Curriculum and Pedagogy	Master of Arts: Curriculum and Instruction	Endorsements/emphases: • Elementary Education • Secondary Math, Science or Social Studies
CPCE: Counseling Psychology and Counselor Education	Master of Arts: Counseling Psychology and Counselor Education	Public School Counselor License: 0–21 Encouraged to apply for licensure from the State of Colorado: Couples and Family Therapy Clinical Mental Health Counseling –Interdisciplinary Clinical Mental Health Counseling – Multicultural
Doctoral Studies in Education	Doctor of Education (EdD) in Leadership for Educational Equity Doctor of Philosophy (PhD) in Educational Studies and Research	EdD emphases: Instructional Leadership Executive Leadership
Graduate and Undergraduate Teacher Licensure	Master of Arts: Curriculum and Instruction Educational Psychology Special Education College of Liberal Arts Degrees: Bachelor of Arts Bachelor of Science	Graduate Teacher Licensure: Elementary Education Secondary Education: Math, Science, Social Studies, English, Foreign Language Special Education: Generalist–K–12 Undergraduate Teacher Licensure: Elementary Education Secondary Education: Math, English, Social Studies, Foreign Language

ECE: Early Childhood Education	Master of Arts: Early Childhood Education	Early Childhood Special Education Specialist Birth - 8
EPSY: Educational Psychology	Master of Arts: Educational Psychology	Emphases: Human Learning Human Development Research & Evaluation Educational Assessment Individualized Programs
ILT: Information and Learning Technologies	Master of Arts: Information and Learning Technologies	Endorsements/emphases: • Adult Learning & Instructional Design • E-Learning Design and Implementation • K-12 Instructional Technology Teacher and Instructional Technology Specialist • School and Teacher Librarian
LDE: Linguistically Diverse Education	Master of Arts: Curriculum and Instruction	Endorsement/emphasis: • Linguistically Diverse Education
L2CRT: Literacy, Language and Culturally Responsive Teaching	Master of Arts: Curriculum and Instruction	Endorsements/emphases: • Reading Teacher: K–6, 7–12 • Secondary English Education
SPED: Special Education	Master of Arts: Special Education	Special Education Generalist K-12
SPSY: School Psychology	Educational Specialist (EdS): School Psychology	School Psychology Birth - 21

Courses

See a list of All Courses by Course Type.

ACCT 2200 - Financial Accounting and Financial Statement Analysis

Summer 2010 Registration **ACCT 2200**

The financial accounting process, the role of the profession and the analysis of financial statements. Principal focus on interpretation of financial statements, with emphasis on asset and liability valuation problems and the determination of net income. Prereq: MATH 1070 and sophomore standing. A grade of 'C' or better is required in this course to proceed to ACCT 2220. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ACCT 2220 - Managerial Accounting and Professional Issues

Summer 2010 Registration **ACCT 2220**

Introduces managerial accounting. Shows managers how to use accounting information to make decisions. Principal focus on cost behavior analysis, budgeting and product costing. Prereq: ACCT 2200 with a grade of 'C' or better and sophomore standing.

Strictly enforced. **Semester Hours:** 3to 3 **When Offered:** FASPRSUM

Registration is changing. Visit our website for details ucdenver.edu/registration.

ACCT 2550 - Introductory Accounting for Entrepreneurs and the Arts

Summer 2010 Registration **ACCT 2550**

An Integration of financial and managerial accounting processes as they relate to Entrepreneurs, Arts & Media managers and similar applications. This course will cover the analysis and interpretation of financial statements, asset and liability valuation and the determination of net income. Incorporates the use of accounting information to make decisions focusing on cost behavior analysis, budgeting and product costing in entrepreneurial and arts related businesses. Prereq: MATH 1070 or 1110. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ACCT 3054 - Accounting Systems and Data Processing

Summer 2010 Registration **ACCT 3054**

The design and analysis of accounting information systems, with special emphasis on computers and computer programming, and the role of accounting in the role of accounting in the management process. Must earn a grade of 'C' or better to qualify for graduation. Prereq: Completion of ACCT 2220 and ISMG 2050 with a grade of 'C' or

better (Strictly enforced). **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ACCT 3220 - Intermediate Financial Accounting I

Summer 2010 Registration **ACCT 3220**

An intensive analysis of generally accepted accounting principles, accounting theory and preparation of annual financial statements for public corporations. Must complete course with a 'C' to qualify in graduation requirements. Prereq: Completion of ACCT 2220 with a grade of 'C' or better. Strictly enforced. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ACCT 3230 - Intermediate Financial Accounting II

Summer 2010 Registration **ACCT 3230**

Selected topics not covered in ACCT 3220. Must complete course with a grade of 'C' to qualify in graduation requirements. Prereq: ACCT 3220, completed with a grade of a 'C' or better. Strictly enforced. **Semester Hours:** 3to 3 **When Offered:** FALL SPR

Registration is changing. Visit our website for details ucdenver.edu/registration.

ACCT 3320 - Intermediate Cost Accounting

Summer 2010 Registration **ACCT 3320**

Cost analysis for purposes of control and decision making. Analysis of cost behavior, role of accounting in planning and control, and managerial uses of cost accounting data. Includes use of computer assisted decision models. Must receive a 'C' grade to qualify in graduation requirements. Prereq: ACCT 2220, and DSCI 2010 completed with a grade of 'C' or better. Strictly enforced. **Semester Hours:** 3to 3 **When Offered:** FASPRSUM

Registration is changing. Visit our website for details ucdenver.edu/registration.

ACCT 3939 - Internship/Cooperative Education

Summer 2010 Registration **ACCT 3939**

Supervised experiences involving the application of concepts and skills in an employment situation. Prereq: Senior standing and 3.5 GPA. **Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ACCT 4030 - Financial Accounting

Summer 2010 Registration **ACCT 4030**

Analysis of financial accounting concepts, the development of accounting thought and principles and critical review of generally accepted accounting principles. (Not recommended for candidates planning to sit for the CPA examination.) Note: Students who have taken ACCT 3220 or ACCT 3230 (or equivalent) may not take this course.

Prereq: ACCT 2200 and ACCT 2220 or equivalent. Must have a 'C' or better in courses. Strictly enforced. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ACCT 4070 - Management Accounting

Summer 2010 Registration **ACCT 4070**

Designed to provide students with a foundation in management accounting models and information, with emphasis on management decision making uses of accounting information. (Not recommended for candidates planning to sit for the CPA examination.)

Prereq: ACCT 2200 and 2220 or equivalent with a grade of a 'C' or better. Note: students who have taken ACCT 3320 or its equivalent may not take this course. **Semester Hours:** 3to 3 **When Offered:** *SPRING*

Registration is changing. Visit our website for details ucdenver.edu/registration.

ACCT 4240 - Advanced Financial Accounting

Summer 2010 Registration **ACCT 4240**

Advanced financial accounting concepts and practices with emphasis on accounting for partnerships, business combinations and consolidations. Prereq: Completion of ACCT 3230 with a grade of a 'C' or better. Strictly enforced. Cross-listed with ACCT 6024. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ACCT 4330 - Managerial Accounting Problems and Cases

Summer 2010 Registration **ACCT 4330**

Critical analysis of advanced topics in managerial accounting. Considerable use of cases and current readings. Prereq: Completion of ACCT 3320 with a grade of 'C'. Strictly enforced. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ACCT 4370 - International Accounting

Summer 2010 Registration **ACCT 4370**

Designed to expose students to the international aspects of accounting and financial management. Includes discussion of some of the different financial accounting practices across countries; financial statement analysis in a global context, international auditing practices and procedures, international tax implications and the implications of operating within the regulations of the Foreign Corrupt Practices Act, the European Union, North American Free Trade Agreement and General Agreement on Tariffs and Trade. Prereq: Completion of ACCT 3220 with a grade of 'C' or better. Strictly enforced. Cross-listed with ACCT 6370 and INTB 6370. **Semester Hours:** 3to 3 **When Offered:** *SPRING*

Registration is changing. Visit our website for details ucdenver.edu/registration.

ACCT 4410 - Income Tax Accounting

Summer 2010 Registration **ACCT 4410**

Provisions and procedures of federal income tax laws and requirements affecting individuals and business organizations, including problems of tax planning and compliance. Note: Students cannot receive credit for both ACCT 4410 and ACCT 6140. Prereq: ACCT 3230 completed with a grade of "C" or better. Strictly enforced. Cross-listed with ACCT 6140. **Semester Hours:** 3to 3**When Offered:** *FALL SPR*
Registration is changing. Visit our website for details ucdenver.edu/registration.

ACCT 4490 - Experiential Learning

Summer 2010 Registration **ACCT 4490**

Designed to provide practical knowledge on developing a professional practice in accounting or financial management. Topics: Marketing, operating a professional practice. Lectures, guest speakers student projects. Prereq: ACCT 3220 completed with a 'C' or better, or permission of instructor. Cross-listed with ACCT 6490. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ACCT 4520 - Oil and Gas Accounting

Summer 2010 Registration **ACCT 4520**

The Oil and Gas Accounting course is designed to give students an overview of the oil and gas industry and the particular accounting issues this industry faces. The focus is on the oil and gas industry but many of the issues discussed are appropriate and applicable to all energy-related entities. This is a valuable learning experience for those interested in acquiring an understanding of the accounting issues for energy management firms in preparation for entry into public accounting. The course enjoys support from the energy industry in the form of guest speakers and project ideas. Prereq: Completion of ACCT 3220 with a grade of 'C' or better. Strictly enforced. Cross-listed with ACCT 6520. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ACCT 4620 - Auditing

Summer 2010 Registration **ACCT 4620**

Generally accepted auditing standards and the philosophy supporting them; auditing techniques available to the independent public accountant. Pertinent publications of the AICPS reviewed. Note: Students cannot receive credit for both ACCT 4620 and ACCT 6020. Prereq: ACCT 3230 must be completed with a grade of a 'C' or better. Strictly enforced. Cross-listed with ACCT 6020. **Semester Hours:** 3to 3**When Offered:** *FALL*

SPR

Registration is changing. Visit our website for details ucdenver.edu/registration.

ACCT 4780 - Accounting and Information Systems Processes and Controls

Summer 2010 Registration **ACCT 4780**

The course is designed to develop knowledge and skills used to understand and evaluate corporate accounting processes and systems. It focuses on financial and information system internal controls and the flow of corporate information through an accounting system. A financial system objective and risk assessment approach is used to present concepts and techniques for evaluating the adequacy of system processes and controls. Prereq: Completion of ACCT 2200, ACCT 2220 and ACCT 3054 with a grade of 'C' or better (strictly enforced). Cross-listed with ACCT 6510, ISMG 4780, and ISMG 6510. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ACCT 4800 - Accounting for Government and Nonprofit Organizations

Summer 2010 Registration **ACCT 4800**

Planning and control of government and nonprofit organizations. Includes program budgets, responsibility accounting and fund accounting. Prereq: Completion of ACCT 3220 with a grade of 'C' and permission of instructor, strictly enforced. Cross-listed with ACCT 6080. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ACCT 4840 - Independent Study

Summer 2010 Registration **ACCT 4840**

Semester Hours: 1to 8

Registration is changing. Visit our website for details ucdenver.edu/registration.

ACCT 4915 - Accounting for the Public Interest

Summer 2010 Registration **ACCT 4915**

Applies accounting knowledge and concepts in a not-for-profit organization. Student volunteers help with functions or special projects and are supervised by both faculty members and personnel from the agency to which they are assigned. Prereq: Permission of instructor. Cross-listed with ACCT 6015. **Semester Hours:** 3to 3 **When Offered:** *FASPRSUM*

Registration is changing. Visit our website for details ucdenver.edu/registration.

ACCT 4950 - Special Topics

Summer 2010 Registration **ACCT 4950**

Research methods and results, special topics and professional developments in accounting. Consult the current 'Schedule Planner' for semester offerings. Prereq: Varies according to topic and instructor requirements. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ACCT 5939 - Internship/Cooperative Education

Summer 2010 Registration **ACCT 5939**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ACCT 6015 - Accounting for the Public Interest

Summer 2010 Registration **ACCT 6015**

Applies accounting knowledge and concepts in a not-for-profit organization. Student volunteers help with functions or special projects and are supervised by both faculty members and personnel from the agency to which they are assigned Note: This class is rarely offered. Prereq: Permission of instructor. Cross-listed with ACCT 4915. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ACCT 6020 - Auditing

Summer 2010 Registration **ACCT 6020**

Generally accepted auditing techniques and the philosophy supporting them; auditing techniques available to the independent public accountant. Pertinent publications of the AICPA reviewed. Prereq: ACCT 3230 with a grade of 'C' or better and ACCT 3054, strictly enforced. Cross-listed with ACCT 4620. **Semester Hours:** 3to 3 **When Offered:** FALL SPR

Registration is changing. Visit our website for details ucdenver.edu/registration.

ACCT 6024 - Advanced Financial Accounting

Summer 2010 Registration **ACCT 6024**

Advanced financial accounting concepts and practice with emphasis on accounting for partnerships, business combinations and consolidations. Prereq: ACCT 3230 or equivalent. Cross-listed with ACCT 4240. **Semester Hours:** 3to 3 **When Offered:** FALL SPR

Registration is changing. Visit our website for details ucdenver.edu/registration.

ACCT 6030 - Financial Accounting

Summer 2010 Registration **ACCT 6030**

Accelerated analysis of financial accounting concepts, the development of accounting thought and principles and critical review of generally accepted accounting principles. Prereq: BUSN 6550 or equivalent. Note: students who have taken ACCT 3220 or ACCT 3230 (or equivalent) may not take this course. **Semester Hours:** 3to 3**When Offered:** FALL

Registration is changing. Visit our website for details ucdenver.edu/registration.

ACCT 6033 - Advanced Managerial Accounting

Summer 2010 Registration **ACCT 6033**

Critical analysis of advanced topics in managerial accounting. Note: This class is rarely offered. Prereq: ACCT 3320. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ACCT 6070 - Management Accounting

Summer 2010 Registration **ACCT 6070**

Designed to provide graduate business students with a foundation in management accounting models and information, with emphasis on management decision making uses of accounting information. Note: This class is rarely offered. Students who have taken ACCT 3320 or its equivalent may not take this course. Prereq: BUSN 6550 or equivalent. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ACCT 6080 - Accounting for Government and Nonprofit Organizations

Summer 2010 Registration **ACCT 6080**

Nonprofit Organizations. Planning and control of government and nonprofit organizations. Includes program budgets, responsibility accounting and fund accounting. Prereq: ACCT 3220 or BUSN 6550 or permission of instructor. Cross-listed with ACCT 4800. **Semester Hours:** 3to 3**When Offered:** SPRING
Registration is changing. Visit our website for details ucdenver.edu/registration.

ACCT 6140 - Tax Planning for Managers

Summer 2010 Registration **ACCT 6140**

A Federal tax survey course with an emphasis on tax planning for the graduate student who wants to understand the impact of taxation on individual and business transactions. Course materials emphasize the application of individual, partnership and corporate tax principles to the decision making process. Prereq: BUSN 6550 or equivalent. Note: Students cannot receive credit for both ACCT 4410 and 6140. Cross-listed with ACCT 4410. **Semester Hours:** 3to 3**When Offered:** FALL SPR
Registration is changing. Visit our website for details ucdenver.edu/registration.

ACCT 6250 - Seminar: Financial Accounting

Summer 2010 Registration **ACCT 6250**

Nature and origin of accounting theory and the development of postulates, principles and practices. Methodology appropriate to development and evaluation of accounting theory, with special emphasis on accepted research standards and procedures. Prereq: ACCT 3230 and ACCT 4620 or ACCT 6020 or concurrent registration in ACCT 4620 or ACCT 6020. **Semester Hours:** 3to 3**When Offered:** FALL SPR
Registration is changing. Visit our website for details ucdenver.edu/registration.

ACCT 6260 - Seminar: Managerial Accounting

Summer 2010 Registration **ACCT 6260**

Focuses on the conceptual foundations of managerial accounting. Behavioral and quantitative approaches regarding information for decision making, planning, control, performance evaluation and other issues are investigated. Prereq: ACCT 3320 or ACCT 6070 (or equivalent). **Semester Hours:** 3to 3**When Offered:** FALL SPR
Registration is changing. Visit our website for details ucdenver.edu/registration.

ACCT 6280 - Professional Judgment and Decision Making in Accounting

Summer 2010 Registration **ACCT 6280**

Accounting is a process of providing economic information useful for decision making. This course provides (1) an opportunity to develop professional judgment skills, and (2) tools to make better decisions through an active, case-oriented learning method. Cases involve representative problems professional accountants face in financial reporting, audit, tax, business services, and practice management, including ethical conflicts and technical decisions. Participants learn to apply a structured decision model, incorporating critical, creative, evaluative and reflective judgment processes and learn how to recognize and avoid common decision errors and biases. Prereq: ACCT 4620 (or equivalent) or permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ACCT 6290 - Management Control Systems

Summer 2010 Registration **ACCT 6290**

Focuses on the design and use of control systems which ensure that people in organizations behave consistently with the organizational goals. Controls for communication, motivation and performance evaluation (along with informational requirements) are stressed through analysis of cases and classroom discussion. Note: This class is rarely offered. Prereq: BUSN 6550 or equivalent. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ACCT 6340 - Financial Statement Analysis

Summer 2010 Registration **ACCT 6340**

Financial statements are used as an information source on which to base investment, lending potential or even employment. Designed to develop skills in using, understanding, analyzing, and interpreting financial statements and to make students aware of the value and limitations of financial statement information. Note: Should take in the third semester of the graduate program. Prereq: BUSN 6550 or equivalent. **Semester Hours:** 3to 3**When Offered:** FALL

Registration is changing. Visit our website for details ucdenver.edu/registration.

ACCT 6350 - Current Issues in Professional Accounting

Summer 2010 Registration **ACCT 6350**

An in-depth analysis of current issues in the accounting profession, including ethics development, and validity of standards and regulations. Prereq: ACCT 3230, ACCT 4620, ACCT 6020 or permission of instructor. **Semester Hours:** 3to 3**When Offered:** FALL

Registration is changing. Visit our website for details ucdenver.edu/registration.

ACCT 6360 - Fraud Examination

Summer 2010 Registration **ACCT 6360**

This course examines the theories and methods of fraud examination in the context of auditing both for-profit and not-for-profit entities. Topics include identification of weaknesses in accounting controls, analytical review, and forensic accounting methods. Prereq: ACCT 4620 or ACCT 6020. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ACCT 6370 - International Accounting

Summer 2010 Registration **ACCT 6370**

Designed to expose students to the international aspects of accounting and financial management. Includes discussion of some of the different financial accounting practices across countries; financial statement analysis in a global context, international auditing practices and procedures, international tax implications and the implications of operating within the regulations of the Foreign Corrupt Practices Act, the European Union, North American Free Trade Agreement and General Agreement on Tariffs and Trade. Prereq: BUSN 6550 or equivalent. Note: Students cannot receive credit for both ACCT 6370 and INTB 6370. IFRS's are reviewed and compared with the requirements of US GAAP. Cross-listed with INTB 6370 and ACCT 4370. **Semester Hours:** 3to 3**When Offered:** SPRING

Registration is changing. Visit our website for details ucdenver.edu/registration.

ACCT 6380 - Forensic Accounting

Summer 2010 Registration **ACCT 6380**

An examination of investigative auditing, fraud auditing, litigation support, and economic quantification of damages. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ACCT 6390 - International Taxation

Summer 2010 Registration **ACCT 6390**

Examines U.S. federal tax law consequences of doing business abroad, foreign source income, tax relief for employees stationed abroad, transfer pricing, and tax planning for multinational businesses. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ACCT 6410 - Advanced Tax For Individuals

Summer 2010 Registration **ACCT 6410**

An advanced federal individual income tax course stressing the methodology used in tax research and in tax planning. Includes use of specialized tax software to address compliance and planning issues by solving complex case-type real-life situations.

Prereq: ACCT 4410 or 6140 (or equivalent). **Semester Hours:** 3to 3 **When Offered:**

SPRING

Registration is changing. Visit our website for details ucdenver.edu/registration.

ACCT 6420 - Advanced Tax for Businesses

Summer 2010 Registration **ACCT 6420**

An advanced federal tax course stressing research and tax planning issues of corporate and partnership entities. Includes use of specialized tax software to address compliance and planning issues by solving complex case-type, real-life situations. Prereq: ACCT 4410 or 6140 (or equivalent). **Semester Hours:** 3to 3 **When Offered:** *FALL*

Registration is changing. Visit our website for details ucdenver.edu/registration.

ACCT 6430 - International Taxation

Summer 2010 Registration **ACCT 6430**

International taxation focuses on the U.S. taxation of international transactions, including a review of the taxation systems in several countries. Includes different forms of doing business in several countries (e.g. in the U.S., would include sole proprietorship, partnerships, limited liability companies and corporations), the ease of operating each form of business, identifying how business owners are protected from the business liabilities and risks and the different, if any, tax treatments afforded each form of business. Other topics include a review of tax rates, consumption regimes (e.g. value -

added taxes), the taxation of U.S. expatriates, the tax consequences of repatriating profits to the U.S., the application of any tax treaties with the U.S. and related tax matters. **Semester Hours:** 3to 3 **When Offered:** *SUMMER*
Registration is changing. Visit our website for details ucdenver.edu/registration.

ACCT 6450 - Research Problems in Income Tax Accounting

Summer 2010 Registration **ACCT 6450**

Study of the methodology used in tax research and tax planning, together with a study of some aspects of tax administration and tax practice and some aspects of the current law and proposals for its revision. Note: This class is rarely offered. Prereq: ACCT 4410 or ACCT 6410 or permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ACCT 6460 - Advance Topics in Taxation

Summer 2010 Registration **ACCT 6460**

Course will focus on advanced topics in tax planning for closely held businesses. Format: Lectures by expert tax professionals and questions/discussion on various topics with emphasis on current issues and trends. Prereq: ACCT 6140. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ACCT 6470 - Internal Auditing

Summer 2010 Registration **ACCT 6470**

Intro course for business students and CIA candidates. Topics include: IA fundamentals; IA standards; internal controls; managing the IA department; IA working papers, procedures and evidences; fraud detection and prevention; ethics; evaluation of the IA function, and Sarbanes-Oxley Act of 2002. Prereq: BUSN 6550 or equivalent. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ACCT 6480 - Partnership Taxation

Summer 2010 Registration **ACCT 6480**

Fundamentals of the Taxation of Partnerships and Partners. This class will focus on fundamental tax issues relating to partnerships and partners arising from the formation, operation, and liquidation of partnerships. Course work includes an examination of pertinent federal income tax returns of the partnership. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ACCT 6490 - Experiential Learning

Summer 2010 Registration **ACCT 6490**

Designed to provide practical knowledge on developing a professional practice in accounting or financial management. Topics: Marketing, operating a professional practice. Lectures, guest speakers (if you are interested in being a guest lecturer for the class contact the instructor), and student projects. Prereq: ACCT 3220 or permission of instructor. Cross-listed with ACCT 4490. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ACCT 6510 - Accounting and Information Systems Processes and Controls

Summer 2010 Registration **ACCT 6510**

The course is designed to develop knowledge and skills used to understand and evaluate corporating accounting processes and systems. Focuses on financial and information system internal controls and the flow of corporate information through an accounting system. A financial system objective and risk assessment approach is used to present concepts and techniques for evaluating the adequacy of system processes and controls. Prereq: ACCT 3054 or ISMG 3000 or equivalent professional experience. Cross-listed with ACCT 4780, ISMG 4780 and 6510. **Semester Hours:** 3to 3**When Offered:** FALL
Registration is changing. Visit our website for details ucdenver.edu/registration.

ACCT 6520 - Issues in Oil and Gas Accounting

Summer 2010 Registration **ACCT 6520**

The Oil and Gas Accounting course is a course designed to give students an overview of the oil and gas industry and the particular accounting issues this industry faces. The focus is on the oil and gas industry but many of the issues discussed are appropriate and applicable to all energy-related entities. This is a valuable learning experience for those interested in acquiring an understanding of the accounting issues for energy management firms in preparation for entry into public accounting. The course enjoys support from the energy industry in the form of guest speakers and project ideas. Prereq: BUSN 6550 or ACCT 3220 or permission of instructor. Cross-listed with ACCT 4520. **Semester Hours:** 3to 3**When Offered:** SPRING
Registration is changing. Visit our website for details ucdenver.edu/registration.

ACCT 6620 - Advanced Auditing

Summer 2010 Registration **ACCT 6620**

Development of auditing as a profession, including evolution of standards and audit reports. Historical and contemporary literature in the field reviewed. Prereq: ACCT 4620 or ACCT 6020 or equivalent. **Semester Hours:** 3to 3**When Offered:** FALL SPR
Registration is changing. Visit our website for details ucdenver.edu/registration.

ACCT 6800 - Special Topics

Summer 2010 Registration **ACCT 6800**

Research methods and results, special topics and professional developments in accounting. Consult the current 'Schedule Planner' for semester offerings as new special topics courses are frequently added. Prereq: Varies according to topics and instructor requirements. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ACCT 6840 - Independent Study

Summer 2010 Registration **ACCT 6840**

Permission of instructor required. Allowed only under special and unusual circumstances. Regularly scheduled courses cannot be taken as independent study. **Semester Hours:** 1to 8

Registration is changing. Visit our website for details ucdenver.edu/registration.

ACCT 6939 - Internship/Cooperative Education

Summer 2010 Registration **ACCT 6939**

Supervised experiences involving the application of concepts and skills in an employment situation. Prereq: 15 semester hours for MS students and 21 hours for MBA students and a cumulative 3.2 GPA. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ACCT 6950 - Master's Thesis

Summer 2010 Registration **ACCT 6950**

Semester Hours: 1to 8

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 1000 - Anthropology: Past and Present

Summer 2010 Registration **ANTH 1000**

Anthropology is the study of humankind in all of its diversity and complexity. Anthropologists have traditionally approached the study from four distinct perspectives: biological, cultural, linguistic and archaeological. This course considers how anthropologists study humankind from these four perspectives and the robust picture of humanity that emerges. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 1111 - Freshman Seminar

Summer 2010 Registration **ANTH 1111**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 1302 - Introduction to Archaeology

Summer 2010 Registration **ANTH 1302**

Introduces the study of past cultures and their environments. Emphasis is on the scientific method, aspects of research design and analytical techniques used by archaeologists to determine chronology, taphonomy, source production areas, exchange networks, and human-environment interactions. Note: Three hours of lecture and a two-hour lab each week. **Semester Hours:** 4to 4 **GT Pathways Category Key:** GT-SS3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 1303 - Introduction to Biological Anthropology

Summer 2010 Registration **ANTH 1303**

Introduces the study of human biological evolution, both processes and outcomes, from primate ancestors to fossil hominids to contemporary human populations. Methods of obtaining and interpreting data concerning the genetic, biological and evolutionary basis of physical variation in living and skeletal populations. Note: 3 hours of lecture and a 2 hour lab each week. **Semester Hours:** 4to 4 **GT Pathways Category Key:** GT-SC1
Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 2102 - Culture and the Human Experience

Summer 2010 Registration **ANTH 2102**

An application of the concept of culture to several aspects of the human experience, including gender relations, emotion and personality, cognition, language, health and healing and economic behavior. In exploring these dimensions of the human experience, the course focuses on selected cultures from each of the world's major geographic areas. **Semester Hours:** 3to 3 **GT Pathways Category Key:** GT-SS3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 2840 - Independent Study

Summer 2010 Registration **ANTH 2840**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 2939 - Internship: Cooperative Education

Summer 2010 Registration **ANTH 2939**

Experiences involving application of specific, relevant concepts and skills in supervised

employment situations. Prereq: 15 hours of 2.75 GPA. **Semester Hours:** 1 to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 3000 - Globalization, Migration, Transnationalism

Summer 2010 Registration **ANTH 3000**

Examines the cultural dynamics of globalization, including: global capitalist transformations, development and the role of aid organizations, international migration, the maintenance of transnational ties, and cross-border social formations. Reviews theories of globalization as well as their applied implications. Note: Introductory course in Anthropology. Prereq: Upper-division undergraduate standing or permission of instructor. **Semester Hours:** 3 to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 3006 - Development, Environment and Culture

Summer 2010 Registration **ANTH 3006**

Investigates theories, issues and problems in development and its relationship to social and environmental problems. Considers the connections between development and underdevelopment, the success and failures of development policies and five case studies in development. Prereq: Anthropology and microeconomics or macroeconomics. **Semester Hours:** 3 to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 3101 - Foundations of Cultural Anthropology

Summer 2010 Registration **ANTH 3101**

Covers current theories in cultural anthropology and discusses the nature of field work. Major schools of thought and actual field studies are explored with an emphasis on anthropological data gathering, analysis and writing. Prereq: Introductory course in cultural anthropology. **Semester Hours:** 3 to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 3121 - Language and Communication

Summer 2010 Registration **ANTH 3121**

Definitions of language and communication and their relationship to human behavior, thought and culture. The classification of languages, linguistic universals, language acquisition, multilingualism, and nonhuman communication, with consideration of the evolutionary implications of such studies. Prereq: Introductory course in cultural anthropology. **Semester Hours:** 3 to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 3142 - Cultural Diversity in the Modern World

Summer 2010 Registration **ANTH 3142**

An in-depth analysis of the phenomena of culture and application of the culture concept to understanding cultural diversity in the modern world. Applies the concept of culture to several basic aspects of human social life, for example: social class and gender relations, ethnicity, racism and sexism, education, health and economic behavior. Students explore these issues in the context of case studies of particular groups and/or communities, focusing primarily on the diversity of cultural expression in contemporary U.S. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 3150 - Special Topics in Medical Anthropology

Summer 2010 Registration **ANTH 3150**

Seminar series on current issues in medical anthropology. Faculty offer a range of different courses, including the political economy of drugs, health and human rights, and reproductive health. Prereq: Introductory course in cultural anthropology. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 3200 - Human Migration: Nomads, Sojourners, and Settlers

Summer 2010 Registration **ANTH 3200**

Explores the relationship between human migration, voluntary and forced and social organization and culture in the modern world. Case studies include pastoralists, foragers, refugees, immigrants, sojourners and settlers and their impact on health, culture, identity, ethnicity, tradition and nationality. Cross-listed with HBSC 3200. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 3210 - Urban Food Systems and Sustainability

Summer 2010 Registration **ANTH 3210**

Urbanites are increasingly removed from the complex of factors that provide us food. Being concerned about sustainability, we need to understand the complex webs in food systems and their implications for the health and natural systems. This problem-based course will wrestle with urban food systems organized to address the 3 E's of sustainability: environmental, economic, and equity. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 3301 - World Prehistory

Summer 2010 Registration **ANTH 3301**

Explores of 3.5 million years of human cultural development that examines the prehistory of Africa, Asia, Europe and the Americas. Patterns and processes that underlie the earliest hominid expansion out of Africa, tool use, origins of fire, the peopling of the Americas, the development of metallurgy, the domestication of plants and animals and the rise of cities and the state are examined. Emphasis is on both regional developments and landmark projects that have helped clarify prehistory. Prereq: Introductory course in archaeology. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 3310 - Colorado Archaeology

Summer 2010 Registration **ANTH 3310**

A survey of the prehistoric and protohistoric peoples of the five major culture areas of Colorado: the Four Corners, Great Basin, Rocky Mountains, High Plains, and Front Range. Of special interest will be the study of the initial peopling of Colorado, economic and political organization, ethnic interaction and the history of archaeological work in the region. Prereq: ANTH 1302. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 3330 - Topics in Archaeology

Summer 2010 Registration **ANTH 3330**

A flexible format for addressing specific topics in archaeology. Examples include the archaeology of the Great Plains, the Mediterranean Region, etc. Prereq: An introductory course in archaeology. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 3400 - Visual Anthropology

Summer 2010 Registration **ANTH 3400**

Explores visual anthropology and the production of culture. The focus of the course is the history and current practice of anthropological film and "Doing visual ethnography" to examine a range of experience, knowledge and practice among different societies and ourselves. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 3410 - Anthropology of Work

Summer 2010 Registration **ANTH 3410**

Explores the culture of workforces and workplaces. Ethnographic methods and collaborative research practices comprise the framework of the course to examine people, occupations and work cultures engaged in production and consumption of

commodities at local and global levels. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 3420 - Anthropology and Politics of the Global Tobacco Epidemic

Summer 2010 Registration **ANTH 3420**

Examines anthropological perspectives on tobacco, tobacco-related health policymaking, and cigarette manufacturers and leaf-buying companies in the global tobacco epidemic. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 3500 - Human Osteology

Summer 2010 Registration **ANTH 3500**

Provides in-depth knowledge of human osteology, including the following topics: skeletal anatomy; age, sex and stature determination; skeletal trauma/pathology; and taphonomy. Recitation component provides hands-on experience with skeletal material. Prereq: ANTH 1303. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 3512 - Human Evolution

Summer 2010 Registration **ANTH 3512**

Provides an overview of the fossil and archaeological evidence for human origins. Theory and method in paleoanthropology is emphasized. The goal is to outline current knowledge of human biological evolution and the lifeways of our evolutionary relatives. Prereq: ANTH 1303. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 3700 - Current Topics in Anthropology:

Summer 2010 Registration **ANTH 3700**

This undergraduate course offers a flexible format for addressing specific topics of special interest in anthropology, such as: aging, race and prejudice, class, warfare and aggression, ethnicity, myth and folklore, language and communication, Colorado prehistory and topics in evolutionary theory. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 3910 - Cross-Cultural Field Experience

Summer 2010 Registration **ANTH 3910**

An intensive contact with another culture through supervised travel in the U.S. or in a country other than the United States. Written reports required. Note: Class includes pre-trip orientation lectures; in-country lectures by local resource people and supervising

CU-Denver faculty. **Semester Hours:** 3to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 3939 - Internship/Cooperative Education

Summer 2010 Registration **ANTH 3939**

Experiences involving application of specific, relevant concepts and skills in supervised employment situations. Prereq: Junior standing and 2.75 GPA. **Semester Hours:** 1to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 4000 - Special Topics in Anthropology

Summer 2010 Registration **ANTH 4000**

Designed to give students a chance to evaluate critically some practical or theoretical problem under faculty supervision and to present results of their thinking to fellow students and instructors for critical evaluation. Prereq: Permission of instructor. Cross-listed with ANTH 5000. **Semester Hours:** 1to 4
Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 4010 - Global Health Studies I: The Biocultural Basis of Health

Summer 2010 Registration **ANTH 4010**

This course is concerned with the underlying biological and cultural determinants of health throughout the human life cycle in global and cross-cultural perspective. Note: The first of a two-course sequence in medical anthropology and global health studies; the second is ANTH 4020. Prereq: Upper division and/or graduate standing. Cross-listed with ANTH 5014, HBSC 4010 and 5010. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 4020 - Global Health Studies II: Comparative Health Systems

Summer 2010 Registration **ANTH 4020**

The course has three parts: (1) examines the social and cultural construction of sickness, systems of etiology cross culturally, the therapeutic encounter, varying roles of healer and patient, and the cultural basis of all healing systems; (2) considers health systems in the context of global health reform and the history, organization and roles of institutions of global health governance; and (3) considers the inter-relationship of health, foreign policy and global security. Prereq: Upper division and/or graduate standing. Cross-listed with ANTH 5024, HBSC 4020 and 5020. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 4030 - Ethnobiology

Summer 2010 Registration **ANTH 4030**

Considers the relationship between human society and plants and animals in the natural world. Primary focus on the perception and cognitive organization of the environment and how that affects the definition and use of plants and animals as resources. Prereq: Introductory anthropology and/or biology. Cross-listed with ANTH 5030.

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 4040 - Anthropology of Food and Nutrition

Summer 2010 Registration **ANTH 4040**

Examines the myriad relationships between food as a biological necessity and eating as a socially and culturally conditioned activity. Takes a biocultural perspective that considers not only the tremendous variety of foods we eat, but also the complex meanings and importance attached to food and eating. Prereq: Introductory course in anthropology. Cross-listed with ANTH 5040.

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 4050 - Quantitative Methods in Anthropology

Summer 2010 Registration **ANTH 4050**

Surveys the ways of deriving meaning from anthropological data by numerical means, including, but not confined to basic statistical procedures. Prereq: College-level algebra or its equivalent. Cross-listed with ANTH 5053.

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 4060 - Evolutionary Medicine

Summer 2010 Registration **ANTH 4060**

Applies evolutionary principles to an understanding of human health and illness. The view complements perspectives on health and disease emanating from biological and social sciences, but considers the health or disease process from the perspective of pathogen and host, current and previous environments, and various phases of the life cycle. Prereq: ANTH 1303. Cross-listed with ANTH 5060, HBSC 4060 and 5060.

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 4070 - Culture of Development and Globalization

Summer 2010 Registration **ANTH 4070**

Anthropological critiques of development and globalization point out that they have occurred without regard for the diversity of human culture and human need. Beginning with this analysis, this course goes one step further by examining culture and values of development and how they affect the way development gets done. Prereq: Upper

division standing and permission of instructor. Cross-listed with ANTH 5070. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 4080 - Global Health Practice

Summer 2010 Registration **ANTH 4080**

A travel-study course that provides students the opportunity to work on global health issues in the context of a supervised internship experience. In addition to a formal internship placement or directed research opportunity, students attend formal lectures and participate in seminars devoted to addressing those health issues most relevant to the country in which the course is being taught. Prereq: HBSC/ANTH 4010/5014, HBSC/ANTH 4020/5024, HLTH 6070 or equivalent. Cross-listed with ANTH 5080, HBSC 4080 and 5080. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 4090 - Political Economy of Drugs

Summer 2010 Registration **ANTH 4090**

Psychotropic drugs, both legal and illicit, are a predominant part of our everyday lives. This course examines their use and meaning within cultures, and the social, political and economic issues that surround their production, use and misuse. Prereq: introductory course in cultural anthropology. Cross-listed with ANTH 5090. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 4101 - Applied Statistics Using SAS and SPSS I

Summer 2010 Registration **ANTH 4101**

Teaches the practical statistical tools social scientists use to analyze real-world problems. Split into four modules, each taught by a different instructor. The first module introduces SAS and SPSS; modules 2-4 are problem-based and cover topics such as ANOVA, multivariate regression and cluster analysis. Prereq: Any statistics course. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 4102 - Applied Statistics Using SAS and SPSS II

Summer 2010 Registration **ANTH 4102**

Students use the skills they learned in the previous semester to analyze a social issue of their choosing and present their findings. Note: In addition to lectures, weekly one-on-one meetings between faculty and students are required. Prereq: ANTH 4101. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 4130 - Comparative Religious Systems

Summer 2010 Registration **ANTH 4130**

A cross-cultural analysis of religious belief and behavior. Emphasis is placed on religions found among non-Western cultural groups and includes consideration of how major religions of the world are manifested on local levels. Prereq: ANTH 2102 or equivalent. Cross-listed with ANTH 5130, RLST 4010, 5010. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 4140 - Principles of Economic Anthropology

Summer 2010 Registration **ANTH 4140**

Both formalist and substantivist perspectives are used to examine economic organization in a cross-cultural perspective. Special attention is focused on gift-giving in pre-stratified societies, craft specialization in middle-range societies, specialized economies in non-market-oriented ancient states and economic organization in modern world systems. Prereq: ANTH 2102 or equivalent. Cross-listed with ANTH 5140. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 4150 - Human Biocultural Adaptability

Summer 2010 Registration **ANTH 4150**

The chief concern of this course is the relationship between ourselves and our surroundings and the very immediate ways the environments in which we live affect us. The view is of ourselves as a part of, not apart from, these environments. Prereq: ANTH 1303 and 2102 or equivalent. Cross-listed with ANTH 5150. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 4160 - Topics in Language, Society and Culture

Summer 2010 Registration **ANTH 4160**

A changing set of topics that address the nature of language in society and analysis of "Languaculture." Topics may include: language and power, language and identity, conversational analysis, language and self, language socialization, nonverbal communication, evolution of language, ethnopoetics, language as social action, orality and literacy, linguistic hygiene, language and gender, discourse analysis, deception and truth. Prereq: ANTH 2102 or equivalent. Cross-listed with ANTH 5160. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 4170 - Culture and the Environment

Summer 2010 Registration **ANTH 4170**

Examines the historical origins of Western and non-Western ideas of the environment and the place of people within it. The imposition of Western ideas on non-Western groups regarding environmental policy is also examined, with special attention given to practices of conservation, development and transnational monetary policy. Prereq: ANTH 2102 or equivalent. Cross-listed with ANTH 5170. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 4180 - The Nature of Power

Summer 2010 Registration **ANTH 4180**

Introduces the major theories of power used in contemporary anthropology, with an emphasis on cross-cultural perspectives. Explores how power is defined, determined and exercised globally and locally and how different systems of power articulate with one another. Prereq: ANTH 2102 or equivalent. Cross-listed with ANTH 5180. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 4190 - Ethnicity and Nationalism

Summer 2010 Registration **ANTH 4190**

Anthropological research on ethnicity and nationalism throughout the world, in both simple and complex societies; theoretical and ethnographic research will be mutually reinforcing. Prereq: Senior or graduate standing, a course in anthropology, or permission of instructor. Cross-listed with ANTH 5190. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 4200 - Gender in Cross-Cultural Perspective

Summer 2010 Registration **ANTH 4200**

A comparative analysis of gender-based status and social roles of women and men, with women's status and roles emphasized due to their near-universal construction as the "Other" sex. Examines in cross- and sub-cultural context the relations among women's status and their subsistence and reproductive activities; and the division of labor by sex, ideology and political economy. Prereq: ANTH 2102 or equivalent. Cross-listed with ANTH 5200. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 4210 - Archaeology of the American Southwest

Summer 2010 Registration **ANTH 4210**

Considers the origins, characteristics, and interrelationships of the major culture areas in the American Southwest, including the Anasazi, Hohokam, Mogollon, Sinagua and Northern Mexico. Prereq: Introduction to archaeology. Cross-listed with ANTH

5210.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 4220 - Community in Global Context

Summer 2010 Registration **ANTH 4220**

Presents the community study method from the perspective of anthropology and as a widely applicable research technique in planning, development and other areas of public affairs. Also includes analyses of case studies and student field research. Prereq: Introductory course in cultural anthropology. Cross-listed with ANTH 5220.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 4230 - Anthropology and Community-Based Participatory Research

Summer 2010 Registration **ANTH 4230**

The seminar explores anthropological critiques, knowledge production and multi-media approaches to community-based participatory research (CBPR), such as photovoice and digital storytelling, to understand the history of CBPR and analyze partnerships between university researchers and community representatives. Cross-listed with ANTH 5230.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 4250 - Culture Change in the Modern World

Summer 2010 Registration **ANTH 4250**

Processes and dilemmas of culture change using macro-level theories as well as models of change for communities and individuals. Conceptual and practical problems of modernity relating to globalization, urbanization, environmental degradation and technological change. Prereq: At least one course in cultural anthropology.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 4260 - Human Reproductive Ecology

Summer 2010 Registration **ANTH 4260**

Considers the determinants of fertility variation within and among traditional human societies. Biocultural and ecological perspectives on pubertal timing, marriage patterns, birth seasonality, duration of birth intervals and reproductive senescence. Prereq: ANTH 1303 or equivalent. Cross-listed with ANTH 5260.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 4290 - Anthropology and Public Health

Summer 2010 Registration **ANTH 4290**

This course critically explores anthropological approaches to public health problems. Through a number of key issues and case studies, we examine how public health practice can be enhanced through anthropological research, theory and methodology. Prereq: upper division standing. Cross-listed with ANTH 5290. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 4300 - Migrant Health

Summer 2010 Registration **ANTH 4300**

This course examines health issues associated with transnational migration from an anthropological point of view. Drawing upon case studies, we examine the health of migrant communities in both host and sending nations. Prereq: upper division standing. Cross-listed with ANTH 5300. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 4320 - Archaeology of Mexico and Central America

Summer 2010 Registration **ANTH 4320**

Surveys the major prehistoric and protohistoric cultures and societies of that area of Mexico and Central America identified with the evolution of Meso-American civilization. Major topics include early human colonization of the Americas, the domestication of plants and animals, the emergence of regionally-based cultures and societies, trade and exchange and the evolution of urbanism and the state. Primary emphasis on such ancient cultures and societies as those of the Olmec, Zapotec, Maya, Teotihuacan, Toltec and Aztec. Prereq: Introduction to archaeology. Cross-listed with ANTH 5320. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 4330 - Lithic Analysis

Summer 2010 Registration **ANTH 4330**

Examines the theoretical basis and methodological tools used by archaeologists in the analysis of prehistoric stone tools. Topics of discussion include the mechanics of stone fracture, typologies, use wear analysis and core reduction techniques. Prereq: ANTH 1302. Cross-listed with ANTH 5330. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 4380 - Archaeology of Hunters-Gatherers

Summer 2010 Registration **ANTH 4380**

Explores the theory and methods used by archaeologists to investigate prehistoric hunter gatherers. Topics of concern include mobility, subsistence, procurement, and socio-political organization. Prereq: ANTH 1302 Cross-listed with ANTH 5380. **Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 4390 - Laboratory Methods in Archaeology

Summer 2010 Registration **ANTH 4390**

Methods and theories of archaeology are used to scrutinize the collection and interpretation of data and the relationships of archaeology to other disciplines. Core materials emphasize the critique of basic archaeological assumptions. Note: Course content varies slightly each time it is offered, in response to student needs and the availability of projects (e.g., laboratory work, urban excavation, survey and mapping). May be repeated for credit when topics change. Prereq: ANTH 1302 or equivalent. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 4400 - Archaeology of Power and Inequality

Summer 2010 Registration **ANTH 4400**

Addresses inequality and power through a long-term archaeological and theoretical perspective. Discusses explanations for the origins of power and inequality and their role in early small-scale societies and emerging complex politics. Prereq: ANTH 1302 or equivalent. Cross-listed with ANTH 5400. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 4450 - Development and Conservation: Contemporary Issues

Summer 2010 Registration **ANTH 4450**

Applies the theoretical paradigms of political ecology to contemporary issues of sustainable development. Case studies are chosen illustrating topics based on faculty expertise and student interaction. The first part of the course presents theoretical perspectives relevant to the chosen topic. In the second half, students participate in directed problem solving activities. Prereq: ANTH 4070, ANTH 4170 and graduate standing or permission of instructor. Cross-listed with ANTH 5450. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 4460 - Development and Conservation: Theory and Practice

Summer 2010 Registration **ANTH 4460**

Examines the praxis of anthropological knowledge of human ecosystem interaction and development of economic opportunities. Issues of biodiversity, resource conservation, sustainable development and globalization are studied. Prereq: ANTH 4450 or permission of instructor. Cross-listed with ANTH 5460. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 4500 - Advanced Issues in Human Evolution

Summer 2010 Registration **ANTH 4500**

This flexible course offers an advanced treatment of issues in human biological evolution. Topics may emphasize morphological evolution, behavioral evolution, the environment of human evolution, non-human primate comparative information. Prereq: ANTH 1303 and 3512 or equivalent. Cross-listed with ANTH 5500. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 4520 - Human Biological Variation

Summer 2010 Registration **ANTH 4520**

Human biological variation and adaptation, considered from an evolutionary perspective. How we measure and classify human variation often affects the conclusions we draw. This course considers the causes and maintenance of human variability and adaptability, including cultural and social factors in the genesis and maintenance of normal and abnormal traits. Prereq: Introductory course in biological or physical anthropology. Cross-listed with ANTH 5520. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 4540 - Forensic Anthropology

Summer 2010 Registration **ANTH 4540**

The goals of this course are to provide detailed knowledge of the human skeleton, as well as the methods employed in determination of biological characteristics that can predict an individual's identity. The application of human osteological knowledge to forensic and anthropological problems and research are discussed in the context of a "hands-on" session during each lecture period. Prereq: ANTH 1303 or equivalent. Cross-listed with ANTH 5540. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 4550 - Primate Comparative Anatomy

Summer 2010 Registration **ANTH 4550**

Examines human and non-human primate anatomical diversity. Students learn primate anatomy and the morphological differences among species. Explanations for the evolutionary origins of differences are reviewed, focusing on evolutionary theory, comparative methods and biomechanics. Prereq: ANTH 1303 or equivalent. Cross-listed with ANTH 5550. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 4560 - Human Ecology

Summer 2010 Registration **ANTH 4560**

Studies demographic and ecological variables as they relate to human populations. Aspects of natural selection, overpopulation and environmental deterioration are considered. Prereq: Introductory course in biological or physical anthropology. Cross-listed with ANTH 5560. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 4570 - Landscape Archaeology

Summer 2010 Registration **ANTH 4570**

Introduces spatial archaeology through intrasite analysis and regional studies. Methods treated include site location and quantitative spatial organization. Theoretical topics include definitions of community, ancient urbanism and the impact of subsistence and politics on relations to the landscape. Prereq: ANTH 1302 or equivalent. Cross-listed with ANTH 5570. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 4580 - Neanderthals and the Origin of Modern Humans

Summer 2010 Registration **ANTH 4580**

Focuses on the human fossil record for the tax on Homo sapiens, including the earliest members of this group ("early" or "archaic" Homosapiens), the Neanderthals and so-called "anatomically modern" Homosapiens. The goal of the course is to survey the major issues within the area of modern human origins, and to learn about the evolutionary relationships, lifeways and behaviors of these groups. Prereq: ANTH 1303 or equivalent. Cross-listed with ANTH 5580. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 4590 - Primate Behavior

Summer 2010 Registration **ANTH 4590**

Studies nonhuman primate behavior with emphasis on understanding social behavior, ecology and issues related to human evolution. Prereq: ANTH 1303 or equivalent. Cross-listed with ANTH 5590. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 4600 - Medical Anthropology

Summer 2010 Registration **ANTH 4600**

Introduces students to the theories and concepts of medical anthropology, the study of human health and illness. Explores conceptions of the body, modalities of healing, the clinical encounter, and new medical technologies. Prereq: Upper-division standing. Cross-listed with ANTH 5600. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 4640 - Darwinian Approach to Human Behavior

Summer 2010 Registration **ANTH 4640**

The evolution of human behaviors from a Darwinian perspective, focusing on the natural selection of behaviors that maximize reproductive success. Includes topics such as male and female reproductive strategies, female mate choice, male violence and resource acquisition and control. Prereq: ANTH 1303. Cross-listed with ANTH 5640. **Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 4730 - Peoples and Cultures of Sub-Saharan Africa

Summer 2010 Registration **ANTH 4730**

Covers various types of societies and civilizations that have existed in sub-Saharan Africa. Explores foragers, pastoralists, agricultural societies, chiefdoms, kingdoms, and empires, as these emerged and interacted with each other. Details their ideas and social orders, including the following topics: race, ethnicity, kinship, politics, economics, religion, magic, witchcraft, sorcery, marriage, age, gender, stratification, art, literature and oral traditions. Also addresses the impact of colonialism, the rise of nations, changes in the post-colonial period, warfare, and the impact of globalism on Africa today. Prereq: Upper division standing. Cross-listed with ANTH 5730, ETST

4730.Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 4740 - Ethnography of Mexico and Central America

Summer 2010 Registration **ANTH 4740**

Geographic affiliations, culture, history, traditional ways of life and culture change in Mexico and Central America. Cross-listed with ANTH 5740. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 4800 - Special Topics in Medical Anthropology

Summer 2010 Registration **ANTH 4800**

Seminar series on current issues in medical anthropology. Faculty offer a range of different courses, including the political economy of drugs, health and human rights, and reproductive health. Prereq: upper division standing. Cross-listed with ANTH

5800.Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 4810 - Integrating Anthropology

Summer 2010 Registration **ANTH 4810**

Designed to build on specialized course work in the subdisciplines of anthropology, this

course emphasizes the basic concepts that integrate and unite the discipline and give it unique perspective. These are the concepts of culture, adaptation and human evolution. In the last several weeks of the course, students consider the applicability of the anthropological perspective to specific human issues. Note: Centers on the critical examination and discussion of presentations made by department faculty and graduate students. Prereq: junior or senior standing and course work equivalent to a minor in anthropology. Cross-listed with ANTH 5810. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 4840 - Independent Study

Summer 2010 Registration **ANTH 4840**

Directed study based on a specific subfield of anthropology. Note: Permission of instructor required. **Semester Hours:** 1to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 4910 - Field Experience in Archaeology

Summer 2010 Registration **ANTH 4910**

Students participate in archaeological field research and data recovery and conduct laboratory analysis of materials recovered in the field. Emphasis is placed on excavation technique and accuracy of record keeping. Prereq: Introductory course in archaeology. Cross-listed with ANTH 5910. **Semester Hours:** 3to 6
Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 4995 - Travel Study

Summer 2010 Registration **ANTH 4995**

A flexible format that permits courses to be taught in various areas of the world. Cultures of the Himalayas. Concerned broadly with contemporary Himalayan culture. Focuses on Tibetan cultures and the Tibetan diaspora, and the Nepalese (Newari) culture of the Katmandu Valley. The goals for this course are: to acquaint the student with social, political and cultural features of this part of the world; to teach, through directed field experiences, how cultural anthropology is practiced; to understand how the process of tourism differs from the study of anthropology; how tourism, however it is practiced, changes in fundamental ways those subject to it. The Arts of Self and Society in Contemporary China. An intensive introduction to contemporary conditions and issues in the People's Republic of China, including social relations, popular culture, eating practices, religious practices and everyday life. Uses a combination of readings, lectures, field trips to local sites and ethnographic field projects. Usually situated in Kunming, Yunnan province, in southwest China, but the location may vary. Note: Students enroll additionally in Chinese language classes at levels from beginning to advanced. Prereq: Permission of instructor. Cross-listed with ANTH 5995. **Semester**

Hours: 3to 9

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 5000 - Special Topics in Anthropology

Summer 2010 Registration **ANTH 5000**

Designed to give students a chance to evaluate critically some practical or theoretical problem under faculty supervision and to present results of their thinking to fellow students and instructors for critical evaluation. Prereq: Permission of instructor. Cross-listed with ANTH 4000.**Semester Hours:** 1to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 5014 - Global Health Studies I: The Biocultural Basis of Health

Summer 2010 Registration **ANTH 5014**

This course is concerned with the underlying biological and cultural determinants of health throughout the human life cycle in global and cross-cultural perspective. Note: The first of a two-course sequence in medical anthropology and global health studies; the second is ANTH 5024. Prereq: Upper division and/or graduate standing. Cross-listed with ANTH 4010, HBSC 4010 and HBSC 5010.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 5024 - Global Health Studies II: Comparative Health Systems

Summer 2010 Registration **ANTH 5024**

The course has three parts: (1) examines the social and cultural construction of sickness, systems of etiology cross culturally, the therapeutic encounter, varying roles of healer and patient and the cultural basis of all healing systems; (2) considers health systems in the context of global health reform and the history, organization and roles of institutions of global health governance; and (3) considers the inter-relationship of health, foreign policy and global security. Prereq: Upper division and/or graduate standing. Cross-listed with ANTH 4020, HBSC 4020 and HBSC 5020.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 5030 - Ethnobiology

Summer 2010 Registration **ANTH 5030**

Considers the relationship between human society and plants and animals in the natural world. Primary focus on the perception and cognitive organization of the environment and how that affects the definition and use of plants and animals as resources. Prereq: Introductory anthropology and/or biology and graduate standing. Cross-listed with ANTH 4030.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 5040 - Anthropology of Food and Nutrition

Summer 2010 Registration **ANTH 5040**

Examines the myriad relationships between food as a biological necessity and eating as a socially and culturally conditioned activity. Takes a biocultural perspective that considers not only the tremendous variety of foods we eat, but also the complex meanings and importance attached to food and eating. Prereq: Introductory course in anthropology and graduate standing. Cross-listed with ANTH 4040. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 5053 - Quantitative Methods in Anthropology

Summer 2010 Registration **ANTH 5053**

Surveys the ways of deriving meaning from anthropological data by numerical means, including, but not confined to basic statistical procedure. Prereq: College-level algebra and graduate standing. Cross-listed with ANTH 4050. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 5060 - Evolutionary Medicine

Summer 2010 Registration **ANTH 5060**

Applies evolutionary principles to an understanding of human health and illness. The view complements perspectives on health and disease emanating from biological and social sciences, but considers the health or disease process from the perspective of pathogen and host, current and previous environments, and various phases of the life cycle. Prereq: ANTH 1303. Cross-listed with ANTH 4060, HBSC 4060 and 5060. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 5070 - Culture of Development and Globalization

Summer 2010 Registration **ANTH 5070**

Anthropological critiques of development and globalization point out that they have occurred without regard for the diversity of human culture and human need. Beginning with this analysis, this course goes one step further by examining culture and values of development and how they affect the way development gets done. Prereq: Upper division standing and permission of instructor. Cross-listed with ANTH 4070. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 5080 - Global Health Practice

Summer 2010 Registration **ANTH 5080**

A travel-study course that provides students the opportunity to work on global health issues in the context of a supervised internship experience. In addition to a formal internship placement or directed research opportunity, students attend formal lectures and participate in seminars devoted to addressing those health issues most relevant to the country in which the course is being taught. Prereq: HBSC/ANTH 5014/4010, HBSC/ANTH 5024/4020, HLTH 6070 or equivalent. Cross-listed with ANTH 4080, HBSC 5080 and 4080. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 5090 - Political Economy of Drugs

Summer 2010 Registration **ANTH 5090**

Psychotropic drugs, both legal and illicit, are a predominant part of our everyday lives. This course examines their use and meaning within cultures, and the social, political and economic issues that surround their production, use and misuse. Prereq: introductory course in cultural anthropology. Cross-listed with ANTH 4090. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 5130 - Comparative Religious Systems

Summer 2010 Registration **ANTH 5130**

A cross-cultural analysis of religious belief and behavior. Emphasis is placed on religions found among non-Western cultural groups and includes consideration of how major religions of the world are manifested on local levels. Prereq: Background in cultural anthropology and graduate standing. Cross-listed with ANTH 4130, RLST 4010, 5010. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 5140 - Principles of Economic Anthropology

Summer 2010 Registration **ANTH 5140**

Both formalist and substantivist perspectives are used to examine economic organization in a cross-cultural perspective. Special attention is focused on gift-giving in pre-stratified societies, craft specialization in middle-range societies, specialized economies in non-market-oriented ancient states and economic organization in modern world systems. Prereq: Introductory course in cultural anthropology. Cross-listed with ANTH 4140. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 5150 - Human Biocultural Adaptability

Summer 2010 Registration **ANTH 5150**

The chief concern of this course is the relationship between ourselves and our

surroundings and the very immediate ways the environments in which we live affect US. The view is of ourselves as a part of, not apart from, these environments. Prereq: Background in cultural anthropology and graduate standing. Cross-listed with ANTH 4150.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 5160 - Topics in Language, Society and Culture

Summer 2010 Registration **ANTH 5160**

A changing set of topics that address the nature of language in society and analysis of "Languaculture." Topics may include: language and power, language and identity, conversational analysis, language and self, language socialization, nonverbal communication, evolution of language, ethnopoetics, language associational action, orality and literacy, linguistic hygiene, language and gender, discourse analysis, deception and truth. Prereq: ANTH 3121 or 6133 or equivalent. Cross-listed with ANTH 4160.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 5170 - Culture and the Environment

Summer 2010 Registration **ANTH 5170**

Examines the historical origins of Western and non-Western ideas of the environment and the place of people within it. The imposition of Western ideas on non-Western groups regarding environmental policy is also examined, with special attention given to practices of conservation, development and transnational monetary policy. Prereq: ANTH 2102 or equivalent. Cross-listed with ANTH 4170.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 5180 - The Nature of Power

Summer 2010 Registration **ANTH 5180**

Introduces the major theories of power used in contemporary anthropology, with an emphasis on cross-cultural perspectives. Explores how power is defined, determined and exercised globally and locally and how different systems of power articulate with one another. Prereq: ANTH 2102 or equivalent. Cross-listed with ANTH 4180.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 5190 - Ethnicity and Nationalism

Summer 2010 Registration **ANTH 5190**

Anthropological research on ethnicity and nationalism throughout the world, in both simple and complex societies; theoretical and ethnographic research will be mutually reinforcing. Prereq: Senior or graduate standing, a course in anthropology or permission

of instructor. Cross-listed with ANTH 4190. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 5200 - Gender in Cross-Cultural Perspective

Summer 2010 Registration **ANTH 5200**

A comparative analysis of gender-based status and social roles of women and men, with women's status and roles emphasized due to their near-universal construction as the "other" sex. Examines, in cross- and sub-cultural context, the relations among women's status and their subsistence and reproductive activities; and the division of labor by sex, ideology and political economy. Prereq: Graduate standing. Cross-listed with ANTH 4200. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 5210 - Archaeology of the American Southwest

Summer 2010 Registration **ANTH 5210**

Considers the origins, characteristics and interrelationships of the major culture areas in the American Southwest, including the Anasazi, Hohokam, Mogollon, Sinagua and Northern Mexico. Prereq: Introduction to archaeology and graduate standing. Cross-listed with ANTH 4210. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 5220 - Community in Global Context

Summer 2010 Registration **ANTH 5220**

Presents the community study method from the perspective of anthropology and as a widely applicable research technique in planning, development and other areas of public affairs. Also includes analyses of case studies and student field research. Prereq: Background in cultural anthropology and graduate standing. Cross-listed with ANTH 4220. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 5230 - Anthropology and Community-Based Participatory Research

Summer 2010 Registration **ANTH 5230**

The seminar explores anthropological critiques, knowledge production and multi-media approaches to community-based participatory research (CBPR), such as photovoice and digital storytelling, to understand the history of CBPR and analyze partnerships between university researchers and community representatives. Cross-listed with ANTH 4230. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 5260 - Human Reproductive Ecology

Summer 2010 Registration **ANTH 5260**

Considers the determinants of fertility variation within and among traditional human societies. Biocultural and ecological perspectives on pubertal timing, marriage patterns, birth seasonality, duration of birth intervals and reproductive senescence. Prereq: ANTH 1303 or equivalent. Cross-listed with ANTH 4260. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 5290 - Anthropology and Public Health

Summer 2010 Registration **ANTH 5290**

This course critically explores anthropological approaches to public health problems. Through a number of key issues and case studies, we examine how public health practice can be enhanced through anthropological research, theory and methodology. Prereq: graduate standing. Cross-listed with ANTH 4290. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 5300 - Migrant Health

Summer 2010 Registration **ANTH 5300**

This course examines health issues associated with transnational migration from an anthropological point of view. Drawing upon case studies, we examine the health of migrant communities in both host and sending nations. Prereq: graduate standing. Cross-listed with ANTH 4300. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 5320 - Archaeology of Mexico and Central America

Summer 2010 Registration **ANTH 5320**

Surveys the major prehistoric and protohistoric cultures and societies of that area of Mexico and Central America identified with the evolution of Meso-American civilization. Major topics include early human colonization of the Americas, the domestication of plants and animals, the emergence of regionally-based cultures and societies, trade and exchange and the evolution of urbanism and the state. Primary emphasis on such ancient cultures and societies as those of the Olmec, Zapotec, Maya, Teotihuacan, Toltec and Aztec. Prereq: Introduction to archaeology. Cross-listed with ANTH 4320. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 5330 - Lithic Analysis

Summer 2010 Registration **ANTH 5330**

Examines the theoretical basis and methodological tools used by archaeologists in the

analysis of prehistoric stone tools. Topics of discussion include the mechanics of stone fracture, typologies, use wear analysis and core reduction techniques. Prereq: ANTH 1302. Cross-listed with ANTH 4330. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 5380 - Archaeology of Hunters-Gatherers

Summer 2010 Registration **ANTH 5380**

Explores the theory and methods used by archaeologists to investigate prehistoric hunter gatherers. Topics of concern include mobility, subsistence, procurement, and socio-political organization. Prereq: ANTH 1302 Cross-listed with ANTH 4380. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 5400 - Archaeology of Power and Inequality

Summer 2010 Registration **ANTH 5400**

Addresses inequality and power through a long-term archaeological and theoretical perspective. Discusses explanations for the origins of power and inequality and their role in early small-scale societies and emerging complex politics. Prereq: ANTH 1302 or equivalent. Cross-listed with ANTH 4400. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 5450 - Development and Conservation: Contemporary Issues

Summer 2010 Registration **ANTH 5450**

Applies the theoretical paradigms of political ecology to contemporary issues of sustainable development. Case studies are chosen illustrating topics based on faculty expertise and student interaction. The first part of the course presents theoretical perspectives relevant to the chosen topic. In the second half, students participate in directed problem solving activities. Prereq: ANTH 4070, ANTH 4170 and graduate standing or permission of instructor. Cross-listed with ANTH 4450. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 5460 - Development and Conservation: Theory and Practice

Summer 2010 Registration **ANTH 5460**

Examines the praxis of anthropological knowledge of human ecosystem interaction and development of economic opportunities. Issues of biodiversity, resource conservation, sustainable development and globalization are studied. Prereq: ANTH 5450 or permission of instructor. Cross-listed with ANTH 4460. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 5500 - Advanced Issues in Human Evolution

Summer 2010 Registration **ANTH 5500**

This flexible course offers an advanced treatment of issues in human biological evolution. Topics may emphasize morphological evolution, behavioral evolution, the environment of human evolution, non-human primate comparative information. Cross-listed with ANTH 4500. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 5520 - Human Biological Variation

Summer 2010 Registration **ANTH 5520**

Human biological variation and adaptation, considered from an evolutionary perspective. How we measure and classify human variation often affects the conclusions we draw. This course considers the causes and maintenance of human variability and adaptability, including cultural and social factors in the genesis and maintenance of normal and abnormal traits. Prereq: Background in physical or biological anthropology and graduate standing. Cross-listed with ANTH 4520. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 5530 - Anthropological Genetics

Summer 2010 Registration **ANTH 5530**

An advanced survey of molecular and population genetics and their applications in anthropology. Topics vary, including but not limited to: genetic epidemiology, genetic distance studies, behavioral genetics, developmental genetics, sociobiology, and use of mitochondrial DNA to reconstruct population histories. Emphasis is on applications of new technology and methodology, as well as new genetic paradigms replacing classical models of genetic causation. Prereq: Undergraduate course work in biological anthropology or general genetics. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 5540 - Forensic Anthropology

Summer 2010 Registration **ANTH 5540**

The goals of this course are to provide detailed knowledge of the human skeleton, as well as the methods employed in determination of biological characteristics that can predict an individual's identity. The application of human osteological knowledge to forensic and anthropological problems and research are discussed in the context of a "hands-on" session during each lecture period. Prereq: ANTH 1303 or equivalent. Cross-listed with ANTH 4540. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 5550 - Primate Comparative Anatomy

Summer 2010 Registration **ANTH 5550**

Examines human and non-human primate anatomical diversity. Students learn primate anatomy and the morphological differences among species. Explanations for the evolutionary origins of differences are reviewed, focusing on evolutionary theory, comparative methods and biomechanics. Prereq: ANTH 1303 or equivalent. Cross-listed with ANTH 4550. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 5560 - Human Ecology

Summer 2010 Registration **ANTH 5560**

Studies demographic and ecological variables as they relate to human populations. Aspects of natural selection, overpopulation and environmental deterioration are considered. Prereq: Background in biological or physical anthropology and graduate standing. Cross-listed with ANTH 4560. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 5570 - Landscape Archaeology

Summer 2010 Registration **ANTH 5570**

Introduces spatial archaeology through intrasite analysis and regional studies. Methods treated include site location and quantitative spatial organization. Theoretical topics include definitions of community, ancient urbanism and the impact of subsistence and politics on relations to the landscape. Prereq: ANTH 1302 or equivalent. Cross-listed with ANTH 4570. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 5580 - Neanderthals and the Origin of Modern Humans

Summer 2010 Registration **ANTH 5580**

Focuses on the human fossil record for the tax on Homo sapiens, including the earliest members of this group ("early" or "Archaic" Homo sapiens), the Neanderthals and so-called "Anatomically modern" Homosapiens. The goal of the course is to survey the major issues within the area of modern human origins, and to learn about the evolutionary relationships, lifeways and behaviors of these groups. Prereq: ANTH 1303 or equivalent. Cross-listed with ANTH 4580. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 5590 - Primate Behavior

Summer 2010 Registration **ANTH 5590**

Studies nonhuman primate behavior with emphasis on understanding social behavior,

ecology and issues related to human evolution. Prereq: ANTH 1303 or equivalent.
Cross-listed with ANTH 4590.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 5600 - Medical Anthropology

Summer 2010 Registration **ANTH 5600**

Introduces students to the theories and concepts of medical anthropology, the study of human health and illness. Explores conceptions of the body, modalities of healing, the clinical encounter, and new medical technologies. Prereq: Graduate standing. Cross-listed with ANTH 4600.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 5640 - Darwinian Approach to Human Behavior

Summer 2010 Registration **ANTH 5640**

The evolution of human behaviors from a Darwinian perspective, focusing on the natural selection of behaviors that maximize reproductive success. Includes topics such as male and female reproductive strategies, female mate choice, male violence and resource acquisition and control. Prereq: ANTH 1303. Cross-listed with ANTH 4640.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 5730 - Peoples and Cultures of Sub-Saharan Africa

Summer 2010 Registration **ANTH 5730**

Covers various types of societies and civilizations that have existed in sub-Saharan Africa. Explores foragers, pastoralists, agricultural societies, chiefdoms, kingdoms and empires, as these emerged and interacted with each other. Details their ideas and social orders, including the following topics: race, ethnicity, kinship, politics, economics, religion, magic, witchcraft, sorcery, marriage, age, gender, stratification, art, literature and oral traditions. Also addresses the impact of colonialism, the rise of nations, changes in the post-colonial period, warfare, and the impact of globalism on Africa today. Prereq: Upper division standing. Cross-listed with ANTH 4730, ETST 4730.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 5740 - Ethnography of Mexico and Central America

Summer 2010 Registration **ANTH 5740**

Geographic affiliations, culture, history, traditional ways of life and culture change in Mexico and Central America. Prereq: Graduate standing. Cross-listed with ANTH 4740.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 5800 - Special Topics in Medical Anthropology

Summer 2010 Registration **ANTH 5800**

Seminar series on current issues in medical anthropology. Faculty offer a range of different courses, including the political economy of drugs, health and human rights, and reproductive health. Prereq: graduate standing. Cross-listed with ANTH 4800. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 5810 - Integrating Anthropology

Summer 2010 Registration **ANTH 5810**

Designed to build on specialized course work in the subdisciplines of anthropology, this course emphasizes the basic concepts that integrate and unite the discipline and give it unique perspective. These are the concepts of culture, adaptation and human evolution. In the last several weeks of the course, students consider the applicability of the anthropological perspective to specific human issues. Note: Centers on the critical examination and discussion of presentations made by department faculty and graduate students. Cross-listed with ANTH 4810. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 5840 - Independent Study

Summer 2010 Registration **ANTH 5840**

Directed study based on a specific subfield of anthropology. Prereq: Permission of instructor required. **Semester Hours:** 1to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 5910 - Field Experience in Archaeology

Summer 2010 Registration **ANTH 5910**

Students participate in archaeological field research and data recovery and conduct laboratory analysis of materials recovered in the field. Emphasis is placed on excavation technique and accuracy of record keeping. Prereq: Background in archaeology and graduate standing. Cross-listed with ANTH 4910. **Semester Hours:** 3to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 5939 - Internship/Cooperative Education

Summer 2010 Registration **ANTH 5939**

Semester Hours: 1to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 5995 - Travel Study

Summer 2010 Registration **ANTH 5995**

A flexible format that permits courses to be taught in various areas of the world. Cultures of the Himalayas. Concerned broadly with contemporary Himalayan culture. Focuses on Tibetan cultures and the Tibetan diaspora, and the Nepalese (Newari) culture of the Katmandu Valley. The goals for this course are: to acquaint the student with social, political and cultural features of this part of the world; to teach, through directed field experiences, how cultural anthropology is practiced; to understand how the process of tourism differs from the study of anthropology; how tourism, however it is practiced, changes in fundamental ways those subject to it. The Arts of Self and Society in Contemporary China. An intensive introduction to contemporary conditions and issues in the People's Republic of China, including social relations, popular culture, eating practices, religious practices and everyday life. Uses a combination of readings, lectures, field trips to local sites and ethnographic field projects. Usually situated in Kunming, Yunnan province, in southwest China, but the location may vary. Note: Students enroll additionally in Chinese language classes at levels from beginning to advanced. Prereq: Permission of instructor. Cross-listed with ANTH 4995. **Semester Hours: 3to 9**

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 6000 - Seminar in Current Research Topics

Summer 2010 Registration **ANTH 6000**

An inquiry into current research of critical and general interest to anthropologists. Variable format. Prereq: Permission of instructor. **Semester Hours: 1to 3**
Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 6040 - Advanced Topics in Medical Anthropology

Summer 2010 Registration **ANTH 6040**

A flexible seminar format for dealing with topics of special interest in medical anthropology on an advanced graduate level. Topics to be considered vary from semester to semester. Examples include high altitude adaptation, anthropological perspectives on substance abuse, epidemiology, environmental and occupational health, the health consequences of cultural change and cross-cultural psychiatry. Note: Topics vary from semester to semester. Prereq: Permission of instructor. **Semester Hours: 1to 4**

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 6041 - Human Genetics: Legal, Ethical and Social Issues

Summer 2010 Registration **ANTH 6041**

Examines legal, ethical and social issues that have come about with advances in human

genetics. Topics include privacy, informed consent, discrimination, forensics, medical malpractice and property rights. Prereq: Graduate standing. Cross-listed with HBSC 6320 and 7320. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 6063 - Qualitative Research Design and Methods

Summer 2010 Registration **ANTH 6063**

Much of the data collected in the social sciences is interview and text-based. This course explores methods for collecting and analyzing these data and theoretical paradigms that underlie these methods. Cross-listed with HBSC 7051. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 6103 - Current Theory in Ethnography

Summer 2010 Registration **ANTH 6103**

An in-depth inquiry into important theories in cultural anthropology through extensive primary source reading. Practice in formulating theory, critical thinking and theoretical writing are emphasized. Note: First course in a two-course required graduate sequence.

Prereq: Undergraduate course work in cultural anthropology. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 6133 - Anthropological Perspectives on Language

Summer 2010 Registration **ANTH 6133**

An intensive introduction to linguistic anthropology. Following a brief survey of technical linguistics, focus is on: the roles of language in society; multilingualism; language and identity; language and worldview; language, gender, class and power; language as social action; and other topics. Students carry out investigations based on models from their reading, as well as responding to the theoretical approaches of the field. Prereq:

Undergraduate course work in cultural anthropology. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 6307 - Contemporary Perspectives in Archaeology

Summer 2010 Registration **ANTH 6307**

Explores contemporary theoretical methodological perspectives in archaeology. Structured to proceed from a survey of the history of archaeological thought based on recent retrospectives, to an analysis of works reflecting current perspectives and directions. Topics include: archaeological interpretation, classical versus scientific archaeology, versus culture-history, functionalist and materialist paradigms, ethno-archaeological and text-based studies, neo-evolutionism, interactionist models, Marxist perspectives, processual theory. Prereq: Undergraduate course work in

archaeology.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 6317 - Archaeological Research Design and Analysis

Summer 2010 Registration **ANTH 6317**

Examines the methods and techniques used in archaeology, including theory-building, hypothesis testing and middle range theory. Core materials emphasize the learning and critique of basic archaeological assumptions and the methods and theories used to scrutinize the collection and interpretation of data. Topics include chronometric applications and paleo-environmental reconstruction. Prereq: ANTH 6307 or equivalent.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 6503 - Biological Anthropology Core: The Fossil Record

Summer 2010 Registration **ANTH 6503**

Examines the historical development and modern practice of biological anthropology, including the theoretical and methodological foundations of this field. Emphasis is placed on the evidence for human and non-human primate evolution and the processes that influenced this evolution. Prereq: Graduate standing.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 6513 - Biological Anthropology Core: Modern Human Variation

Summer 2010 Registration **ANTH 6513**

Considers the theory and methods used in investigations of biological variation in contemporary human populations. This includes the biological and cultural sources responsible for creating and maintaining contemporary variation as well as their functional consequences. Methods of research design and how to write a grant and scientific articles are considered. Prereq: Graduate standing.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 6520 - Seminar: Selected Topics in Physical Anthropology

Summer 2010 Registration **ANTH 6520**

A flexible seminar format for dealing with topics of special interest in physical anthropology on an advanced graduate level. Topics vary from semester to semester. Examples include: anthropology of nutrition, paleoecology, primate evolution, field experience in paleontology, advanced osteology and advanced human ecology. Prereq: Undergraduate work in biological/physical anthropology and graduate standing.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 6840 - Independent Study: Anth

Summer 2010 Registration **ANTH 6840**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ANTH 6950 - Master's Thesis

Summer 2010 Registration **ANTH 6950**

Semester Hours: 1to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

ARCH 5000 - Math and Physics for Architects

Summer 2010 Registration **ARCH 5000**

Provides the review of mathematics and physics. This is a prerequisite for the graduate technology courses. Does not count toward the required credits for the March degree. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ARCH 5110 - Design Studio I

Summer 2010 Registration **ARCH 5110**

This first of four core design studios introduces the basic strategies and techniques of architectural design. Focuses on the languages of design, as well as on traditional and digital methods of visualizing architectural ideas and forms. Prereq: Must have completed the College's woodshop training program. Coreq: ARCH 5111. **Semester Hours:** 6to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

ARCH 5111 - Introduction to Drawing

Summer 2010 Registration **ARCH 5111**

This course explores the development of graphic skills emphasizing drawing as a means to design. It includes investigation of drawing types and methods; diagramming of ideas and systems; informative, exploratory and developmental sketching. Coreq: ARCH 5110. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ARCH 5120 - Design Studio II

Summer 2010 Registration **ARCH 5120**

The second of the four core design studios focuses on concepts of small-scale building design, siting and climate. Through a number of design exercises, students learn how

these factors help shape buildings. Prereq: ARCH 5110 and ARCH 5111. Coreq: ARCH 5121. **Semester Hours:** 4to 4
Registration is changing. Visit our website for details ucdenver.edu/registration.

ARCH 5121 - Design Seminar II

Summer 2010 Registration **ARCH 5121**

Supports fuller discussion of the key themes and concepts in ARCH 5120. Prereq: ARCH 5110 and 5111; Coreq: ARCH 5120. **Semester Hours:** 2to 2
Registration is changing. Visit our website for details ucdenver.edu/registration.

ARCH 5130 - Design Studio III

Summer 2010 Registration **ARCH 5130**

The third of the four core studios focuses on concepts of program, architectural meaning and human behavior in buildings. Through a number of design exercises, students learn how these factors help shape buildings. Prereq: ARCH 5120 and ARCH 5121. Coreq: ARCH 5131. **Semester Hours:** 4to 4
Registration is changing. Visit our website for details ucdenver.edu/registration.

ARCH 5131 - Design Seminar III

Summer 2010 Registration **ARCH 5131**

Supports fuller discussion of the key themes and concepts in ARCH 5130. Prereq: ARCH 5120 and ARCH 5121. Coreq: ARCH 5130. **Semester Hours:** 2to 2
Registration is changing. Visit our website for details ucdenver.edu/registration.

ARCH 5140 - Design Studio IV

Summer 2010 Registration **ARCH 5140**

The last of the four core design studios focuses on concepts of building technology, context and environmental sustainability. Through a number of design exercises, students learn how technology helps shape buildings. Prereq: ARCH 5130 and 5131. Coreq: ARCH 5141. **Semester Hours:** 4to 4
Registration is changing. Visit our website for details ucdenver.edu/registration.

ARCH 5141 - Design Seminar IV

Summer 2010 Registration **ARCH 5141**

Supports fuller discussion of the key themes and concepts in ARCH 5140. Prereq: ARCH 5130 and 5131; Coreq: ARCH 5140. **Semester Hours:** 2to 2
Registration is changing. Visit our website for details ucdenver.edu/registration.

ARCH 5210 - Introduction to Architecture

Summer 2010 Registration **ARCH 5210**

Introduces important ways of looking at architecture and acquaints students with the various perspectives that they will later find in the rest of the curriculum. **Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ARCH 5220 - History of Architecture I

Summer 2010 Registration **ARCH 5220**

Introduces world architecture and urbanism from prehistory to the Italian Renaissance. The course helps students understand the various cultural, technological, philosophical, and aesthetic ideas that helped shape buildings through history. Buildings and settlements on all continents and in all of the major world cultures are discussed. Prereq: ARCH 5210. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ARCH 5230 - History of Architecture II

Summer 2010 Registration **ARCH 5230**

Examines world architecture and urbanism from the Italian Renaissance to the present. Helps students understand the various cultural, technological, philosophical and aesthetic ideas that helped shape buildings through history. Buildings and settlements on all continents and in all of the major world cultures are discussed. Prereq: ARCH 5220. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ARCH 5240 - Human Factors in Design

Summer 2010 Registration **ARCH 5240**

Focuses on the ethical, social, cultural and psychological principles, processes which people bring to the perception and design of the built environment. Its major topics include: ethical values; cultural patterns and values; privacy and community; social, cultural and personal ritual; the symbolic content of form and environment; and programming and post-occupancy evaluation. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ARCH 5310 - Introduction to Building Technology

Summer 2010 Registration **ARCH 5310**

Provides an overview of the structure, systems, assemblies and processes that make a building. Provides a broad view of building technology and an understanding of the interrelationship of all the parts, upon which subsequent technology courses are

based.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ARCH 5320 - Building Construction and Methods

Summer 2010 Registration **ARCH 5320**

Discusses the principles and processes of building construction and introduces the major constructional systems. Stresses the relationship between architectural concepts and building technology and helps students understand how to choose building systems and materials. Prereq: ARCH 5310.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ARCH 5330 - Environmental Control Systems I

Summer 2010 Registration **ARCH 5330**

The first course in the environmental control systems sequence introducing the concepts and methods of environmental control in residential buildings. Discusses the thermal behavior of buildings, climate as a determinant of building design, energy use in buildings, natural and mechanical means of environmental control, plumbing, electrical, communication systems, water supply and sanitation systems. Prereq: ARCH 5320.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ARCH 5340 - Environmental Control Systems II

Summer 2010 Registration **ARCH 5340**

The second course in the environmental control systems sequence focusing on the environmental systems in commercial and other non-residential buildings. Discusses natural and artificial lighting, HVAC systems, acoustics, vertical transportation and fire protection. Prereq: ARCH 5330.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ARCH 5350 - Structures I

Summer 2010 Registration **ARCH 5350**

The first course in the structures sequence introduces the analysis and design of structural elements and focuses on the principles of static's and the strength of materials. Topics include stress determination, deflection and the behaviors of tension, compression and shear in various structural elements. Coreq: ARCH 5340.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ARCH 5360 - Structures II

Summer 2010 Registration **ARCH 5360**

Focuses on the relationship between architectural concepts and the selection of structural systems. Addresses the qualitative and quantitative analysis of reinforced concrete, steel and wood structural systems and members. Prereq: ARCH

5350. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ARCH 5410 - Professional Practice

Summer 2010 Registration **ARCH 5410**

Introduces the essential elements of professional practice through topics such as internship, licensing, services, modes of practice, fees, marketing, documents, specification and production procedures. Examines traditional and emerging forms of practice. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ARCH 6150 - Comprehensive Design Studio

Summer 2010 Registration **ARCH 6150**

A required studio focusing on an architectural project from schematic design through detailed development including structural, environmental systems, life safety, wall sections and building assemblies. A comprehensive program will inform the architectural project. Prereq: ARCH 5140 and ARCH 5141. Coreq: ARCH 6151. **Semester Hours:** 4to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

ARCH 6151 - Comprehensive Design Seminar

Summer 2010 Registration **ARCH 6151**

Supports fuller discussion of the key themes and concepts in ARCH 6150. Prereq: ARCH 5140 and ARCH 5141. Coreq: ARCH 6150. **Semester Hours:** 2to 2

Registration is changing. Visit our website for details ucdenver.edu/registration.

ARCH 6160 - Architectural Photography

Summer 2010 Registration **ARCH 6160**

Introduces the key concepts and techniques of photography in general and architectural photography in particular. Students learn basic principles of exposure, focal length, composition and darkroom procedures and then undertake a number of photographic exercises. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ARCH 6161 - Precedents in Architecture

Summer 2010 Registration **ARCH 6161**

Explores a number of traditional answers to recurring design issues, such as how to approach and enter a building or how to design a facade. In a seminar setting, students examine traditional ideas for their underlying principles and design new architectural compositions based on those principles. Prereq: Completion of ARCH 5110. **Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

ARCH 6162 - Furniture Design

Summer 2010 Registration **ARCH 6162**

Students learn how to design and build furniture in the College's woodshop. Topics include ergonometics, properties of materials, principles and techniques of joinery and techniques of hand and machine tools. Prereq: must have completed the college's woodshop training program. **Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

ARCH 6170 - Advanced Design Studio

Summer 2010 Registration **ARCH 6170**

Students enter the advanced design studio after successfully completing the four core design studios and comprehensive studio (ARCH 6150). Students must take two advanced studios (unless they wish to undertake a thesis; see ARCH 6950). Topics vary according to faculty interests. Prereq: ARCH 6150 and ARCH 6151. Coreq: ARCH 6171. **Semester Hours: 4to 4**

Registration is changing. Visit our website for details ucdenver.edu/registration.

ARCH 6171 - Advanced Design Seminar

Summer 2010 Registration **ARCH 6171**

Supports fuller discussion of key themes and concepts in ARCH 6170. Students must take two advanced design seminars (unless they wish to undertake a thesis; see ARCH 6950). Prereq: ARCH 6150, ARCH 6151. Coreq: ARCH 6170. **Semester Hours: 2to 2**

Registration is changing. Visit our website for details ucdenver.edu/registration.

ARCH 6190 - Special Topics in Design Studies

Summer 2010 Registration **ARCH 6190**

Various topics in design, according to current faculty and student interests. Prereq: Completion of ARCH 5110. **Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

ARCH 6210 - History of American Architecture

Summer 2010 Registration **ARCH 6210**

Examines the history of American architecture from prehistoric times to the present, mainly within the geographical borders of the present-day United States. Helps students understand the various cultural, technological, philosophical and aesthetic ideas that helped shape American buildings. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ARCH 6212 - History of Modern Architecture

Summer 2010 Registration **ARCH 6212**

Examines the various theories, accomplishments and ideals of modern architecture in the 20th century. Issues include the relationship between theory and practice, architecture and ideology, technology, abstraction and representation, functionalism and formalism, utopianism and social responsibility. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ARCH 6220 - History of Architectural Theory

Summer 2010 Registration **ARCH 6220**

Investigates the history of architectural theories in the West from antiquity to the present. Explores the various ideas that have been proposed to explain or to direct architectural design and examines the relationship between the theories and the buildings themselves. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ARCH 6221 - Post-Structuralist Architecture

Summer 2010 Registration **ARCH 6221**

Examines the ways in which architecture has responded to the philosophical changes introduced during the 1960's French post-structuralism. Evaluates how the new metaphysical outlooks have affected architectural theory and design methods. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ARCH 6290 - Special Topics in Cultural Studies

Summer 2010 Registration **ARCH 6290**

Various topics in cultural studies, according to current faculty and student interests.

Prereq: ARCH 5210, ARCH 5220 and ARCH 5230. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ARCH 6370 - Introduction To Design Build

Summer 2010 Registration **ARCH 6370**

Introduction to Design Build project delivery methods important to architects. Lecture, research on the industry and an individual student project are the methods used to introduce ethical questions, role of the architect, owner, consultant and subcontractors.

Work leads to studio project or case study. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ARCH 6371 - Maintaining Quality and Managing Risks: Design Build

Summer 2010 Registration **ARCH 6371**

A lecture and seminar on approaches to risk management including contracts, insurance, financial analysis, dispute resolution and client relationships. Utilizing case study approach, quality assurance will be defined and studied in the design and building phase of workings. Prereq: ARCH 6370. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ARCH 6372 - Architecture in a Single Source Project Delivery

Summer 2010 Registration **ARCH 6372**

Directed to the practice of architecture with design build and other single source delivery systems. This course examines requirements of codes, zoning, building systems and legal questions for the architect. Prereq: ARCH 6370. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ARCH 6373 - Construction in Design Build

Summer 2010 Registration **ARCH 6373**

Using a single project, students fully explore the design phase, estimating, scheduling and project management skills in traditional construction. Course is concurrent with an advanced studio and builds a project on a site. Prereq: ARCH 6370. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ARCH 6390 - Special Topics in Technology

Summer 2010 Registration **ARCH 6390**

Various topics in technology, according to current faculty and student interests. Prereq: ARCH 5310 and ARCH 5320. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ARCH 6412 - Construction Documents

Summer 2010 Registration **ARCH 6412**

Introduces the concepts and techniques of construction documents. **Semester Hours:**

3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ARCH 6490 - Special Topics in Professional Studies

Summer 2010 Registration **ARCH 6490**

Various topics in professional studies according to current faculty and student interests.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ARCH 6520 - Architecture in Other Cultures

Summer 2010 Registration **ARCH 6520**

Various studies of architecture and urbanism in foreign countries.**Semester Hours:** 1to 9

Registration is changing. Visit our website for details ucdenver.edu/registration.

ARCH 6624 - The Built Environment in Other Cultures I: Research Design

Summer 2010 Registration **ARCH 6624**

The intent is to broaden students' perspectives by asking them to examine design within another culture. Each student prepares a proposal of study including a statement of the problem to be addressed, the type of field research to be undertaken and the nature of the report to be produced. Cross-listed with LDAR 6624.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ARCH 6840 - Independent Study

Summer 2010 Registration **ARCH 6840**

Studies initiated by students or faculty and sponsored by a faculty member to investigate a special topic or problem related to architecture. Prereq: Permission of instructor.**Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ARCH 6910 - Teaching Assistantship

Summer 2010 Registration **ARCH 6910**

Work with a faculty member in a course to help with class preparation and delivery. This is intended for students who may be considering a career in teaching architecture.

Prereq: Permission of instructor.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ARCH 6930 - Architecture Internship

Summer 2010 Registration **ARCH 6930**

Designed to provide professional practice experience. The internship is composed of eight hours per week working in a practicing professional's office during the regular semester. Students must complete the second-year level before taking this course.

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ARCH 6931 - Architecture Internship

Summer 2010 Registration **ARCH 6931**

Designed to provide professional practice experience. The internship is composed of eight hours per week working in a practicing professional's office during the regular semester. Students must complete the second-year level before taking this course.

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ARCH 6950 - Thesis Preparation

Summer 2010 Registration **ARCH 6950**

In place of the final advanced design studio, students may choose to develop a specialized thesis in some topic related to architecture. The thesis will normally take three semesters, starting with the three-credit hour ARCH 6490, Thesis Research Tools in the spring semester, this course in the fall semester and finishing with a six-credit thesis class in the third semester. A thesis may culminate in a design or in a written report. A thesis is expected to advance the field in some way by offering new insights into aspects of design, technology, history or professional principles. Prereq: ARCH 6490 and completion of at least one advanced design studio (ARCH 6170 or ARCH 6171).

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ARCH 6951 - Architecture Thesis

Summer 2010 Registration **ARCH 6951**

Development of a master's thesis (see ARCH 6950 above). Prereq: completion of two advanced design studios ARCH 6150 and ARCH 6950.

Semester Hours: 6to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

ARCH 7840 - Independent Study

Summer 2010 Registration **ARCH 7840**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ARTS 1000 - Arts In Our Time

Summer 2010 Registration **ARTS 1000**

Multidisciplinary course designed to introduce students to the ways in which arts work and how the arts shape our perception of the world around us. Each student selects three four-week modules designed to examine each of the disciplines of fine arts, music and theatre, in the context of the creative process, audience perception and historical perspective. Every five weeks, students from each of the modules join forces in a week of "Inter-arts" sessions -- lectures and discussions about the relationship of the arts to each other and to our contemporary culture. Topics which are addressed in the modules include such things as American musical theatre, perception of jazz, public sculpture, light as art, sonic explorations, photography, history of production design, women in American music and censorship. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ARTS 1111 - Freshman Seminar

Summer 2010 Registration **ARTS 1111**

The course explores the nature of creative inspiration, its potential and implementation. Through individual and collaborative projects, students investigate the interdisciplinary composition and development of the literary, visual and performing arts and their aesthetic, social and political impact. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ARTS 1150 - Topics in Cross-Disciplinary Arts I

Summer 2010 Registration **ARTS 1150**

Designed to explore the ways in which the arts are a part of daily life. Research and observation of the variety of ways in which the arts are utilized. Prepares students to participate in special projects. Specific topics and projects change each semester. **Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ARTS 2150 - Topics in Cross-Disciplinary Arts II

Summer 2010 Registration **ARTS 2150**

Provides opportunities for students to apply artists' methods and media in a non-presentation setting. Experiential research is centered around a specific topic each semester, but enable students to discover a broader understanding of the arts. **Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ARTS 3150 - Topics in Cross-Disciplinary Arts III

Summer 2010 Registration **ARTS 3150**

Focuses on the ways in which the arts are engaged in communities as expressions of identity as well as agents of change. Historical research and applied projects provide a foundation for participation in designated team projects. **Semester Hours:** 1to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ARTS 4150 - Topics in Cross-Disciplinary Arts IV

Summer 2010 Registration **ARTS 4150**

Investigates the historical and critical perspectives of the arts in a variety of contexts. Specific topics provide a focus for students to discover the ways in which the arts inform each other and are shaped by the events of the world. **Semester Hours:** 1to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ARTS 5000 - Topics

Summer 2010 Registration **ARTS 5000**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ARTS 5150 - Topics In Cross-Disciplinary Arts

Summer 2010 Registration **ARTS 5150**

Investigates the historical and critical perspectives of the arts in a variety of contexts. Specific topics provide a focus for students to discover the ways in which the arts inform each other and are shaped by the events of the world. **Semester Hours:** 1to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 1111 - Freshman Seminar

Summer 2010 Registration **BIOL 1111**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 1136 - Human Biology

Summer 2010 Registration **BIOL 1136**

Topics include: basic human body chemistry, healthy internal body balance, new disease treatments, human inheritance and human beings as part of Earth's living systems. Note: For students who are not majoring in biology. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 1550 - Basic Biology: Ecology and the Diversity of Life

Summer 2010 Registration **BIOL 1550**

Introduces important biological concepts, including: the process of science, biological diversity, evolution, basic ecological principles and environmental issues. Lectures emphasize current issues. Note: For students who are not majoring in biology. Biology and health career majors should not take this course. **Semester Hours:** 4to 4**GT**

Pathways Category Key: GT-SC1

Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 1560 - Basic Biology: From Cells to Organisms

Summer 2010 Registration **BIOL 1560**

Introduces students to cell structure and function, survey of representative human systems, genetics and applications of biotechnology. Immune systems featured with an emphasis on Aids, cancer and other human diseases prevalent in today's world. Note: For students who are not majoring in biology. Biology and health career majors should not take this course. **Semester Hours:** 4to 4**GT** **Pathways Category Key:** GT-SC1

Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 2051 - General Biology I

Summer 2010 Registration **BIOL 2051**

Introduces four major areas of study: (1) the chemistry of biological systems; (2) the structure and function of the cell; (3) cellular energy transformations (photosynthesis and respiration); and (4) genetics (mitosis, meiosis, patterns of inheritance, molecular genetics). Note: Biology and health science (pre-med, pre-vet, pre-physical therapy, etc.) majors must also take the accompanying laboratory - BIOL 2071. Prereq: CHEM 1000 or high school chemistry required. **Semester Hours:** 3to 3**GT** **Pathways Category Key:** GT-SC1

Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 2061 - General Biology II

Summer 2010 Registration **BIOL 2061**

This course is a continuation of BIOL 2051. Introduces four major areas of study: (1) evolution, (2) animal structure and function, (3) plant structure and function and (4) ecology. Note: Biology and health science (pre-med, pre-vet, nursing, etc.) majors must also take the accompanying laboratory - BIOL 2081. Prereq: BIOL 2051 or equivalent with a grade of "C" (2.0) or higher. **Semester Hours:** 3to 3**GT** **Pathways Category Key:** GT-SC1

Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 2071 - General Biology Laboratory I

Summer 2010 Registration **BIOL 2071**

Introduces the basic scientific approach and report preparation through exercises and experiments in cell biology, basic biochemical techniques, genetics, molecular genetics and applications of biotechnology. Note: Exercises corresponding to topics in BIOL 2051. Coreq: BIOL 2051. **Semester Hours:** 1to 1 **GT Pathways Category Key:** GT-SC1
Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 2081 - General Biology Laboratory II

Summer 2010 Registration **BIOL 2081**

Study of evolution, plant and animal anatomy, developmental biology; includes two off-campus ecology field trips. Note: Exercises corresponding to topics in BIOL 2061. Prereq: BIOL 2071 or equivalent with a grade of "C" (2.0) or higher; Coreq: BIOL 2061. **Semester Hours:** 1to 1 **GT Pathways Category Key:** GT-SC1
Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 2750 - Introduction to Molecular Research Techniques

Summer 2010 Registration **BIOL 2750**

Designed to give background knowledge and hands-on experience for a person wanting to work in a molecular-research laboratory. Introduction to basic molecular techniques including micropipetting, making media, DNA and RNA isolation, restriction digest, RT-PCR, and gel electrophoresis. **Semester Hours:** 2to 2
Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 2840 - Independent Study

Summer 2010 Registration **BIOL 2840**

Note: registration by special processing form only. Prereq: One semester of general biology with a grade of "C" (2.0) or higher and permission of instructor. **Semester Hours:** 1to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 2939 - Internship/Cooperative Education

Summer 2010 Registration **BIOL 2939**

Experiences involving application of specific, relevant concepts and skills in supervised employment situations. Prereq: 15 hours of 2.75 GPA. **Semester Hours:** 1to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 3104 - Behavioral Genetics

Summer 2010 Registration **BIOL 3104**

Interdisciplinary course on relationships between behavior and heredity, with emphasis

on human behavioral genetics. Prereq: General biology or general psychology. Cross-listed with PSYC 3104. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 3124 - Introduction to Molecular Biology

Summer 2010 Registration **BIOL 3124**

Provides an understanding of the structure and function of genetic material, DNA replication and recombination, and regulation of gene expression and protein synthesis. Emphasizes eukaryotic systems, while providing an overview of prokaryotic systems. Prereq: One year of general biology with a grade of "C" or higher and one year of general chemistry. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 3134 - Advanced Topics

Summer 2010 Registration **BIOL 3134**

Periodic examination of current topics in the field of biology. (See Schedule Planner for current topics). **Semester Hours:** 1to 8
Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 3225 - Human Physiology

Summer 2010 Registration **BIOL 3225**

The basic orientation of the course is toward understanding the functioning of the body as a set of homeostatic mechanisms. Particular emphasis is placed on membrane potentials, muscle, circulation, respiration, digestion, the kidney, the control of metabolism and acid-based balance. Prereq: One year of general biology, general cell biology and one year of chemistry with grades of 'C' (2.0) or higher. **Semester Hours:** 4to 4
Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 3244 - Human Anatomy

Summer 2010 Registration **BIOL 3244**

Introduces the structural aspects of the human body. Anatomical models, microscope slides and dissections, including human cadavers are used in the lab. Prereq: one year of general biology with a grade of "C" (2.0) or higher. **Semester Hours:** 4to 4
Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 3330 - Plant Diversity

Summer 2010 Registration **BIOL 3330**

Surveys all major plant groups using evolutionary and ecological principles to interpret

patterns of diversity in form and function. Topics include reproduction and life cycles, adaptations and ecological interactions, paleobotany and biogeography, classification and taxonomy and evolution. Prereq: One year of general biology with a grade of "C" (2.0) or higher. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 3411 - Principles of Ecology

Summer 2010 Registration **BIOL 3411**

A lecture course that examines the interrelationships between organisms and their environments. Subject matter includes organism, population and ecosystem levels of study and application to current environmental issues. The emphasis is on the underlying principles of ecology that involve all types of organisms. Note: Satisfies core ecology requirement for biology major. May not be used as upper division biology elective. No co-credit with BIOL 3412. Prereq: One year of general biology with a grade of "C" (2.0) or higher. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 3412 - Fundamentals of Applied Ecology

Summer 2010 Registration **BIOL 3412**

Ecology is the science of interrelationships between organisms, including humans and their environment. This lecture course examines applications of ecological principles to human needs and environmental protection. Covers the ecology of humans and managed systems. Note: Satisfies core ecology requirement for biology major. May not be used as upper division biology elective. No co-credit with BIOL 3411. Prereq: One year of general biology with a grade of "C" (2.0) or higher. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 3413 - Ecology Laboratory

Summer 2010 Registration **BIOL 3413**

Provides hands-on experiences in ecology and appreciation for using research tools to study ecological systems. Students will learn a wide range of techniques and concepts related to population, community, ecosystem, urban, and physiological ecology. Prereq: Introductory Ecology with a grade of "C" (2.0) or higher; concurrent registration in ecology accepted. **Semester Hours:** 2to 2

Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 3520 - Invertebrate Zoology

Summer 2010 Registration **BIOL 3520**

Most species on earth are invertebrate animals that, by definition, lack backbones. This course examines the biology, taxonomy, anatomy, ecology and evolution of these

important creatures, which occupy a diversity of terrestrial, freshwater and marine habitats. Prereq: One year of general biology with a grade of "C" (2.0) or higher. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 3521 - Vertebrate Biology

Summer 2010 Registration **BIOL 3521**

The subphylum vertebrata consists of fish, amphibians, reptiles, birds and mammals-- some of the most fascinating and most threatened species on earth. This course covers the geological record, evolution, taxonomy, anatomy, physiology, ecology and conservation of these organisms. Prereq: One year of general biology with a grade of "C" (2.0) or higher. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 3611 - General Cell Biology

Summer 2010 Registration **BIOL 3611**

Covers the structure and function of the cell including bioenergetics, membranes, secretion, respiration and the cell cycle. Prereq: One year of general biology with a grade of "C" (2.0) or higher and one year of general chemistry. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 3612 - Cell Biology Laboratory

Summer 2010 Registration **BIOL 3612**

Laboratory course covering topics in cell and molecular biology, such as protein folding, membrane potential, organelle function, cell signaling and fertilization; as well as associated methods, including microscopy, cell culture and PCR. Basic skills are emphasized in recitation and laboratory. Prereq: General cell biology with a grade of "C" (2.0) or higher or permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 3621 - Introduction to Immunology

Summer 2010 Registration **BIOL 3621**

Provides an introduction to the basic concepts of immunology, including development of the immune system, innate immunity, aspects of the adaptive immune system, and the role of the immune system in disease, as well as allergies and autoimmunity. Prereq: One year of general biology with a grade of "C" or higher. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 3654 - General Microbiology

Summer 2010 Registration **BIOL 3654**

Covers all aspects of the biology of microorganisms: their cellular structures and function, growth and metabolism, general and molecular genetics, diversity and interactions with other organisms and the environment (ecology). The objective is to provide students with a thorough introduction to microbiology including basic microbiological laboratory techniques. Note: General cell biology or general genetics is recommended. Prereq: One year of general biology and one year of general chemistry with grades of "C" (2.0) or higher. **Semester Hours:** 4 to 4
Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 3832 - General Genetics

Summer 2010 Registration **BIOL 3832**

Introduces molecular, classical, developmental and population genetics. Prereq: One year of general biology with a grade of "C" (2.0) or higher. **Semester Hours:** 4 to 4
Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 3840 - Independent Study

Summer 2010 Registration **BIOL 3840**

Note: Registration by special processing form only. Prereq: One year of general biology with a grade of "C" (2.0) or higher and permission of instructor; registration by special processing form only. **Semester Hours:** 1 to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 3939 - Internship/Cooperative Education

Summer 2010 Registration **BIOL 3939**

Designed experience involving application of specific, relevant concepts and skills in supervised employment situations. Prereq: Junior standing and 2.75 GPA. **Semester Hours:** 1 to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 4024 - Introduction to Biotechnology

Summer 2010 Registration **BIOL 4024**

Introduces aspects of biotechnology within a historical context, including medical, forensic, agricultural and microbial biotechnology. Addresses principles behind state-of-the-field techniques in recombinant DNA technology, bioinformatics, proteomics and genomics. Biotechnology regulations and ethics will also be discussed. Prereq: BIOL 4024: one year of general biology with a grade of "C" (2.0) or higher. BIOL 5024: graduate standing or permission of instructor. Cross-listed with BIOL 5024. **Semester Hours:** 3 to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 4050 - Advanced Biology Topics

Summer 2010 Registration **BIOL 4050**

Examines current topics in the field of biology. Topics vary from term to term. See Schedule Planner for current topics. Prereq: One year of general biology with grades of "C" (2.0) or higher. Cross-listed with BIOL 5050. **Semester Hours:** 1to 8
Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 4051 - Advanced Topics In Microbiology

Summer 2010 Registration **BIOL 4051**

An in-depth study of microbial concepts, including prokaryotic and eukaryotic structure and function; properties of biological macromolecules; microbial growth kinetics; and microbial diversity. Emphasis is on one of the following: virology, microbial physiology, environmental microbiology, microbial biotechnology and nucleic acids. Prereq: General microbiology with a grade of "C" (2.0) or higher. Cross-listed with BIOL 5051. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 4052 - Advanced Ecology

Summer 2010 Registration **BIOL 4052**

This combination seminar and lecture course focuses on state-of-field knowledge, current theories and recent models in selected areas of ecology, such as theoretical ecology, evolutionary ecology, population biology and ecosystems ecology. Prereq: Introductory ecology with a grade of "C"(2.0) or higher (BIOL 3411 or BIOL 3412 or equivalent). Cross-listed with BIOL 5052. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 4053 - Disease Ecology

Summer 2010 Registration **BIOL 4053**

The study of the underlying principles that influence the spatio-temporal patterns of infectious disease in environments. Students will apply ecological theories about concepts such as biodiversity, trophic interactions, landscape structure, and nutrient cycling to the study of disease. Prereq: Introductory Ecology with a grade of "C" (2.0) or higher. Cross-listed with BIOL 5053. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 4054 - Developmental Biology

Summer 2010 Registration **BIOL 4054**

Covers gametogenesis, fertilization, cleavage and development of the embryo with an emphasis on the biochemical and biophysical aspects. Prereq: General cell biology with

a grade of "C" (2.0) or higher. Cross-listed with BIOL 5054. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 4064 - Advanced Cell Biology

Summer 2010 Registration **BIOL 4064**

Builds on the foundations laid in the prerequisite courses. Major topics include the functions of cell membranes, energy transduction and regulation of metabolic pathways. A major emphasis is the control and integration of cellular activities. Prereq: General cell biology and one semester of biochemistry with grades of "C" or higher. Cross-listed with BIOL 5064. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 4074 - Human Reproductive Biology

Summer 2010 Registration **BIOL 4074**

Comprehensive study of anatomy and physiology of human reproduction. Embryogenesis of male and female reproductive systems and detailed analysis of contraception, world population growth, population control and implications of population growth are also covered. Prereq: One year of general biology with a grade of "C" (2.0) or higher. Cross-listed with BIOL 5074. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 4125 - Molecular Biology Laboratory

Summer 2010 Registration **BIOL 4125**

Provides hands-on experiences in molecular biology and an appreciation for using the tools of molecular biology to study biological systems. Emphasis is placed on DNA cloning, PCR, mutagenesis and protein purification techniques. Experimental design and the theories underlying the techniques are also discussed. Prereq: General microbiology with a grade of "C" or higher and molecular biology, either introductory or advanced, with a grade of "C" (2.0) or higher; concurrent registration in molecular biology accepted.

Cross-listed with BIOL 5125. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 4126 - Molecular Genetics

Summer 2010 Registration **BIOL 4126**

Examines molecular techniques and their application to experimental genetics, specifically organization and mapping of genomes, application and model systems in defining hereditary components of disease, and mechanisms of identifying mutations and their implications for disease. Also addresses application of recombinant DNA technology. Prereq: General genetics and one year of organic chemistry (or equivalent) with grades of "C" (2.0) or higher; biochemistry strongly recommended. Cross-listed with

BIOL 5126.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 4128 - Topics in Molecular Biology

Summer 2010 Registration **BIOL 4128**

Literature-based course examining the regulation of gene expression in eukaryotic systems, as well as contemporary recombinant DNA technology and applications of molecular cloning techniques. Prereq: General cell biology and general genetics with a grade of "C" (2.0) or higher; biochemistry strongly recommended. Cross-listed with BIOL 5128.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 4134 - Human Genetics

Summer 2010 Registration **BIOL 4134**

Advanced survey of the current status of the field. Emphasis on understanding, diagnosis and treatment of genetic disease and on the impact of molecular biology on human genetics. Prereq: General genetics with a grade of "C" (2.0) or higher. Cross-listed with 5134.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 4144 - Medical Microbiology

Summer 2010 Registration **BIOL 4144**

Provides an understanding of the relationship between pathogenic organisms and their host. Emphasis is placed on the area of medical bacteriology, with attention given to mechanisms of pathogenesis, genetics of disease, serology and treatment. Prereq: general microbiology with a grade of "C" (2.0) or higher. Cross-listed with BIOL 5144.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 4154 - Conservation Biology

Summer 2010 Registration **BIOL 4154**

Basic concepts and theories in population biology and genetics as they apply to issues relating to the preservation of biodiversity, such as the genetics of small populations, captive propagation, restoration ecology and the design of nature reserves. Prereq: Introductory ecology (BIOL 3411, 3412 or equivalent) with a grade of "C" (2.0) or higher. Cross-listed with BIOL 5154.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 4165 - Neurobiology

Summer 2010 Registration **BIOL 4165**

Overview of neuroscience, covering the cellular basis of neuronal activity, muscle, sensory structures and the structure and function of the human brain. Prereq: One year of general biology and general cell biology with grades of "C" (2.0) or higher. Cross-listed with BIOL 5165. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 4250 - Mechanisms of Animal Behavior

Summer 2010 Registration **BIOL 4250**

The proximate and ultimate mechanisms of animal behavior are analyzed using comparative animal examples from the scientific literature. Proximate mechanisms include genetic and physiological processes. Ultimate mechanisms include the role of natural and sexual selection in the evolution of behavior. Prereq: One year of general biology with a grade of "C" (2.0) or higher. Genetics and human physiology are recommended. Cross-listed with BIOL 5250. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 4315 - Plant Systematics

Summer 2010 Registration **BIOL 4315**

Lecture, lab and field trips. Extensive introduction to the basic principles and concepts of vascular plant systematics. Topics include principles of taxonomy, nomenclature, methods, systems of classification and field and herbarium procedures. Emphasis on plant structure and identification using fresh, frozen and pressed plant specimens. Prereq: One year of general biology with a grade of "C" (2.0) or higher. Cross-listed with BIOL 5315. **Semester Hours:** 4to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 4335 - Plant Science

Summer 2010 Registration **BIOL 4335**

Lecture, lab and field trips. An in-depth study of flowering plants, including embryology, structure, function, reproduction, ecology and evolution of the group. Emphasis is placed upon morphology and anatomy at all stages of plant development. Prereq: One year of general biology with a grade of "C" (2.0) or higher. Cross-listed with BIOL 5335. **Semester Hours:** 4to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 4345 - Flora of Colorado

Summer 2010 Registration **BIOL 4345**

Lecture, lab and field trips. Introduces the vascular plant flora of Colorado, including ferns, gymnosperms and flowering plants. Emphasis on field identification of species

representing a range of natural communities from grassland to alpine tundra, as well as non-natives. Field and herbarium techniques covered. Prereq: One year of general biology with a grade of "C" (2.0) or higher. Cross-listed with BIOL 5345. **Semester**

Hours: 4to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 4415 - Microbial Ecology

Summer 2010 Registration **BIOL 4415**

An in-depth study of ecology as it relates to microorganisms; abiotic and biotic interactions within microbial populations in macro- and microhabitats; and the role of microorganisms in maintaining steady state conditions in natural ecosystems. Emphasis is placed on how the ecology of microorganisms affects the human condition. Prereq: General microbiology with a grade of "C" (2.0) or higher. Cross-listed with BIOL

5415. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 4416 - Aquatic Ecology

Summer 2010 Registration **BIOL 4416**

This advanced ecology course examines the inter-relations of biological (including humans), physical and chemical components of wetlands, streams, rivers, lakes, reservoirs and groundwater. Learning is facilitated through lectures, discussions, student presentations, laboratory and field exercises. Prereq: Introductory ecology (BIOL 3411, 3412 or equivalent) with a grade of "C" (2.0) or higher. Cross-listed with BIOL

5416. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 4425 - Biogeography

Summer 2010 Registration **BIOL 4425**

An in-depth study of biological populations through analysis of geographic distribution patterns in space and time. Emphasis on how biogeography informs studies of evolution and ecology and on applied studies in conservation, sustainability, epidemiology, and disease dynamics. Prereq: One year of general biology with a grade of "C" (2.0) or higher. Cross-listed with BIOL 5425. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 4450 - Marine Biology

Summer 2010 Registration **BIOL 4450**

Looks at the fascinating organisms that inhabit the oceans, which represent 99% of the living space of earth. While the focus is on the ecology of marine organisms, taxonomy, physiology and anatomy are also covered. Prereq: One year of general biology with a

grade of "C" (2.0) or higher. Cross-listed with BIOL 5450. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 4455 - Comparative Environmental Physiology

Summer 2010 Registration **BIOL 4455**

This advanced physiology course explores the physiological evolutionary adaptations of different animals in the context of their environment. Content includes exploration of maintenance of homeostasis via feedback regulation, structure-function relationships, cellular physiology, and the study of organ systems including the nervous, endocrine, respiratory, reproductive and cardiovascular systems. Prereq: Human or animal physiology with a grade of "C" (2.0) or higher. Cross-listed with BIOL 5455. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 4460 - Environmental Toxicology

Summer 2010 Registration **BIOL 4460**

Text and literature-based course provides students with background knowledge concerning environmental toxins, the nature and extent of environmental contamination, and toxicant effects on individual organisms and populations. Prereq: Human physiology with grades of "C" (2.0) or higher; organic chemistry and/or biochemistry strongly recommended. Cross-listed with BIOL 5460. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 4474 - Ecological Methods

Summer 2010 Registration **BIOL 4474**

Deals with the empirical aspects of an ecological study. Students learn sampling techniques that are used in plant and animal ecology. Emphasis is placed on hypothesis testing, data analysis and experimental field designs. Prereq: Introductory ecology (BIOL 3411, 3412 or equivalent) with a grade of "C" (2.0) or higher. Cross-listed with BIOL 5474. **Semester Hours:** 4to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 4475 - Mechanisms of Human Pathology

Summer 2010 Registration **BIOL 4475**

Studies physiological, cellular and biochemical processes in human diseases, with particular focus on non-communicable diseases such as diabetes, cardiovascular disease and diseases of aging such as osteoporosis and macular degeneration. Prereq: Human physiology with a grade of "C" (2.0) or higher; general cell biology or general microbiology strongly recommended. Cross-listed with BIOL 5475. **Semester Hours:** 3to

Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 4494 - Population and Evolutionary Genetics

Summer 2010 Registration **BIOL 4494**

Introduces the genetic processes underlying evolutionary change in microbial, plant and animal populations. Topics include: sources of variation, Hardy-Weinberg equilibrium, population genetic structure, natural selection and other evolutionary forces, quantitative genetics and molecular phylogenetics. Emphasis on experimental data. Prereq: One year of general biology and general genetics with grades of "C" (2.0) or higher. Cross-listed with BIOL 5494. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 4550 - Cell Signaling

Summer 2010 Registration **BIOL 4550**

Lecture by faculty and student presentations cover mechanism of hormones and regulation of various cellular processes through second messenger systems. Prereq: General cell biology with a grade of "C" (2.0) or higher; one semester of biochemistry recommended. Cross-listed with BIOL 5550. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 4560 - Seminar: Nervous System Disorders

Summer 2010 Registration **BIOL 4560**

Opening lectures cover the scientific process and how to review original scientific literature. Students present seminars on original research focusing on the neural bases of diseases such as Parkinson's, Alzheimer's and schizophrenia. Prereq: General cell biology with a grade of "C" (2.0) or higher; neurobiology strongly recommended. Cross-listed with BIOL 5560. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 4621 - Immunology

Summer 2010 Registration **BIOL 4621**

Studies antibody-antigen interactions, the immune system, inflammation, hypersensitivity, autoimmunity, and recovery from infection. Prereq: One year of general biology and general cell biology with grades of "C" (2.0) or higher; general genetics strongly recommended. Cross-listed with BIOL 5621. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 4622 - Topics in Immunology

Summer 2010 Registration **BIOL 4622**

An in-depth study of immunological concepts. Topics will vary from semester to semester and may range from specifics of immune cell responses to tolerance and autoimmunity. Delivery will include lecture, student presentations, and discussion. Prereq: One year of general biology with a grade of 'C' or higher; general cell biology and general genetics are recommended. Cross-listed with BIOL 5622. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 4634 - Biology of Cancer

Summer 2010 Registration **BIOL 4634**

Cancer is the second leading cause of death in the United States. This course offers an overview of recent research into the causes, treatments and possible prevention of cancer. Includes a detailed look at the mechanisms of action of various oncogenes. Prereq: General cell biology with a grade of 'C' (2.0) or higher; general genetics strongly recommended. Cross-listed with BIOL 5634. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 4640 - Mammalogy

Summer 2010 Registration **BIOL 4640**

Lecture, laboratory, and required field trips. This course provides a general overview of the biology of mammals, including their diversity, distribution, economic importance, and other characteristics that make them of special interest to humans. Coverage will be worldwide, with special emphasis placed on the mammals of Colorado. Prereq: One year of general biology with grades of 'C' (2.0) or higher and completion of the structure/function core requirement with a grade of 'C' (2.0) or higher. Cross-listed with BIOL 5640. **Semester Hours:** 4to 4
Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 4674 - Endocrinology

Summer 2010 Registration **BIOL 4674**

This systematic survey of the endocrine system looks at the cellular basis and biochemical characteristics of individual endocrine tissues. Their function in the regulation of other endocrinological, physiological, and behavioral events is analyzed. The course emphasizes the human system and complements studies in physiology, behavior and neurobiology. Prereq: Human physiology with a grade of "C" (2.0) or higher. Cross-listed with BIOL 5674. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 4705 - Introduction to Research

Summer 2010 Registration **BIOL 4705**

An overview of all aspects of scientific research. Topics covered include the scientific method, experimental design, the role of statistics, scientific writing, publication and sources of funding. Several guest faculty lectures are scheduled. Prereq: One year of general biology with a grade of "C" (2.0) or higher; junior or senior standing. Cross-listed with BIOL 5705. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 4750 - Technology Transfer and Biotechnology

Summer 2010 Registration **BIOL 4750**

An innovative hybrid course combining traditional classroom presentations with discussions and assignments on a web-based classroom management system. Covers the process from academic discovery to commercialization of a product, including clinical trials, patent law, entrepreneurship, ethics, venture capital funding, marketing and product development. Note: Will not fulfill biology major requirements. Cross-listed with BIOL 5750. **Semester Hours:** 2to 2

Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 4764 - Biostatistics

Summer 2010 Registration **BIOL 4764**

Covers the quantitative aspects of data collection, organization, and analysis in the biological sciences. Emphasizes understanding of relationships among probability theory, parameter estimation, test statistics, scope of inference, and interpretation. Provides "Hands-on" experience with data analysis. Prereq: One year of general biology with a "C" (2.0) or higher, college-level algebra with "B" (3.0) or higher, or permission of instructor. Cross-listed with BIOL 5764. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 4840 - Independent Study

Summer 2010 Registration **BIOL 4840**

Note: Registration by special processing form only. Prereq: One year of general biology with a grade of "C" (2.0) or higher and permission of instructor. **Semester Hours:** 1to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 4910 - Field Studies

Summer 2010 Registration **BIOL 4910**

Field studies of individuals, populations and communities comprising a specified ecosystem. Emphasis on field identification of vascular plants and vertebrate animals. Topics include the physical environment, biotic and abiotic interactions, life history, ecological adaptations and biogeography. Note: Lectures and a week-long field trip.

Prereq: One year of general biology and ecology with grades of "C" (2.0) or higher; permission of instructor. Cross-listed with BIOL 5910. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 4974 - Evolution

Summer 2010 Registration **BIOL 4974**

A capstone course that draws upon concepts from all fields of biology. Topics include the fossil record, mass extinctions, the historical development of the modern synthesis, principles and mechanisms of evolution, current viewpoints and controversies. Prereq: One year of general biology and general genetics with grades of "C" (2.0) or higher; junior or senior standing strongly recommended. Cross-listed with BIOL 5974. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 4990 - Undergraduate Research Seminar

Summer 2010 Registration **BIOL 4990**

Introduces research in the biological sciences. Students read current scientific literature, attend related seminars and participate in discussions. This course offers students a chance to interact with visiting scientists, who will present state-of-the-field biological research in a seminar setting. Prereq: Senior standing, satisfactory completion of all biology core courses, overall GPA of 3.0 or higher and permission of instructor. Cross-listed with BIOL 6655. **Semester Hours:** 1to 1
Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 5001 - RM-MSMSP: Cells, Human Systems and Heredity

Summer 2010 Registration **BIOL 5001**

Systematic study of key concepts in cell structure and function; energy transformations in living systems, functioning of human systems in health or disease, patterns or process of human inheritance and biotechnology impacts on human society. Concepts are linked to other scientific, mathematical, societal and pedagogical domains. This course is not applicable toward any degree in the College of Liberal Arts and Sciences. Prereq: Permission of project director. **Semester Hours:** 4to 4
Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 5002 - RM-MSMSP: Ecology, Biodiversity and Adaptation

Summer 2010 Registration **BIOL 5002**

Systematic study of biological concepts including ecosystems, population dynamics, food chains, biodiversity and evolutionary processes. Instruction is inquiry-based and interactive. Concepts are linked to other scientific, mathematical, societal and pedagogical domains. This course is not applicable toward any degree in the College of

Liberal Arts and Sciences. Prereq: Permission of instructor (project director). **Semester Hours:** 4to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 5003 - RM-MSMSP: The Biology of Life: Integrated Perspectives

Summer 2010 Registration **BIOL 5003**

Uses an integrated approach to investigate current biological, ecological and environmental issues including biofuels, climate change, red tides, coral bleaching, biomagnifications of toxins, acid rain and population growth. Note: This course is not applicable toward any degree in the College of Liberal Arts and Sciences. Prereq: BIOL 5001 and BIOL 5002 or permission of instructor. **Semester Hours:** 4to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 5024 - Introduction to Biotechnology

Summer 2010 Registration **BIOL 5024**

Introduces aspects of biotechnology within a historical context, including medical, forensic, agricultural and microbial biotechnology. Addresses principles behind state-of-the-field techniques in recombinant DNA technology, bioinformatics, proteomics and genomics. Biotechnology regulations and ethics will also be discussed. Prereq: BIOL 4024: one year of general biology with a grade of "C" (2.0) or higher. BIOL 5024: graduate standing or permission of instructor. Cross-listed with BIOL 4024. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 5050 - Advanced Biology Topics

Summer 2010 Registration **BIOL 5050**

Examines current topics in the field of biology. Topics vary from term to term. See Schedule Planner for current topics. Prereq: Graduate standing or permission of instructor. Cross-listed with BIOL 4050. **Semester Hours:** 1to 8

Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 5051 - Advanced Topics In Microbiology

Summer 2010 Registration **BIOL 5051**

An in-depth study of microbial concepts, including prokaryotic and eukaryotic structure and function; properties of biological macromolecules; microbial growth kinetics; and microbial diversity. Emphasis is on one of the following: virology, microbial physiology, environmental microbiology, microbial biotechnology and nucleic acids. Prereq: Graduate standing or permission of instructor. Cross-listed with BIOL 4051. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 5052 - Advanced Ecology

Summer 2010 Registration **BIOL 5052**

This combination seminar and lecture course focuses on state-of-field knowledge, current theories and recent models in selected areas of ecology, such as theoretical ecology, evolutionary ecology, population biology and ecosystems ecology. Prereq: Graduate standing or permission of instructor. Cross-listed with BIOL 4052. **Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 5053 - Disease Ecology

Summer 2010 Registration **BIOL 5053**

The study of the underlying principles that influence the spatio-temporal patterns of infectious disease in environments. Students will apply ecological theories about concepts such as biodiversity, trophic interactions, landscape structure, and nutrient cycling to the study of disease. Prereq: Graduate standing or permission of instructor. Cross-listed with BIOL 4053. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 5054 - Developmental Biology

Summer 2010 Registration **BIOL 5054**

Covers gametogenesis, fertilization, cleavage and development of the embryo with an emphasis on the biochemical and biophysical aspects. Prereq: Graduate standing or permission of instructor. Cross-listed with BIOL 4054. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 5064 - Advanced Cell Biology

Summer 2010 Registration **BIOL 5064**

Builds on the foundations laid in the prerequisite courses. Major topics include the functions of cell membranes, energy transduction and regulation of metabolic pathways. A major emphasis is the control and integration of cellular activities. Prereq: Graduate standing or permission of instructor. Cross-listed with BIOL 4064. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 5074 - Human Reproductive Biology

Summer 2010 Registration **BIOL 5074**

Comprehensive study of anatomy and physiology of human reproduction. Embryogenesis of male and female reproductive systems and detailed analysis of contraception, world population growth, population control and implications of population

growth are also covered. Prereq: Graduate standing or permission of instructor. Cross-listed with BIOL 4074.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 5099 - Biology For Computer Scientists, Engineers and Mathematicians

Summer 2010 Registration **BIOL 5099**

Designed to give a foundation in molecular biology for work in the field of computational biology or bioinformatics. The goal of this new field is to provide predictive capability for diagnosing disease and discovering therapeutics. Prereq: B.S. in computer science, engineering, mathematics or a related discipline.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 5125 - Molecular Biology Lab

Summer 2010 Registration **BIOL 5125**

Provides hands-on experiences in molecular biology and an appreciation for using the tools of molecular biology to study biological systems. Emphasis is placed on DNA cloning, PCR, mutagenesis and protein purification techniques. Experimental design and the theories underlying the techniques are also discussed. Prereq: Graduate standing or permission of instructor. Cross-listed with BIOL 4125.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 5126 - Molecular Genetics

Summer 2010 Registration **BIOL 5126**

Examines molecular techniques and their application to experimental genetics, specifically organization and mapping of genomes, application and model systems in defining hereditary components of disease, and mechanisms of identifying mutations and their implications for disease. Also addresses application of recombinant DNA technology. Prereq: General genetics and one year of organic chemistry (or equivalent) with grades of "C" (2.0) or higher; biochemistry strongly recommended. Cross-listed with BIOL 4126.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 5128 - Topics in Molecular Biology

Summer 2010 Registration **BIOL 5128**

Literature-based course examining the regulation of gene expression in eukaryotic systems, as well as contemporary recombinant DNA technology and applications of molecular cloning techniques. Prereq: General cell biology and general genetics with a grade of "C" (2.0) or higher; biochemistry strongly recommended. Cross-listed with BIOL 4128.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 5134 - Human Genetics

Summer 2010 Registration **BIOL 5134**

Advanced survey of the current status of the field. Emphasis on understanding, diagnosis and treatment of genetic disease and on the impact of molecular biology on human genetics. Prereq: Graduate standing or permission of instructor. Cross-listed with BIOL 4134. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 5144 - Medical Microbiology

Summer 2010 Registration **BIOL 5144**

Provides an understanding of the relationship between pathogenic organisms and their host. Emphasis is placed on the area of medical bacteriology, with attention given to mechanisms of pathogenesis, genetics of disease, serology and treatment. Prereq: Graduate standing or permission of instructor. Cross-listed with BIOL 4144. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 5154 - Conservation Biology

Summer 2010 Registration **BIOL 5154**

Basic concepts and theories in population biology and genetics as they apply to issues relating to the preservation of biodiversity, such as the genetics of small populations, captive propagation, restoration ecology and the design of nature reserves. Prereq: Graduate standing or permission of instructor. Cross-listed with BIOL 4154. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 5165 - Neurobiology

Summer 2010 Registration **BIOL 5165**

Overview of neuroscience, covering the cellular basis of neuronal activity, muscle, sensory structures and the structure and function of the human brain. Prereq: Graduate standing or permission of instructor. Cross-listed with BIOL 4165. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 5250 - Mechanisms of Animal Behavior

Summer 2010 Registration **BIOL 5250**

The proximate and ultimate mechanisms of animal behavior are analyzed using comparative animal examples from the scientific literature. Proximate mechanisms include genetic and physiological processes. Ultimate mechanisms include the role of

natural and sexual selection in the evolution of behavior. Prereq: One year of general biology with a grade of "C" (2.0) or higher. Genetics and human physiology are recommended. Cross-listed with BIOL 4250. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 5315 - Plant Systematics

Summer 2010 Registration **BIOL 5315**

Lecture, lab and field trips. Extensive introduction to the basic principles and concepts of vascular plant systematics. Topics include principles of taxonomy, nomenclature, methods, systems of classification and field and herbarium procedures. Emphasis on plant structure and identification using fresh, frozen and pressed plant specimens. Prereq: Graduate standing or permission of instructor. Cross-listed with BIOL 4315. **Semester Hours:** 4to 4
Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 5330 - Evolution and Diversification of Plants

Summer 2010 Registration **BIOL 5330**

Surveys the diverse assemblage of green algae and land plants. Ecological and evolutionary principles are used to interpret patterns of form and function within the context of their phylogeny as revealed from molecular systematics. Prereq: Graduate standing or permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 5335 - Plant Science

Summer 2010 Registration **BIOL 5335**

Lecture, lab and field trips. An in-depth study of flowering plants, including embryology, structure, function, reproduction, ecology and evolution of the group. Emphasis is placed upon morphology and anatomy at all stages of plant development. Prereq: Graduate standing or permission of instructor. Cross-listed with BIOL 4335. **Semester Hours:** 4to 4
Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 5345 - Flora of Colorado

Summer 2010 Registration **BIOL 5345**

Lecture, lab and field trips. Introduces the vascular plant flora of Colorado, including ferns, gymnosperms and flowering plants. Emphasis on field identification of species representing a range of natural communities from grassland to alpine tundra, as well as non-natives. Field and herbarium techniques covered. Prereq: Graduate standing or permission of instructor. Cross-listed with BIOL 4345. **Semester Hours:** 4to 4
Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 5415 - Microbial Ecology

Summer 2010 Registration **BIOL 5415**

An in-depth study of ecology as it relates to microorganisms; abiotic and biotic interactions within microbial populations in macro- and microhabitats; and the role of microorganisms in maintaining steady state conditions in natural ecosystems. Emphasis is placed on how the ecology of microorganisms affects the human condition. Prereq: Graduate standing or permission of instructor. Cross-listed with BIOL 4415. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 5416 - Aquatic Ecology

Summer 2010 Registration **BIOL 5416**

This advanced ecology course examines the inter-relations of biological (including humans), physical and chemical components of wetlands, streams, rivers, lakes, reservoirs and groundwater. Learning is facilitated through lectures, discussions, student presentations, laboratory and field exercises. Prereq: Graduate standing or permission of instructor. Cross-listed with BIOL 4416. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 5425 - Biogeography

Summer 2010 Registration **BIOL 5425**

An in-depth study of biological populations through analysis of geographic distribution patterns in space and time. Emphasis on how biogeography informs studies of evolution and ecology and on applied studies in conservation, sustainability, epidemiology, and disease dynamics. Prereq: One year of general biology with a grade of "C" (2.0) or higher. Cross-listed with BIOL 4425. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 5445 - Applied Environmental Biology

Summer 2010 Registration **BIOL 5445**

Examines the reciprocal relationships of organisms and the environment at scales from microbes to ecosystems. Explores the impact of human-caused perturbations on organisms as well as the impact of living systems on the flow of energy and materials (natural and man-made) through the environment. Prereq: Graduate standing or permission of instructor; one year of general biology and one year of general chemistry; introductory ecology recommended. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 5450 - Marine Biology

Summer 2010 Registration **BIOL 5450**

Looks at the fascinating organisms that inhabit the oceans, which represent 99% of the living space of earth. While the focus is on the ecology of marine organisms, taxonomy, physiology and anatomy are also covered. Prereq: One year of general biology. Cross-listed with BIOL 4450. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 5455 - Comparative Environmental Physiology

Summer 2010 Registration **BIOL 5455**

This advanced physiology course explores the physiological evolutionary adaptations of different animals in the context of their environment. Content includes exploration of maintenance of homeostasis via feedback regulation, structure-function relationships, cellular physiology, and the study of organ systems including the nervous, endocrine, respiratory, reproductive and cardiovascular systems. Prereq: Graduate standing or permission of instructor. Cross-listed with BIOL 4455. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 5460 - Environmental Toxicology

Summer 2010 Registration **BIOL 5460**

Text and literature-based course provides students with background knowledge concerning environmental toxins, the nature and extent of environmental contamination, and toxicant effects on individual organisms and populations. Prereq: Human physiology with grades of "C" (2.0) or higher; organic chemistry and/or biochemistry strongly recommended. Cross-listed with BIOL 4460. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 5474 - Ecological Methods

Summer 2010 Registration **BIOL 5474**

Lecture, laboratory. Deals with the empirical aspects of an ecological study. Students learn sampling techniques that are used in plant and animal ecology. Emphasis is placed on hypothesis testing, data analysis and experimental field designs. Prereq: Graduate standing or permission of instructor. Cross-listed with BIOL 4474. **Semester Hours:** 4to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 5475 - Mechanisms of Human Pathology

Summer 2010 Registration **BIOL 5475**

Studies physiological, cellular and biochemical processes in human diseases, with particular focus on non-communicable diseases such as diabetes, cardiovascular disease and diseases of aging such as osteoporosis and macular degeneration. Prereq:

Graduate standing or permission of instructor. Cross-listed with BIOL 4475. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 5494 - Population and Evolutionary Genetics

Summer 2010 Registration **BIOL 5494**

Introduces the genetic processes underlying evolutionary change in microbial, plant and animal populations. Topics include: sources of variation, Hardy-Weinberg equilibrium, population genetic structure, natural selection and other evolutionary forces, quantitative genetics and molecular phylogenetics. Emphasis on experimental data. Prereq:

Graduate standing or permission of instructor. Cross-listed with BIOL 4494. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 5550 - Cell Signaling

Summer 2010 Registration **BIOL 5550**

Lecture by faculty and student presentations cover mechanism of hormones and regulation of various cellular processes through second messenger systems. Prereq: Graduate standing or permission of instructor. Cross-listed with BIOL 4550. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 5560 - Seminar: Nervous System Disorders

Summer 2010 Registration **BIOL 5560**

Opening lectures cover the scientific process and how to review original scientific literature. Students present seminars on original research focusing on the neural bases of diseases such as Parkinson's, Alzheimer's and schizophrenia. Prereq: Graduate standing or permission of instructor. BIOL 5165 or 4165 is strongly recommended.

Cross-listed with BIOL 4560. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 5621 - Immunology

Summer 2010 Registration **BIOL 5621**

Studies antibody-antigen interactions, the immune system, inflammation, hypersensitivity, autoimmunity, and recovery from infection. Prereq: Graduate standing or permission of instructor. Cross-listed with BIOL 4621. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 5622 - Topics in Immunology

Summer 2010 Registration **BIOL 5622**

An in-depth study of immunological concepts. Topics will vary from semester to semester and may range from specifics of immune cell responses to tolerance and autoimmunity. Delivery will include lecture, student presentations, and discussion. Prereq: One year of general biology with a grade of 'C' or higher; general cell biology and general genetics are recommended. Cross-listed with BIOL 4622. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 5634 - Biology of Cancer

Summer 2010 Registration **BIOL 5634**

Cancer is the second leading cause of death in the United States. This course offers an overview of recent research into the causes, treatments and possible prevention of cancer. Includes a detailed look at the mechanisms of action of various oncogenes. Prereq: Graduate standing or permission of instructor. Cross-listed with BIOL 4634. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 5640 - Mammalogy

Summer 2010 Registration **BIOL 5640**

Lecture, laboratory, and required field trips. This course provides a general overview of the biology of mammals, including their diversity, distribution, economic importance, and other characteristics that make them of special interest to humans. Coverage will be worldwide, with special emphasis placed on the mammals of Colorado. Prereq: One year of general biology with grades of 'C' (2.0) or higher and completion of the structure/function core requirement with a grade of 'C' (2.0) or higher. Cross-listed with BIOL 4640. **Semester Hours:** 4to 4
Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 5674 - Endocrinology

Summer 2010 Registration **BIOL 5674**

This systematic survey of the endocrine system looks at the cellular basis and biochemical characteristics of individual endocrine tissues. Their function in the regulation of other endocrinological, physiological, and behavioral events is analyzed. The course emphasizes the human system and complements studies in physiology, behavior and neurobiology. Prereq: Graduate standing or permission of instructor. Cross-listed with BIOL 4674. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 5705 - Introduction to Research

Summer 2010 Registration **BIOL 5705**

An overview of all aspects of scientific research. Topics covered include the scientific method, experimental design, the role of statistics, scientific writing, publication and sources of funding. Several guest faculty lectures are scheduled. Prereq: Graduate standing or permission of instructor. Cross-listed with BIOL 4705. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 5750 - Technology Transfer and Biotechnology

Summer 2010 Registration **BIOL 5750**

An innovative hybrid course combining traditional classroom presentations with discussions and assignments on a web-based classroom management system. Covers the process from academic discovery to commercialization of a product, including clinical trials, patent law, entrepreneurship, ethics, venture capital funding, marketing and product development. Note: Will not fulfill biology major requirements. Cross-listed with BIOL 4750. **Semester Hours:** 2to 2

Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 5764 - Biostatistics

Summer 2010 Registration **BIOL 5764**

Covers the quantitative aspects of data collection, organization, and analysis in the biological sciences. Emphasizes understanding of relationships among probability theory, parameter estimation, test statistics, scope of inference, and interpretation. Provides "Hands-on" experience with data analysis. Prereq: One year of general biology with a "C" (2.0) or higher, college-level algebra with "B" (3.0) or higher, or permission of instructor. Cross-listed with BIOL 4764. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 5840 - Independent Study: BIOL

Summer 2010 Registration **BIOL 5840**

Note: Registration by special processing form only. Prereq: Permission of instructor. **Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 5910 - Field Studies

Summer 2010 Registration **BIOL 5910**

Field studies of individuals, populations and communities comprising a specified ecosystem. Emphasis on field identification of vascular plants and vertebrate animals. Topics include the physical environment, biotic and abiotic interactions, life history, ecological adaptations and biogeography. Note: Lectures and a week-long field trip.

Prereq: Graduate standing or permission of instructor. Cross-listed with BIOL 4910.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 5939 - Internship/Cooperative Education

Summer 2010 Registration **BIOL 5939**

Designed experience involving application of specific, relevant concepts and skills in supervised employment situations. Prereq: Graduate standing.**Semester Hours:** 1to 6
Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 5974 - Evolution

Summer 2010 Registration **BIOL 5974**

A capstone course that draws upon concepts from all fields of biology. Topics include the fossil record mass extinctions, the historical development of the modern synthesis, principles and mechanisms of evolution, current viewpoints and controversies. Prereq: Graduate standing or permission of instructor. Cross-listed with BIOL 4974.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 6655 - Seminar

Summer 2010 Registration **BIOL 6655**

Prereq: Graduate standing or permission of instructor. Cross-listed with BIOL 4990.**Semester Hours:** 1to 1
Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 6950 - Master's Thesis

Summer 2010 Registration **BIOL 6950**

Semester Hours: 1to 8
Registration is changing. Visit our website for details ucdenver.edu/registration.

BIOL 9000 - INTC: Special Topics

Summer 2010 Registration **BIOL 9000**

Semester Hours: 1to 10
Registration is changing. Visit our website for details ucdenver.edu/registration.

BLAW 3000 - Legal and Ethical Environments of Business I

Summer 2010 Registration **BLAW 3000**

Addresses the most fundamental ways the legal and ethical environments of business

affect managers. Students are taught to identify legal issues, make ethical judgments about business conduct, and understand the ways ethical and social issues are developed. Topics include actual analysis of legal and ethical issues, ethical theory and its application, law-making processes, contracts, torts, product liability, criminal law, constitutional law and real property. This is a business core course therefore a grade of "C" or better must be earned to satisfy Business graduation requirements and prerequisites for other business courses. Prereq: Junior Standing. **Semester Hours:** 3to 3**When Offered:** FASPRSUM
Registration is changing. Visit our website for details ucdenver.edu/registration.

BLAW 4120 - Legal Issues for Entrepreneurs

Summer 2010 Registration **BLAW 4120**

Skills in legal and factual analysis and the application of ethical theories are addressed with an emphasis on applicability for entrepreneurs. The cases are drawn from a variety of functional areas such as accounting, information systems, finance, management, marketing and production. Topics include securities, venture capital, employment law and consumer law. Cross-listed with ENTP 3120. **Semester Hours:** 3to 3**When Offered:** FASPRSUM
Registration is changing. Visit our website for details ucdenver.edu/registration.

BLAW 6500 - Legal Issues for CPA's

Summer 2010 Registration **BLAW 6500**

Examines advanced legal issues affecting accounting financial reporting. Designed for graduate students who want to understand and improve the links between accounting disclosures and legal requirements. Note: This class is rarely offered. Prereq: BLAW 3000 or BUSN 6540 (or equivalent). **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

BUSN 5939 - Cooperative Education

Summer 2010 Registration **BUSN 5939**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

BUSN 6520 - Managing Individuals and Teams

Summer 2010 Registration **BUSN 6520**

Students learn the strengths and weaknesses of their management style and how to work effectively with individual differences. Students also learn how to form teams around purpose/task, diagnose problems and identify and implement solutions by utilizing leadership skills such as setting goals, processes and measures, interpersonal communication, motivation and conflict management. Students develop an

understanding of the effect of the organizational and social context on the behavior of individuals and teams. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

BUSN 6521 - Managing Individuals and Teams (Health Section)

Summer 2010 Registration **BUSN 6521**

Students learn the strengths and weaknesses of their management style and how to work effectively with individual differences. Students also learn how to form teams around purpose/task, diagnose problems and identify and implement solutions by utilizing leadership skills such as setting goals, processes and measures, interpersonal communication, motivation and conflict management. Students develop an understanding of the effect of the organizational and social context on the behavior of individuals and teams. The emphasis is on health care issues and is intended for health care students. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

BUSN 6530 - Data Analysis for Managers

Summer 2010 Registration **BUSN 6530**

Provides an overview of techniques for data analysis, including multiple regression, sampling theory and applications of probabilistic inference from sample data. The emphasis is upon the applications of these techniques to management problems. Students are required to analyze data sets, present their analyses in written or oral form and defend their conclusions. Note: Students cannot receive credit for both BUSN 6530 and FNCE 6290. **Semester Hours:** 3to 3 **When Offered:** FASPRSUM
Registration is changing. Visit our website for details ucdenver.edu/registration.

BUSN 6540 - Legal and Ethical Environment of Business

Summer 2010 Registration **BUSN 6540**

Students develop a working knowledge of legal and ethical parameters for business decision making. The course addresses the legal system and mechanisms for resolving disputes. Topics include constitutional law, torts, product liability, contracts, property law, consumer protection, intellectual property, business entities and employment law. It stresses the influence of legal issues on organizational decision making. Note: Students can substitute ENTP 6822 but credit cannot be received for both. Health Administration students must take BUSN 6541. **Semester Hours:** 3to 3 **When Offered:** FASPRSUM
Registration is changing. Visit our website for details ucdenver.edu/registration.

BUSN 6541 - Legal and Ethical Environment of Business (Health Section)

Summer 2010 Registration **BUSN 6541**

Students develop a working knowledge of legal and ethical parameters for business

decision making. Addresses the legal system and mechanisms for resolving disputes. Topics include business entities, torts, contracts, employment relationships, litigation and alternative dispute resolution. It stresses the influence of legal issues on organization and decision making. The emphasis is on health care issues and is intended for health care students.**Semester Hours:** 3to 3**When Offered:** *SPRING*
Registration is changing. Visit our website for details ucdenver.edu/registration.

BUSN 6550 - Analyzing and Interpreting Accounting Information

Summer 2010 Registration **BUSN 6550**

Emphasizes the use of accounting statements and data in making business decisions. External financial accounting information and concepts are used for investment and credit decisions. Internal managerial accounting information and concepts are used for product costing, cost analysis and management control.**Semester Hours:** 3to 3**When Offered:** *FASPRSUM*
Registration is changing. Visit our website for details ucdenver.edu/registration.

BUSN 6560 - Marketing Management

Summer 2010 Registration **BUSN 6560**

Focuses on the formulation and implementation of a marketing plan in the context of the firm's strengths, overall strategy and competitive environment. Emphasis is on understanding the marketing environment and on decision making skills regarding market selection, pricing, promotion, product configuration and management of distribution channels.**Semester Hours:** 3to 3**When Offered:** *FASPRSUM*
Registration is changing. Visit our website for details ucdenver.edu/registration.

BUSN 6610 - Information Systems Management and Strategy

Summer 2010 Registration **BUSN 6610**

Examines the strategic, technological, financial and organizational issues involved with the effective management of information technology. Topics include: (1) role and importance of IT in modern organizations (e.g., IT impact on competitiveness, alignment of corporate and IT strategies, IT infrastructures and IT-enabled organizational processes), (2) alternative methods to develop, acquire and implement information systems (e.g.) evaluation of IT investments, implementing and managing complex IT projects), (3) nature of IT management (e.g., the evolving roles of enterprise IT management, IT sourcing and contractual relationships) and (4) ethical and security issues associated with IT. Note: Students cannot receive credit if they have taken BUSN 6810 or ISMG 6180. Cross-listed with ISMG 6180.**Semester Hours:** 3to 3**When Offered:** *FASPRSUM*
Registration is changing. Visit our website for details ucdenver.edu/registration.

BUSN 6620 - Applied Economics for Managers

Summer 2010 Registration **BUSN 6620**

After taking this course, students should be able to apply economic principles to make optimal decisions given firm cost, demand and market circumstances. Also, they should be able to analyze the firm's interactions with its competitive market environment.

Students will learn basic aspects of federal macroeconomic policy designed to achieve stable prices and economic growth. Also, they will learn to understand the measurement of output (GDP), employment and prices; the conduct of monetary and fiscal policy; and the balance of trade. Prereq: BUSN 6530 or FNCE 6290 and BUSN 6550, both may be taken concurrently. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

BUSN 6621 - Applied Economics for Managers (Health Section)

Summer 2010 Registration **BUSN 6621**

After taking this course, students should be able to apply economic principles to make optimal decisions given firm cost, demand and market circumstances. Also, they should be able to analyze the firm's interactions with its competitive market environment.

Students should understand basic aspects of federal macroeconomics policy designed to achieve stable prices and economic growth. Also, they should understand basic aspects of government regulation of business. The emphasis is on healthcare issues and is intended for healthcare students. Prereq: BUSN 6530 and BUSN 6550, both may be taken may concurrently. **Semester Hours:** 3to 3**When Offered:** *SPRING*

Registration is changing. Visit our website for details ucdenver.edu/registration.

BUSN 6630 - Management of Operations

Summer 2010 Registration **BUSN 6630**

This course is concerned with the production and delivery of goods and services. It provides an overview of a variety of key Operation Management issues including scheduling, capacity determination, facility location and layout, distribution and related topics. The use of model- assisted decision making is emphasized. **Semester Hours:** 3to 3**When Offered:** *FASPRSUM*

When Offered: *FASPRSUM*

Registration is changing. Visit our website for details ucdenver.edu/registration.

BUSN 6631 - Management of Operations (Health Section)

Summer 2010 Registration **BUSN 6631**

This course focuses on managing and evaluating the processes that produce and deliver health services. Particular emphasis is on quantitative techniques to support healthcare operations including Monte Carlo simulation, decision analysis, quality improvement methods, forecasting, capacity planning, project management and inventory and supply chain management. While this course is intended for healthcare

students, it is open to all. **Semester Hours:** 3to 3**When Offered:** *SPRING*
Registration is changing. Visit our website for details ucdenver.edu/registration.

BUSN 6640 - Financial Management

Summer 2010 Registration **BUSN 6640**

This course is concerned with the business firm's decisions to make investments and to finance its operations. Students learn to use the tools and theories underlying business valuation, cost of capital, capital budgeting and capital structure. Students will learn to evaluate a firm's financial position through the examination of its financial statements and to prepare pro forma statements for the firm. Prereq: BUSN 6530 or FNCE 6290, BUSN 6620 (both may be taken concurrently) and BUSN 6550 completed prior and strictly enforced. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

BUSN 6710 - Strategic Management

Summer 2010 Registration **BUSN 6710**

Concerned with the development of a general management perspective in establishing the strategic direction for an enterprise. Students gain an understanding of strategy formulation and implementation within the context of the global environment. Emphasis is on the integration of knowledge acquired in the previous functional area courses. Note: This course is intended as a final semester Capstone course. Prereq: BUSN 6560 and BUSN 6640 - strictly enforced; BUSN 6630 strongly recommended and may be taken concurrently. **Semester Hours:** 3to 3**When Offered:** *FASPRSUM*
Registration is changing. Visit our website for details ucdenver.edu/registration.

BUSN 6711 - Strategic Management (Health Section)

Summer 2010 Registration **BUSN 6711**

Concerned with the development of a general management perspective in establishing the strategic direction for a health delivery organization. Students gain an understanding of strategy formulation and implementation within the context of the managed care environment. Emphasis is on the integration of knowledge acquired in the previous functional area courses. Note: This course is intended as a final semester course. Required of Health Administration majors; open to others. Prereq: BUSN 6560 and 6640 - strictly enforced; BUSN 6630 strongly recommended and may be taken concurrently. **Semester Hours:** 3to 3**When Offered:** *SPRING*
Registration is changing. Visit our website for details ucdenver.edu/registration.

BUSN 6800 - Topics In Business

Summer 2010 Registration **BUSN 6800**

Current topics in business are occasionally offered. Prerequisites vary depending on the

material covered. Consult the current 'schedule planner' for specific offerings and prerequisites. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

BUSN 6811 - IT and New Business Paradigms

Summer 2010 Registration **BUSN 6811**

Introduces graduate students to the relationship between information technology and the other functional areas of the business. During the course, students have an opportunity to listen and learn from guest speakers who have been involved with either guiding or interpreting the impact of information technology among functional areas of existing or new business. Through the use of current readings, guest lectures and case analysis, students examine various models of IT and new business paradigms to determine the decisions and success criteria for integrating It in ongoing business. a unique feature of the class will be the opportunity for students to present proposals and projects to be critiqued by individuals with It or business experience. Those individuals provide feedback and perspectives regarding potential It or new business paradigm activities. Prereq: Permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

BUSN 6820 - Project Management

Summer 2010 Registration **BUSN 6820**

Introduces the knowledge and skills of Project Management (PM) in a business environment. Emphasis will be on the entire project life cycle, the project management process groups and the knowledge areas as presented in the Project Management Body of Knowledge (PMBOK) from the Project Management Institute (PMI). Managerial aspects, quantitative tools and traditional techniques of Project Management will be covered. Application to various industries will be included. Note: cannot receive credit for both BUSN 6820 and DSCI 6820. Cross-listed with DSCI 6820 and URPL 6686. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

BUSN 6822 - Services Operations

Summer 2010 Registration **BUSN 6822**

Examines the unique issues involved in the management of service operations. Operations Management principles specific to service industries are given in depth coverage. In addition, simulation is introduced as a technique for studying service industries. Note: cannot receive credit for both BUSN 6822 and DSCI 6822. Prereq: BUSN 6530 or permission of instructor. Cross-listed with DSCI 6822. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

BUSN 6824 - Business Forecasting

Summer 2010 Registration **BUSN 6824**

Modern businesses use forecasts in marketing, finance, accounting, human resources management and supply chain and production management decision making. This course focuses on practical application of forecasting techniques, choosing and comparing appropriate methods and applying the results to the business application. Note: Can only receive credit for one of the cross listed courses. Prereq: BUSN 6530 or FNCE 6290. Cross-listed with DSCI 6230 and FNCE 6372. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

BUSN 6826 - Supply Chain Management

Summer 2010 Registration **BUSN 6826**

Introduces the application of purchasing, operations, and logistics to the entire supply chain of an organization. Because of globalization and the rapid advancement of information technology, emphasis is placed on integration management of processes and systems, relationship management of upstream and downstream players and strategies that incorporate current and future trends. Note: Cannot receive credit for both BUSN 6826 and DSCI 6826. Cross-listed with DSCI 6826. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

BUSN 6828 - Business Applications of Data Mining

Summer 2010 Registration **BUSN 6828**

Addresses statistical approaches to the very large data sets increasingly common in business applications such as internet-based business, fraud detection, credit scoring and market segmentation. Topics include limitations of classical statistical when applied to large data sets, alternative approaches and applications of key data mining algorithms such as logistic regression, decision trees and cluster analysis. Emphasis is placed on proper choice of method, interpretation of the results and understanding of the strengths and limitations of the methods. Students are expected to analyze and report on a variety of data sets drawn from business applications areas. Note: cannot receive credit for both BUSN 6828 and DSCI 6828. Prereq: BUSN 6530 or permission of instructor. Cross-listed with DSCI 6828. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

BUSN 6830 - Business and the Natural Environment

Summer 2010 Registration **BUSN 6830**

Class considers the impact of economic activity on the natural environment and the regulatory, market and corporate voluntary responses to reducing this impact. Topics include externalities, life cycle assessment, environmental accounting, corporate environmental reporting, ISP 14000 certification and sustainability. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

BUSN 6832 - Quality and Process Improvement

Summer 2010 Registration **BUSN 6832**

Studies the identification, measurement and improvement of quality and the practical management issues related to implementing quality systems within organizations. Topics include historic and contemporary views of quality, statistical quality control tools including Six Sigma, work design and measurement and process flow and design. Note: cannot receive credit for both BUSN 6832 and DSCI 6440. Prereq: BUSN 6530 or permission of instructor. Cross-listed with DSCI 6440. **Semester Hours:** 3 to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

BUSN 6834 - Simulation Modeling

Summer 2010 Registration **BUSN 6834**

Students learn to model and analyze complex dynamic systems using state-of-the-art software such as Arena. Illustrative application areas include production systems, service systems, distribution systems and health care systems. Topics include creating reliable simulation models, analyzing the input and output from the model and managing simulation projects. A substantial part of the course will be devoted to projects where students define, model and analyze a significant system of their choosing. Note: Cannot receive credit for both BUSN 6834 and DSCI 6480. Prereq: Permission of instructor. Cross-listed with DSCI 6480. **Semester Hours:** 3 to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

BUSN 6836 - Decision Analysis

Summer 2010 Registration **BUSN 6836**

Examines business decision making under conditions of risk and uncertainty using quantitative decision analysis methods such as utility theory, value of information, decisions with conflicting objectives and hierarchical structured models. Applications include decisions commonly encountered in capital acquisitions, financial investments, quality control, project selection, strategic planning, production control and human resource management. Student computer-assisted projects are conducted. Note: Cannot receive credit for both BUSN 6836 and DSCI 6460. Cross-listed with DSCI 6460. **Semester Hours:** 3 to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

BUSN 6840 - Independent Study

Summer 2010 Registration **BUSN 6840**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

BUSN 6850 - Accounting and Finance for Sustainability

Summer 2010 Registration **BUSN 6850**

Helping companies and communities become more socially and environmentally sustainable requires information and investment. This class introduces internal accounting techniques that aid companies in becoming more eco-efficient and external reporting to help investors value a company along social and environmental dimensions. How and when to report potential environmental liabilities and different models of sustainability reporting are also discussed. At the national level we examine alternative measures of GDP that better represent social and environmental aspects of the country. Markets can be powerful tools for change. We look at emissions trading, microfinance and socially responsible investing. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

BUSN 6860 - Finance in the Sports Entertainment Industries

Summer 2010 Registration **BUSN 6860**

This course explores the problems and solutions of financing in sports and entertainment business. It focuses on stadium/venue financing, sports team valuation, entertainment event guarantee estimation, player/artist salary issues and managing disparate revenue streams. The course utilizes speakers, articles, problem sets and cases. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CHEM 1000 - Foundations for General Chemistry

Summer 2010 Registration **CHEM 1000**

This course prepares for CHEM 2031 or 1130. Note: For students with no previous chemistry or with inadequate background. Prereq: MATH 1110 or high school equivalent. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CHEM 1111 - Freshman Seminar

Summer 2010 Registration **CHEM 1111**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CHEM 1115 - Chemistry Content

Summer 2010 Registration **CHEM 1115**

Covers content areas of undergraduate chemistry. Topics include periodicity; the mole and chemical bonding; the kinetic theory and states of matter; chemical reactions; solutions and chemical equilibria. **Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CHEM 1130 - Engineering General Chemistry

Summer 2010 Registration **CHEM 1130**

A one-semester non-laboratory version of general chemistry for engineers and those science majors who do not require laboratory credit and do not plan to take a second semester of chemistry. Prereq: One year of high school chemistry or Chem 1000 and Math 1110 (or high school equivalent). **Semester Hours:** 5to 5

Registration is changing. Visit our website for details ucdenver.edu/registration.

CHEM 1474 - Core Chemistry: Chemistry For the Consumer

Summer 2010 Registration **CHEM 1474**

Focuses on the common household chemicals that affect US on a daily basis. Students learn the underlying chemistry of nuclear power, sunscreens, food, cleaning agents, etc. Home-based laboratory experiments with safe, common substances. **Semester Hours:** 4to 4 **GT Pathways Category Key:** GT-SC1

Registration is changing. Visit our website for details ucdenver.edu/registration.

CHEM 2031 - General Chemistry I

Summer 2010 Registration **CHEM 2031**

Topics include chemical structure, atomic and molecular properties, molecular geometry and bonding, and gas laws. Prepares students to take upper division chemistry courses. Note: a beginning course for science majors, medical technologists, pre-medical and pre-dental students. Prereq: One year of high school chemistry or CHEM 1000 and MATH 1110 (or high school equivalent); Coreq: CHEM 2038. **Semester Hours:** 3to 3 **GT Pathways Category Key:** GT-SC1

Registration is changing. Visit our website for details ucdenver.edu/registration.

CHEM 2038 - General Chemistry Laboratory I

Summer 2010 Registration **CHEM 2038**

Students perform laboratory experiments on topics covered in CHEM 2031 and gain experience in observing, recording, and interpreting physical and chemical phenomena. Note: Laboratory to accompany CHEM 2031. Coreq: CHEM 2031. **Semester Hours:** 1to 1 **GT Pathways Category Key:** GT-SC1

Registration is changing. Visit our website for details ucdenver.edu/registration.

CHEM 2061 - General Chemistry II

Summer 2010 Registration **CHEM 2061**

(Continuation of CHEM 2031.) Topics include kinetics, equilibria and thermodynamics.

Prereq: CHEM 2031; Coreq: CHEM 2068. **Semester Hours:** 3to 3 **GT Pathways**

Category Key: GT-SC1

Registration is changing. Visit our website for details ucdenver.edu/registration.

CHEM 2068 - General Chemistry Laboratory II

Summer 2010 Registration **CHEM 2068**

Students gain experience with laboratory technique and elementary chemical instrumentation. Note: Laboratory to accompany CHEM 2061 and a continuation of CHEM 2038. Prereq: CHEM 2038; Coreq: CHEM 2061. **Semester Hours:** 2to 2 **GT Pathways**

Category Key: GT-SC1

Registration is changing. Visit our website for details ucdenver.edu/registration.

CHEM 2300 - Nutritional Chemistry

Summer 2010 Registration **CHEM 2300**

Introduces nutrition intended primarily for majors in nursing, physical therapy, physical education. Topics include structure and metabolism of carbohydrates, lipids and proteins, functions of vitamins and minerals and food constituents. Prereq: CHEM 1000, 1474 or high school chemistry. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CHEM 2840 - Independent Study: Chem

Summer 2010 Registration **CHEM 2840**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CHEM 2939 - Internship/Cooperative Education

Summer 2010 Registration **CHEM 2939**

Experiences involving application of specific, relevant concepts and skills in supervised employment situations. Prereq: 15 hours of 2.75 GPA. **Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CHEM 3011 - Inorganic Chemistry

Summer 2010 Registration **CHEM 3011**

The fundamentals of inorganic chemistry, including: atomic, molecular and crystal structures; the energetics of reactions, acid-base interactions; and the chemistry of main

group and transition metal elements, including coordination and organometallic chemistry. Prereq or Coreq: CHEM 3421 or 3491. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CHEM 3018 - Inorganic Chemistry Laboratory

Summer 2010 Registration **CHEM 3018**

Combines theoretical concepts with hands-on laboratory experience and introduces students to modern inorganic chemistry. Experiments cover both main group and transition metal chemistry with an emphasis on synthesis, characterization, and application of inorganic compounds. Prereq or Coreq: CHEM 3011. **Semester Hours:** 2to 2

Registration is changing. Visit our website for details ucdenver.edu/registration.

CHEM 3111 - Analytical Chemistry

Summer 2010 Registration **CHEM 3111**

Topics include sampling, volumetric analyses, instrumental analyses and statistical treatment of data. Note: Lecture course for chemistry, biology, medical technology and environmental students. Prereq: CHEM 2061. **Semester Hours:** 3to 3 **When Offered:** FALL

Registration is changing. Visit our website for details ucdenver.edu/registration.

CHEM 3118 - Analytical Chemistry Laboratory

Summer 2010 Registration **CHEM 3118**

Students gain experience with technique of sampling and analysis, including an introduction to instrumental methods. Note: Laboratory course to be taken concurrently with CHEM 3111. Prereq: CHEM 2068; Coreq: CHEM 3111. **Semester Hours:** 2to 2 **When Offered:** FALL

Registration is changing. Visit our website for details ucdenver.edu/registration.

CHEM 3411 - Organic Chemistry I

Summer 2010 Registration **CHEM 3411**

Lecture course designed to introduce the study of structure, reactions, properties, and mechanisms of organic molecules. Prereq: CHEM 2061. **Semester Hours:** 4to 4
Registration is changing. Visit our website for details ucdenver.edu/registration.

CHEM 3418 - Organic Chemistry Laboratory I

Summer 2010 Registration **CHEM 3418**

Laboratory course to augment concepts of CHEM 3411, illustrating the practical aspects of organic chemistry. Prereq: CHEM 2068; Prereq or Coreq: CHEM 3411. **Semester**

Hours: 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

CHEM 3421 - Organic Chemistry II

Summer 2010 Registration **CHEM 3421**

Lecture course designed to introduce the study of structure, reaction, properties and mechanisms of organic molecules. Note: Continuation of CHEM 3411. Prereq: CHEM 3411.**Semester Hours:** 4to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

CHEM 3428 - Organic Chemistry Laboratory II

Summer 2010 Registration **CHEM 3428**

Laboratory course to augment concepts of CHEM 3421, illustrating the practical aspects of organic chemistry. Prereq: CHEM 3418; Prereq or Coreq: CHEM 3421.**Semester Hours:** 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

CHEM 3491 - Honors Organic Chemistry II

Summer 2010 Registration **CHEM 3491**

Second semester organic chemistry. Theoretical concepts and practical aspects of organic structure, mechanism, synthesis and analysis. Note: Required for chemistry majors and open to all students. No joint credit with CHEM 3421. Prereq: CHEM 3411. Coreq: CHEM 3498.**Semester Hours:** 4to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

CHEM 3498 - Honors Organic Chemistry Laboratory II

Summer 2010 Registration **CHEM 3498**

In small groups, students use the chemical literature to devise multi-step syntheses and determine reaction mechanisms for organic compounds. Note: Laboratory course required for chemistry majors. Open to non-majors on approval of the instructor. Prereq or Coreq: CHEM 3491.**Semester Hours:** 2to 2

Registration is changing. Visit our website for details ucdenver.edu/registration.

CHEM 3810 - Biochemistry

Summer 2010 Registration **CHEM 3810**

Introduces the principles of biochemistry for science and health science-oriented majors. Designed to cover the important aspects of modern biochemistry. Prereq: BIOL 2061 and CHEM 3411.**Semester Hours:** 4to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

CHEM 3840 - Independent Study

Summer 2010 Registration **CHEM 3840**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CHEM 3939 - Internship/Cooperative Education

Summer 2010 Registration **CHEM 3939**

Designed experiences involving application of specific, relevant concepts and skills in supervised employment situations. Prereq: Junior standing and at least a 2.75

GPA.**Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CHEM 4121 - Instrumental Analysis

Summer 2010 Registration **CHEM 4121**

Surveys instrumental methods of analysis. Emphasis on spectrophotometry, electrochemistry, chromatography and radiochemical techniques. Prereq: CHEM 3111, 3421 or 3491, and PHYS 2331; Coreq for Chemistry majors: CHEM 4128.**Semester**

Hours: 3to 3**When Offered:** *SPRING*

Registration is changing. Visit our website for details ucdenver.edu/registration.

CHEM 4128 - Instrumental Analysis Laboratory

Summer 2010 Registration **CHEM 4128**

Laboratory practice to accompany CHEM 4121. One hour of discussion and three hours of laboratory, with an emphasis on writing laboratory reports. Note: Required of chemistry majors and open to other students in CHEM 4121. Coreq: CHEM 4121.**Semester Hours:** 2to 2**When Offered:** *SPRING*

Registration is changing. Visit our website for details ucdenver.edu/registration.

CHEM 4511 - Physical Chemistry I

Summer 2010 Registration **CHEM 4511**

Includes study of the laws of thermodynamics, thermochemistry, chemical equilibria, solutions and statistical mechanics. Prereq: PHYS 2331; Coreq: MATH 3511.**Semester**

Hours: 3to 3**When Offered:** *FALL*

Registration is changing. Visit our website for details ucdenver.edu/registration.

CHEM 4518 - Physical Chemistry Laboratory I

Summer 2010 Registration **CHEM 4518**

Instruction in the experimental techniques of physical chemistry with emphasis on the

properties of gases, thermodynamics and chemical equilibrium. Prereq: CHEM 3118; Coreq: CHEM 4511. **Semester Hours:** 2to 2
Registration is changing. Visit our website for details ucdenver.edu/registration.

CHEM 4521 - Physical Chemistry II

Summer 2010 Registration **CHEM 4521**

Continuation of CHEM 4511, with emphasis on chemical kinetics, quantum mechanics, molecular structure and spectroscopy. Prereq: CHEM 4511 and MATH 3511. **Semester Hours:** 3to 3 **When Offered:** *SPRING*
Registration is changing. Visit our website for details ucdenver.edu/registration.

CHEM 4538 - Physical Chemistry II Laboratory

Summer 2010 Registration **CHEM 4538**

Instruction in the experimental techniques of physical chemistry with emphasis on quantum chemistry, spectroscopy and chemical kinetics. Prereq: CHEM 4518; Coreq: CHEM 4521. **Semester Hours:** 2to 2
Registration is changing. Visit our website for details ucdenver.edu/registration.

CHEM 4700 - Environmental Chemistry

Summer 2010 Registration **CHEM 4700**

A discussion of the sources, reactions, transport, effects, and fates of chemical species in the water, soil, and air environments. Prereq: CHEM 3111 or 3411. Cross-listed with CHEM 5700. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CHEM 4810 - General Biochemistry I

Summer 2010 Registration **CHEM 4810**

Topics include structure, conformation, and properties of proteins; enzymes, mechanisms and kinetics; carbohydrates, lipids and membranes, and energetics. Prereq: CHEM 3421 or 3491. Cross-listed with CHEM 5810. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CHEM 4820 - General Biochemistry II

Summer 2010 Registration **CHEM 4820**

Topics include biosynthesis and metabolism of carbohydrates, lipids and amino acids, information processing. Note: continuation of CHEM 4810. Prereq: CHEM 4810. Cross-listed with CHEM 5820. **Semester Hours:** 3to 3 **When Offered:** *SPRING*
Registration is changing. Visit our website for details ucdenver.edu/registration.

CHEM 4828 - Biochemistry Lab

Summer 2010 Registration **CHEM 4828**

Focuses on modern laboratory techniques for biochemical research, with an emphasis on methods for protein isolation, purification, and identification. Students perform experiments involving (but not limited to) chromatography, electrophoresis, spectrophotometry, and protein activity assays. Prereq: CHEM 3810 or 4810. **Semester Hours:** 2to 2

Registration is changing. Visit our website for details ucdenver.edu/registration.

CHEM 4835 - Biochemistry of Cancer

Summer 2010 Registration **CHEM 4835**

Explores the biochemical aspects of cancer causation and treatment. Topics include DNA and protein damage, oncogenes and tumor suppressors, the chemistry of chemotherapeutic agents, and the mechanisms of resistance to anticancer drugs. Prereq: CHEM 3810, 4810, or 5810. Cross-listed with CHEM 5835. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CHEM 4840 - Independent Study: Chem

Summer 2010 Registration **CHEM 4840**

Prereq: Permission of instructor required. **Semester Hours:** 1to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

CHEM 5010 - Advanced Inorganic Chemistry

Summer 2010 Registration **CHEM 5010**

Covers the fundamental principles of inorganic chemistry. Topics include atomic structure and periodicity, molecular symmetry, bonding, structural chemistry, main-group chemistry, coordination chemistry, and organometallic chemistry. Prereq: CHEM 3011 and CHEM 4521 or equivalent, or permission of instructor. **Semester Hours:** 4to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

CHEM 5071 - RM-MSMSP: Atoms and Properties of Matter

Summer 2010 Registration **CHEM 5071**

Systematic study of the structure of the atom, how atoms interact to form bonds, how matter behaves at the molecular level, the periodic table, and the macroscopic properties of matter. Concepts are linked to other scientific, mathematical, societal, and pedagogical domains. This course is not applicable toward any degree in the College of

Liberal Arts and Sciences. Prereq: Permission of project director. **Semester Hours:** 4to 4
Registration is changing. Visit our website for details ucdenver.edu/registration.

CHEM 5072 - RM-MSMSP: Interactions of Elements and Compounds

Summer 2010 Registration **CHEM 5072**

Systematic study of solubility (physical and chemical properties of solutions and the chemistry of acids, bases, pH, and buffer solutions), oxidation or reduction reactions, reaction energetics (thermodynamics and kinetics), and applications of chemistry to environmental, biochemical, and nutritional problems. Concepts are linked to other scientific, mathematical, societal, and pedagogical domains. This course is not applicable toward any degree in the College of Liberal Arts and Sciences. Prereq: CHEM 5071 (or equivalent) and permission of project director. **Semester Hours:** 4to 4
Registration is changing. Visit our website for details ucdenver.edu/registration.

CHEM 5110 - Advanced Analytical Chemistry

Summer 2010 Registration **CHEM 5110**

Explores the fundamental principles of analytical chemistry. Topics will focus on meteorology (the science of making measurements), measurements based on energy transfer (e.g. spectroscopic analysis), and measurements based on mass transfer (e.g. chemical separations and electrochemistry). Prereq: Undergraduate instrumental analysis or equivalent. **Semester Hours:** 4to 4
Registration is changing. Visit our website for details ucdenver.edu/registration.

CHEM 5130 - Surface Analytical Techniques

Summer 2010 Registration **CHEM 5130**

Surveys widely used techniques for surface analysis, including thermal desorption, mass spectrometry, X-ray photoelectron spectroscopy, and surface electrochemistry. Applications to catalyst and organic or biological surfaces are included. Prereq: CHEM 4121 or equivalent. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CHEM 5250 - Chemometrics: Data Analysis

Summer 2010 Registration **CHEM 5250**

Provides chemists and environmental scientists with the basic statistical skills for effective data analysis and experimental design. Minimal theoretical detail is provided; practical applications and graphical techniques are emphasized. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CHEM 5310 - Advanced Organic Chemistry

Summer 2010 Registration **CHEM 5310**

An exploration of structure, bonding and reactivity in organic modules that includes extensive analysis of the chemical literature, culminating in written and seminar presentations of individual projects. Prereq: CHEM 3421 and 4521. **Semester Hours:** 4to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

CHEM 5510 - Computational Chemistry

Summer 2010 Registration **CHEM 5510**

Classical and ab initio molecular dynamics are covered from theory to application. Students have access to high-performance computational resources and cover current topics in the field. Prereq: CHEM 4521 or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CHEM 5520 - Molecular Structure and Spectra

Summer 2010 Registration **CHEM 5520**

Applies quantum mechanics to the understanding of molecular structure and spectroscopy. Prereq: CHEM 4521. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CHEM 5530 - Advanced Physical Chemistry

Summer 2010 Registration **CHEM 5530**

Explores fundamental properties of molecules (bond length and strength, the potential energy surface, reaction rates, etc.) and examines how these properties are measured, using original literature as the primary source, and culminating in written and seminar presentations of individual projects. Prereq: CHEM 4511, 4521 and 4538 or equivalent. **Semester Hours:** 4to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

CHEM 5550 - Applications of Group Theory in Chemistry

Summer 2010 Registration **CHEM 5550**

Introduces the basic principles of the group theoretical method as well as its applications in organic, inorganic, and physical chemistry. Covers Mo's for main-group and transition metal compounds, ligand field theory, molecular vibrations, and electron absorption spectroscopy. Prereq: CHEM 4521 or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CHEM 5600 - Topics in Chemistry

Summer 2010 Registration **CHEM 5600**

Note: Topics vary from year to year. Prereq: Graduate standing. **Semester Hours:** 1to 6
Registration is changing. Visit our website for details ucdenver.edu/registration.

CHEM 5700 - Environmental Chemistry

Summer 2010 Registration **CHEM 5700**

A discussion of the sources, reactions, transport, effects, and fates of chemical species in the water, soil and air environments. Prereq: CHEM 3111, 3411, and graduate standing. Cross-listed with CHEM 4700. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CHEM 5710 - Air Pollution Chemistry

Summer 2010 Registration **CHEM 5710**

Chemical processes occurring in the atmosphere are discussed. Includes application to air pollution problems, including urban air pollution, air quality standards, non-urban air pollution, acid deposition, and stratospheric pollution. Prereq: CHEM 4521 or 4700. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CHEM 5720 - Atmospheric Sampling and Analysis

Summer 2010 Registration **CHEM 5720**

Fundamentals of environmental sampling specifically applied to the atmosphere are discussed. Includes a variety of techniques for the measurement of monitoring gaseous, semi-volatile and particulate air pollutants, techniques for the measurement of criteria pollutants, chemical and physical measurements of particulate and air toxins. Prereq: CHEM 4700 or CHEM 5710 or permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CHEM 5810 - General Biochemistry I

Summer 2010 Registration **CHEM 5810**

Topics include structure, conformation, and properties of proteins; enzymes, mechanisms and kinetics; carbohydrates, lipids and membranes, and energetics. Prereq: CHEM 3421 or 3491. Cross-listed with CHEM 4810. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CHEM 5820 - General Biochemistry II

Summer 2010 Registration **CHEM 5820**

Topics include biosynthesis and metabolism of carbohydrates, lipids and amino acids, information processing. Note: Continuation of CHEM 5810. Prereq: CHEM 5810. Cross-

listed with CHEM 4820. **Semester Hours:** 3to 3 **When Offered:** *SPRING*
Registration is changing. Visit our website for details ucdenver.edu/registration.

CHEM 5835 - Biochemistry of Cancer

Summer 2010 Registration **CHEM 5835**

Explores the biochemical aspects of cancer causation and treatment. Topics include DNA and protein damage, oncogenes and tumor suppressors, the chemistry of chemotherapeutic agents, and the mechanisms of resistance to anticancer drugs.

Prereq: CHEM 3810, 4810, or 5810. Cross-listed with CHEM 4835. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CHEM 5840 - Independent Study

Summer 2010 Registration **CHEM 5840**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CHEM 5939 - Cooperative Education

Summer 2010 Registration **CHEM 5939**

Semester Hours: 1to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

CHEM 5950 - Master's Thesis

Summer 2010 Registration **CHEM 5950**

Semester Hours: 1to 8

Registration is changing. Visit our website for details ucdenver.edu/registration.

CHEM 6000 - Chemistry Seminar

Summer 2010 Registration **CHEM 6000**

Faculty and student presentations of CU-Denver research projects and other current chemistry topics. Note: All chemistry students are encouraged to attend, but credit is given only to those who present seminars. Prereq: Graduate standing. **Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CHEM 6001 - Master's Research Seminar

Summer 2010 Registration **CHEM 6001**

Students present a formal seminar to the department describing their master's research

work. Note: Required for all students completing a thesis-based master's degree; optional for those completing master's projects. Prereq: Participation in master's thesis or project research; CHEM 6000.**Semester Hours:** 1to 1
Registration is changing. Visit our website for details ucdenver.edu/registration.

CHEM 6002 - Chemistry Seminar I

Summer 2010 Registration **CHEM 6002**

The art of listening to and giving a chemistry seminar. Introduces the chemical literature, the pedagogical techniques of seminar giving, and the critical thinking skills required to understand a technical presentation. Note: Seminar presentations by faculty, outside speakers, and advanced graduate students are analyzed by the students participating in the course. Prereq: Graduate standing.**Semester Hours:** 1to 1
Registration is changing. Visit our website for details ucdenver.edu/registration.

CHEM 6003 - Chemistry Seminar II

Summer 2010 Registration **CHEM 6003**

Students prepare and give a chemical seminar based on a literature paper. Note: Seminar presentations by students and outside speakers are analyzed by students in the course. Prereq: Graduate standing.**Semester Hours:** 1to 1
Registration is changing. Visit our website for details ucdenver.edu/registration.

CHEM 6840 - Independent Study: Chem

Summer 2010 Registration **CHEM 6840**

Semester Hours: 1to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

CHEM 6950 - Master's Thesis

Summer 2010 Registration **CHEM 6950**

Semester Hours: 1to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

CHEM 6960 - Master's Report

Summer 2010 Registration **CHEM 6960**

Semester Hours: 1to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

CHIN 1010 - Beginning Chinese I

Summer 2010 Registration **CHIN 1010**

A basic introduction to Chinese language and culture. Students study pronunciation, vocabulary, grammar and simple writing techniques. Note: Students may not enroll in any lower division (1000/2000) language skills course in which their level of proficiency exceeds that of the course. Students placing into a course through any means other than following the regular sequence must consult with an appropriate faculty member of the Dept. of Modern Languages prior to enrollment. No previous study of Chinese is required. **Semester Hours:** 5 to 5

Registration is changing. Visit our website for details ucdenver.edu/registration.

CHIN 1020 - Beginning Chinese II

Summer 2010 Registration **CHIN 1020**

(Continuation of CHIN 1010.) Further practice of pronunciation, study of vocabulary, grammar, and simple writing techniques. Note: Students may not enroll in any lower division (1000/2000) language skills course in which their level of proficiency exceeds that of the course. Students placing into a course through any means other than following the regular sequence must consult with an appropriate faculty member of the Dept. of Modern Languages prior to enrollment. Prereq: CHIN 1010. **Semester Hours:** 5 to 5

Registration is changing. Visit our website for details ucdenver.edu/registration.

CHIN 1071 - Mandarin Chinese for the Professions

Summer 2010 Registration **CHIN 1071**

Provides students with language skills and cultural knowledge in the context of conducting business with Chinese. Students develop elementary language skills for communication, cultural awareness and business etiquette via structured thematic units with business scenarios and simulations. Note: Chinese 1071 cannot be taken to fulfill language requirements; nor can it be used to substitute for Chinese 1010. **Semester Hours:** 3 to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CHIN 1111 - Freshman Seminar

Summer 2010 Registration **CHIN 1111**

Semester Hours: 1 to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CHIN 2110 - Second Year Chinese I

Summer 2010 Registration **CHIN 2110**

Continuing development of listening, speaking, reading, and writing skills in practical Chinese, with grammar review and introduction of the Chinese dictionary. In addition to

contemporary Chinese, there is some emphasis on Chinese classical materials, such as proverbs. Note: Students may not enroll in any lower division (1000/2000) language skills course in which their level of proficiency exceeds that of the course. Students placing into a course through any means other than following the regular sequence must consult with an appropriate faculty member of the Dept. of Modern Languages prior to enrollment. Prereq: CHIN 1020.**Semester Hours:** 5to 5
Registration is changing. Visit our website for details ucdenver.edu/registration.

CHIN 2120 - Second Year Chinese II

Summer 2010 Registration **CHIN 2120**

(Continuation of CHIN 2110.) Satisfies the fourth semester language requirement at most graduate schools. Note: Students may not enroll in any lower division (1000/2000) language skills course in which their level of proficiency exceeds that of the course. Students placing into a course through any means other than following the regular sequence must consult with an appropriate faculty member of the Dept. of Modern Languages prior to enrollment. Prereq: CHIN 2110.**Semester Hours:** 5to 5
Registration is changing. Visit our website for details ucdenver.edu/registration.

CHIN 2840 - Independent Study

Summer 2010 Registration **CHIN 2840**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CHIN 2939 - Internship/Cooperative Education

Summer 2010 Registration **CHIN 2939**

Experiences involving application of specific, relevant concepts and skills in supervised employment situations. Prereq: 15 hours of 2.75 GPA.**Semester Hours:** 1to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CHIN 2970 - Contemporary Chinese Cinema

Summer 2010 Registration **CHIN 2970**

Introduces students to Chinese cinema, one of the most powerful and often controversial modes of representing society, culture, history and politics in China. Note: Taught in English. All films have English subtitles. No previous study of Chinese language or culture is required.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CHIN 3300 - Special Topics on Chinese Film

Summer 2010 Registration **CHIN 3300**

Studies the cultural, social and historical conditions that have shaped Chinese cinema. May focus on one Chinese speaking country or more than one (including but not limited to China, Taiwan and Hong Kong). May focus on a particular period (pre-Cultural revolution, for example) or a particular theme (urban cinema or martial arts films, for example). **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CHIN 3840 - Independent Study: CHIN

Summer 2010 Registration **CHIN 3840**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CHIN 3995 - Travel Study

Summer 2010 Registration **CHIN 3995**

A travel study abroad course to one or more Chinese speaking countries. Topics of the course will vary depending on the instructor, sites visited and focus of the course. Topics may include intensive language training, film studies, contemporary issues, literary and cultural studies, etc. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CLAS 1020 - Introduction to Career Planning

Summer 2010 Registration **CLAS 1020**

Introduces an integrative career planning process that fosters an in-depth understanding of individual interests, personality, skills and values which serves as a foundation for choosing satisfying majors and careers. Students research career options and develop a career plan. Topics include changing workforce, employability skills and current workplace trends. **Semester Hours:** 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

CLAS 1100 - American Ways: Communication, Culture, and the Classroom

Summer 2010 Registration **CLAS 1100**

Provides an introduction to U.S. cultural issues. Geared specifically for foreign students, this course serves to orient students to the social and historical milieu in which they will be functioning while pursuing their degree. Although the focus is on the U.S., the subject matter is to serve as a vehicle for cross-cultural analysis. **Semester Hours:** 2to 2

Registration is changing. Visit our website for details ucdenver.edu/registration.

CLAS 1111 - Freshman Seminar

Summer 2010 Registration **CLAS 1111**

An academic course for entering freshmen, taught under a controlled enrollment environment to promote student faculty interaction and critical thinking skills. An ancillary function is to provide students with academic proficiencies necessary for success in a liberal arts baccalaureate program. **Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CLAS 2939 - Cooperative Education

Summer 2010 Registration **CLAS 2939**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CLAS 3020 - Education, Mentoring, and Leadership

Summer 2010 Registration **CLAS 3020**

Introduces challenges in and tools for addressing issues of mentoring and leadership in school settings. Students are required to think about various needs, origins, moral dilemmas, requirements, and techniques of mentoring and leadership with students and work to develop mentoring skills for application in schools. **Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CLAS 3100 - Perspectives on Teaching

Summer 2010 Registration **CLAS 3100**

Introduces major concepts in education; e.g., characteristics of schools, students, the roles of teachers, voices that influence education, innovations in education, and the teaching responsibilities that future teachers are expected to assume. Prereq: An education internship. **Semester Hours:** 2to 2

Registration is changing. Visit our website for details ucdenver.edu/registration.

CLAS 3935 - Outward Bound

Summer 2010 Registration **CLAS 3935**

The University of Colorado at Denver offers college credit for Colorado Outward Bound School programs. COBS promotes education, service, and personal growth through wilderness experience. COBS offers courses in a variety of locations that span the canyons, rivers, and mountains of Colorado and the West. **Semester Hours:** 1to 10

Registration is changing. Visit our website for details ucdenver.edu/registration.

CLAS 3939 - Cooperative Education

Summer 2010 Registration **CLAS 3939**

Semester Hours: 1to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

CLAS 4840 - Independent Study: CLAS

Summer 2010 Registration **CLAS 4840**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CNST 1000 - China and the Chinese

Summer 2010 Registration **CNST 1000**

A multidisciplinary introduction to Chinese society both past and present. Prehistory, birth of imperial China, literature, philosophy, religion, nationalism, revolution, modernization, contemporary life, social structure, gender, food, family life, population policy, ethnicity, popular culture, economics and politics. Note: This course is taught in English. **Semester Hours:** 3to 3 **GT Pathways Category Key:** GT-AH1

Registration is changing. Visit our website for details ucdenver.edu/registration.

CNST 4000 - Senior Seminar in Chinese Studies

Summer 2010 Registration **CNST 4000**

Capstone course in the Chinese studies program in which students design and carry out independent research projects on topics of their choice. Prereq: CNST 1000 and 15 hours in Chinese studies. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 1011 - Fundamentals of Communication

Summer 2010 Registration **CMMU 1011**

Studies communication theory and application. Topics include communication models, interpersonal communication and the concept of self, nonverbal communication, message preparation and analysis, and decision making. **Semester Hours:** 3to 3 **GT Pathways Category Key:** GT-SS3

Pathways Category Key: GT-SS3

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 1021 - Fundamentals of Mass Communication

Summer 2010 Registration **CMMU 1021**

Studies relationships among television, radio, newspapers, magazines and society. Examines the effects of exposure to mass media, mass media ownership and control, mass media law, technical aspects of message and program production, and

delivery.**Semester Hours:** 3to 3**GT Pathways Category Key:** GT-SS3
Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 1051 - Topics in Communication

Summer 2010 Registration **CMMU 1051**

Special classes for faculty-directed experiences examining communication issues and problems not generally covered in the curriculum.**Semester Hours:** 1to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 1111 - Freshman Seminar

Summer 2010 Registration **CMMU 1111**

Semester Hours: 1to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 2020 - Communication and Citizenship

Summer 2010 Registration **CMMU 2020**

Offers an introduction to debates about, and the different means of practicing, citizenship in America.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 2041 - Interpersonal Communication

Summer 2010 Registration **CMMU 2041**

Focuses on the theory and development of interpersonal relationships. Issues covered include the communication process, self versus others, self-esteem, person perception, the attraction process, nonverbal communication, relationship development and family communication.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 2050 - Business and Professional Speaking

Summer 2010 Registration **CMMU 2050**

Development of communication skills often used in business and professional settings, with an emphasis on various kinds of presentations.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 2101 - Presentational Speaking

Summer 2010 Registration **CMMU 2101**

Theory and practice of presentational speaking in a variety of contexts to accomplish goals of asserting individuality, building community, securing adherence, discovering

knowledge and belief, and offering perspectives. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 2800 - Technology for Workplace Communication

Summer 2010 Registration **CMMU 2800**

Provides students with skills necessary to apply computer technologies that are currently used in the workplace. Topics include the Internet and software applications in advanced work processing, presentations, spreadsheets and databases. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 2939 - Cooperative Education

Summer 2010 Registration **CMMU 2939**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 3120 - Technical Communication

Summer 2010 Registration **CMMU 3120**

Develops students' abilities to prepare and communicate information in diverse media, including written, spoken, graphic and electronic. Technical communication focuses on communication used on the job as opposed to communication in academic settings. Students prepare communications in response to real-world cases and demonstrate the integration of communication through these different media. Prereq: ENGL 1020. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 3271 - Communication and Diversity

Summer 2010 Registration **CMMU 3271**

Explores the complexities of communication across diverse identities such as race, ethnicity, and gender. Course attempts to seek solutions via sharing meaning and discovering common ground. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 3620 - Television Production

Summer 2010 Registration **CMMU 3620**

Introduces basic television production principles, practices, techniques and equipment. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 3650 - Mass Communication and Society

Summer 2010 Registration **CMMU 3650**

Examines the forms, extent, uses, effects, potentials, and problems of mass media and their relation to American society. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 3680 - Mass Communication Skills

Summer 2010 Registration **CMMU 3680**

Instruction in writing and editing skills associated with the production of print, radio, television and film. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 3840 - Independent Study

Summer 2010 Registration **CMMU 3840**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 3939 - Internship/Cooperative Education

Summer 2010 Registration **CMMU 3939**

Applies communication or technical communication concepts and skills in supervised employment situations. Prereq: Junior standing and 2.75 GPA. **Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 4011 - Research Methods: Quantitative

Summer 2010 Registration **CMMU 4011**

Examines quantitative techniques used by researchers in communication, including laboratory research, field and survey research, content analysis, and interaction analysis. Objective of the course is to give students enough background to read critically in the social sciences. Cross-listed with COMM 5011. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 4015 - Communication and Civility

Summer 2010 Registration **CMMU 4015**

Examines the central role of communication in the creation of a civil and humane society. The definition, understanding, and practices of civility in public discourse and in professional, social, and personal relationships are explored. Film, literature, music, and other texts are utilized to illustrate key concepts and serve as catalysts for

discussion.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 4020 - Feminist Perspectives on Communication

Summer 2010 Registration **CMMU 4020**

Introduces the communication theories of major feminist theorists such as Mary Daly, Bell Hooks, and Sonia Johnson, with a focus on how their theories challenge and transform current understandings of communication. Cross-listed with COMM

5020.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 4021 - Perspectives on Rhetoric

Summer 2010 Registration **CMMU 4021**

Introduces major theories of rhetoric from classical through contemporary times, including the theories of Aristotle, Cicero, I. A. Richards, Kenneth Burke, Michel Foucault and Jurgen Habermas. Cross-listed with COMM 5021.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 4022 - Critical Analysis of Communication

Summer 2010 Registration **CMMU 4022**

Surveys research methods used to analyze messages from rhetorical and critical perspectives. Cross-listed with COMM 5022.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 4031 - Perspectives on Communication

Summer 2010 Registration **CMMU 4031**

Overview of major theories and literature in the communication field that serve as the foundation for the study of communication.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 4040 - Communication, Prisons, and Social Justice

Summer 2010 Registration **CMMU 4040**

Examines the U.S. prison-industrial complex and enables students to envision ways of reducing crime and improving democracy by engaging in community service. Note: This course fulfills the communication department's exit class requirement. Prereq: COMM 2020, or permission of instructor. Cross-listed with COMM 5040.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 4041 - Theories and Methods in Interpersonal Communication

Summer 2010 Registration **CMMU 4041**

Examines theories and methods used in interpersonal communication and the role of communication in the development, maintenance, and deterioration of personal relationships. Attention is also given to major types of personal relationships, such as marriage and friendship, and how communication reflects and determines the dynamics of those relationships. Cross-listed with COMM 5041. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 4045 - Female-Male Friendships

Summer 2010 Registration **CMMU 4045**

Explores friendships between women and men across the life cycle and the role of communication in those friendships. Topics include how such friendships impact self-concepts, advantages of female-male friendships, and barriers to female-male friendships. Cross-listed with COMM 5045. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 4111 - Theories of Leadership

Summer 2010 Registration **CMMU 4111**

Examines research and applications related to the major theories of leadership. Emphasizes a critical reading of research confirming or denying various theories, and stresses the historical development of theories of leadership behavior and characteristics. Cross-listed with COMM 5111. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 4120 - Writing Technical Reports

Summer 2010 Registration **CMMU 4120**

Studies various aspects of technical reports, including the theoretical applications behind making reports persuasive. Topics include informal and formal reports, progress reports, feasibility reports, empirical reports and recommendation reports. Prereq: COMM 3120. Cross-listed with COMM 5120. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 4130 - User Interface Design and Analysis

Summer 2010 Registration **CMMU 4130**

Introduces graphical user interface design through analysis of empirical studies and hands-on application of human-computer interaction principles. Prereq: COMM 3120.

Cross-listed with COMM 5130. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 4140 - Argumentation

Summer 2010 Registration **CMMU 4140**

Examines classical through contemporary theories, with special attention to types of propositions, burden of proof, analysis of issues, evidence, reasoning, fallacies, case construction, refutation and ethics. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 4151 - Group Communication

Summer 2010 Registration **CMMU 4151**

Analysis of the impact of small groups on individual behavior in social and task settings. Focuses on the dynamics of small groups, including leadership, roles, norms, goals and cohesion. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 4200 - Persuasion

Summer 2010 Registration **CMMU 4200**

Examines influence and communication at individual, group, organizational and societal levels. a theoretical and applied analysis of persuasion, including examination of public opinion, individual attitudes, beliefs, values, sources, credibility, ethics, and certain message and audience variables. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 4210 - Communication and Discourse Analysis

Summer 2010 Registration **CMMU 4210**

Examines the structural and functional factors affecting the formation, comprehension, and retention of speech. Topics include language norms, speech acts, implicature and meaning, and the analysis of conversations. Cross-listed with COMM 5210. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 4212 - Software Documentation

Summer 2010 Registration **CMMU 4212**

Covers all aspects of software documentation, including project management, audience/use analysis, document design, organization, writing and interviewing techniques, editing, production, and diagnostic and usability testing. Prereq: Previous technical writing course, industry experience, or permission of instructor. Cross-listed

with COMM 5212. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 4215 - Ethics in Communication

Summer 2010 Registration **CMMU 4215**

Designed to help students identify and address the daily ethical challenges that occur in private, social, and professional contexts. Focus is on recognizing, analyzing, and resolving real-world ethical dilemmas using diverse approaches to ethical decision making. Cross-listed with COMM 5215. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 4220 - Human Information Processing

Summer 2010 Registration **CMMU 4220**

Considers the formation of attitude, mental set, and perception as a response to discourse organization. Examines several methods to analyze human responses to linguistic, graphic, and mathematical/statistical representations. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 4221 - Research Methods: Qualitative

Summer 2010 Registration **CMMU 4221**

Applies qualitative research methods to human communication practices, including the processes of designing qualitative studies, collecting data, analyzing and interpreting data, and reporting results. Cross-listed with COMM 5221. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 4222 - Professional Communication

Summer 2010 Registration **CMMU 4222**

Provides strategies for analyzing workplace situations, constructing clear and persuasive arguments and narratives to bring about positive change in organizations, and assessing the effectiveness of communication. Prereq: COMM 3120, industry experience or permission of instructor. Cross-listed with COMM 5222. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 4230 - Nonverbal Communication

Summer 2010 Registration **CMMU 4230**

Studies nonverbal behaviors that accompany or replace verbal communication, including macrospace, proxemics, kinesics, facial expression, eye contact, gestures, vocal characteristics, touch and personal adornment. Cross-listed with COMM 5230. **Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 4240 - Organizational Communication

Summer 2010 Registration **CMMU 4240**

Relationships among such communication factors as flow, media, channel, diversity, information delivery and organization functioning, morale, and productivity. Cross-listed with COMM 5240. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 4245 - Advanced Organizational Communication

Summer 2010 Registration **CMMU 4245**

Explores critical theoretical perspectives on communication in complex organizations, including issues and standpoints that have not been included in mainstream theory and research. Analyzes assumptions and pragmatic solutions associated with these theories. Cross-listed with COMM 5245. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 4255 - Negotiations and Bargaining

Summer 2010 Registration **CMMU 4255**

Designed to allow students to study theories and apply concepts that explain the influences of various forms of mediating, reducing, and/or resolving conflict among individuals, groups, organizations, nations and cultures. Cross-listed with COMM 5255. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 4260 - Communication and Conflict

Summer 2010 Registration **CMMU 4260**

Studies the influence of communication on intrapersonal, interpersonal, intragroup and intergroup conflict situations. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 4262 - Mediation

Summer 2010 Registration **CMMU 4262**

Explores theoretical and practical aspects of mediation in a variety of contexts ranging from divorce mediation to labor-management disputes. Cross-listed with COMM 5262. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 4265 - Gender and Communication

Summer 2010 Registration **CMMU 4265**

Explores the relationship between gender and communication, including how language treats women and men differently and verbal and nonverbal differences in women's and men's communication. Cross-listed with COMM 5265. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 4268 - Communication and Diversity in U.S. History

Summer 2010 Registration **CMMU 4268**

Explores issues of diversity and community in the construction of U.S. culture. Emphasis on legal and historical texts that codify or challenge majoritarian notions of difference and systems of social control. Cross-listed with COMM 5268. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 4270 - Intercultural Communication

Summer 2010 Registration **CMMU 4270**

Examines the philosophy, process, problems, and potentials unique to communication across cultural boundaries. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 4275 - Family Communication

Summer 2010 Registration **CMMU 4275**

Explores family communication processes in traditional and nontraditional families through examination of theories and research on the family. Topics include conflict, family secrets, decision decision-making, and practical guidelines for improved communication in families. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 4280 - Communication and Change

Summer 2010 Registration **CMMU 4280**

Examines the role of communication in change processes of various kinds, including social change and diffusion of innovations. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 4282 - Environmental Communication

Summer 2010 Registration **CMMU 4282**

Studies the communication processes involved in policies and practices affecting natural

and human environments. Cross-listed with COMM 5282. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 4285 - Communication Processes in Technology Transfer

Summer 2010 Registration **CMMU 4285**

Surveys research addressing technology transfer processes. Students examine and critique models of technology transfers and the role of individuals, artifacts, and small teams in technology transfers. Cross-listed with COMM 5285. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 4290 - Web Design

Summer 2010 Registration **CMMU 4290**

Covers writing web pages in HTML, beginning Photoshop, style sheets, bitmapped animations, issues of usable layout, navigability, structure, typography, and color on the web. Projects require students to develop static web sites. Prereq: COMM 3120 or permission of instructor. Cross-listed with COMM 5290. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 4300 - Multimedia Authoring

Summer 2010 Registration **CMMU 4300**

Analysis and evaluation of components of multimedia development and hands-on instruction featuring computer animation for advertising, training, and educational projects. Cross-listed with COMM 5300. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 4310 - Advanced Multimedia Authoring

Summer 2010 Registration **CMMU 4310**

Builds upon the fundamentals of multimedia authoring to develop advanced skills and theory. Students concentrate on developing advanced multimedia applications for education or industry. Prereq: COMM 4300, COMM 5300, previous multimedia experience, or permission of instructor. Cross-listed with COMM 5310. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 4320 - Content Management

Summer 2010 Registration **CMMU 4320**

Centers on large-scale documentation development using XML. Students learn "Single-source" documentation management, a cost-effective way to centralize information and extend it across different platforms and different audiences. Prereq: COMM 4290,

COMM 5290 or permission of instructor. Cross-listed with COMM 5320.**Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 4330 - Dynamic Web Design Workshop

Summer 2010 Registration **CMMU 4330**

Introduces large-scale website development using XML and PHP. Students learn "Single-source" documentation management, a cost-effective way to centralize information and extend it across different platforms (wireless, browsers, help files) and audiences (specialists, managers, customers). Note: Independently taught modules may be taken separately or concurrently. Prereq: COMM 4290, 5290 or knowledge of HTML, CSS, and Photoshop. Cross-listed with COMM 5330.**Semester Hours: 1to 1**
Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 4340 - Advanced Web Design

Summer 2010 Registration **CMMU 4340**

Focuses on user interface design for the World Wide Web using Dynamic HTML, pre-designed CGI scripts downloadable from the Web, animated vector and bitmapped graphics. Note: continuation of COMM 4290, 5290. Prereq: COMM 4290, 5290 or knowledge of HTML, CSS, and Photoshop. Cross-listed with COMM 5340.**Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 4410 - Science Writing

Summer 2010 Registration **CMMU 4410**

An intensive practice in composing for diverse science publication genres and venues and practice in analyzing the ways consumers obtain and process information about scientific developments and controversies. Prereq: at least one writing or composition course at the 3000 level or above. Cross-listed with COMM 5410.**Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 4500 - Health Communication

Summer 2010 Registration **CMMU 4500**

Examines the role of communication in a wide range of health contexts. Topics include cultural constructions of health and illness, public health communication campaigns, client-provider interactions, telemedicine, community-based health programs and medical journalism. Cross-listed with COMM 5500.**Semester Hours: 3to 3**
Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 4510 - Usability Testing

Summer 2010 Registration **CMMU 4510**

Teaches students how to evaluate technical documentation testing needs, evaluate testing options for their feasibility and costs/benefits, design and carry out a usability testing plan, evaluate and write up test results for actual client documents and products.

Prereq: COMM 3120 or permission of instructor. Cross-listed with COMM

5510. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 4605 - Rhetorical Theory for Technical Communication

Summer 2010 Registration **CMMU 4605**

Examines the principles of rhetorical theory and its relationship to technical communication. Students analyze traditional and contemporary rhetorical theories and apply them to contemporary issues of document design. Prereq: COMM 3120, COMM 3650, COMM 4021, COMM 4120, COMM 4200, COMM 4240, COMM 4215, or permission of instructor. Cross-listed with COMM 5605. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 4620 - Health Risk Communication

Summer 2010 Registration **CMMU 4620**

Acquaints students with contemporary theory, research, and practice in health risk communication. Prereq: COMM 3120, COMM 4011, COMM 4200, COMM 4500, or permission of instructor. Cross-listed with COMM 5620, HBSC 4620, HBSC 5620, and ENVS 5620. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 4621 - Visual Communication

Summer 2010 Registration **CMMU 4621**

Explores the social, cultural, and behavioral effects of visual images in a variety of contexts, including graffiti, film, advertising, art and architecture. Cross-listed with COMM 5621. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 4635 - Principles of Public Relations

Summer 2010 Registration **CMMU 4635**

Introduces theory and practice in the field of public relations, including topics such as effects upon society, public opinion, target audiences, adaptation to the media, uses,

laws and ethics. Cross-listed with COMM 5635. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 4640 - Advanced Public Relations

Summer 2010 Registration **CMMU 4640**

Examines key public relations practices in private, not-for-profit and public sectors. Strategic planning processes, research methods, evaluation, reports, and collateral development are addressed, with an emphasis on the intersection of theory and practice. Prereq: COMM 4635. Cross-listed with COMM 5640. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 4665 - Principles of Advertising

Summer 2010 Registration **CMMU 4665**

Provides a fundamental understanding and appreciation of advertising in today's global society, including consumer motivation, buying behavior, research, creative development and media planning. Cross-listed with COMM 5665. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 4680 - Mass Communication Law and Policy

Summer 2010 Registration **CMMU 4680**

Covers issues of mass communication and the law and ethics, including issues of the First and Fourth Amendments, communication regulations, intellectual property, public access and obscenity. Cross-listed with COMM 5680. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 4681 - Communication Issues in Trial Court Practices and Processes

Summer 2010 Registration **CMMU 4681**

Introduces students to communication and language research aimed at improving the fairness, reliability, and validity of court and judicial processes, including lawyer-client interviews, interrogatories, jury selection, jury instructions, witness examination, and the use of language evidence in court. Prereq: ENGL 2030 or equivalent. Cross-listed with COMM 5681. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 4682 - Political Communication

Summer 2010 Registration **CMMU 4682**

Examines the communication processes involved in mediated political events. Topics include the stages of the campaign process, media coverage of the political campaign process, and literacy skills needed to understand political advertising. **Semester Hours:**

3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 4683 - Media in the Courtroom

Summer 2010 Registration **CMMU 4683**

Critically examines the complex issues raised by media involvement in criminal court cases, including effects of pre-trial publicity, cameras in the courtroom, participants who argue their stories to the media, the CSI effect, and other phenomena relevant to media influence. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 4688 - Senior Seminar: Transitioning from College to Career

Summer 2010 Registration **CMMU 4688**

Synthesis experience for communication majors designed to prepare students to enter the job market and to integrate and reflect on their experience in communication. Prereq: Communication major status. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 4690 - Applied Communication

Summer 2010 Registration **CMMU 4690**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 4710 - Topics in Communication

Summer 2010 Registration **CMMU 4710**

Special classes for faculty-directed experiences examining communication issues and problems not generally covered in the curriculum. Cross-listed with COMM

5710. **Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 4750 - Legal Reasoning and Writing

Summer 2010 Registration **CMMU 4750**

Introduces the fundamentals of legal reasoning and legal argumentation through intensive class discussion, formal debate and writing. Attention is given to the relationship between case and statutory law and their application in trial and appeals courts in the United States. Prereq: ENGL 1020, 2030, and any one 3000-level English/writing course or COMM 3120. Cross-listed with COMM 5750, PSCI 4757, 5747. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 4755 - Universal Internet Usability

Summer 2010 Registration **CMMU 4755**

Beginning web design course that introduces students to writing websites for non-native English speakers and for users with disabilities. Students learn HTML, style sheets, basic Photoshop, layout, navigability, and usability for these groups. Prereq: COMM 3120 (or equivalent) or permission of instructor. Cross-listed with COMM

5755. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 4760 - Computer-Mediated Communication

Summer 2010 Registration **CMMU 4760**

Analysis and discussion of the nature, use, and effects of computer-mediated communication in interpersonal, work, educational, societal and international contexts. Focus is on the social aspects of computer-mediated communication rather than on specific software or hardware technologies. Prereq: COMM 2800 or permission of instructor. Cross-listed with COMM 5760. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 4805 - Graphics

Summer 2010 Registration **CMMU 4805**

Instructs technical communicators in designing information that communicates visually as well as verbally. Students focus on document design; illustration; information retrieval; desktop publishing using Quark Xpress; and working with typesetters, printers and graphic artists. Prereq: COMM 3120. Cross-listed with COMM 5805. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 4830 - Visual Principles in Technical Communication

Summer 2010 Registration **CMMU 4830**

Explores the rhetoric and usability of typography and text displays, tables and charts, data graphics, technical pictorials, page and screen layout, and other visual elements of technical communication. The course focuses on principles and research, not software training. Prereq: COMM 3120. Cross-listed with COMM 5830. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 4840 - Independent Study

Summer 2010 Registration **CMMU 4840**

Prereq: Permission of instructor. **Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 4995 - Travel Study Topics

Summer 2010 Registration **CMMU 4995**

Students study various topics in a foreign country led by a CU-Denver instructor; register through the Office of International Education. Cross-listed with COMM 5995. **Semester**

Hours: 1to 15

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 5011 - Research Methods: Quantitative

Summer 2010 Registration **CMMU 5011**

Examines quantitative techniques used by researchers in communication, including laboratory research, field and survey research, content analysis, and interaction analysis. Objective of the course is to give students enough background to read critically in the social sciences. Prereq: Undergraduates with senior standing may enroll with permission of instructor. Cross-listed with COMM 4011. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 5015 - Communication and Civility

Summer 2010 Registration **CMMU 5015**

Examines the central role of communication in the creation and humane society. The definition, understanding, and practices of civility in public discourse and in professional, social, and personal relationships are explored. Film, literature, music, and other texts are utilized to illustrate key concepts and serve as catalysts for discussion. Prereq:

Undergraduates with senior standing may enroll with permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 5020 - Feminist Perspectives on Communication

Summer 2010 Registration **CMMU 5020**

Introduces the communication theories of major feminist theorists such as Mary Daly, Bell Hooks, and Sonia Johnson, with a focus on how their theories challenge and transform current understandings of communication. Prereq: Undergraduates with senior standing may enroll with permission of instructor. Cross-listed with COMM

4020. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 5021 - Perspectives on Rhetoric

Summer 2010 Registration **CMMU 5021**

Introduces major theories of rhetoric from classical through contemporary times, including the theories of Aristotle, Cicero, I. A. Richards, Kenneth Burke, Michel Foucault and Jurgen Habermas. Prereq: Undergraduates with senior standing may enroll with permission of instructor. Cross-listed with COMM 4021. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 5022 - Critical Analysis of Communication

Summer 2010 Registration **CMMU 5022**

Surveys research methods used to analyze messages from rhetorical and critical perspectives. Prereq: Undergraduates with senior standing may enroll with permission of instructor. Cross-listed with COMM 4022. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 5025 - Philosophy of Communication

Summer 2010 Registration **CMMU 5025**

Surveys critical, epistemological, social, scientific, pedagogical, philosophical, and legal perspectives on communication, exploring the constitutive relationship between communication and knowledge formation. Students engage communication scholarship as a social activity and become acclimated to the function of a discipline in creating a professional identity. Prereq: Undergraduates with senior standing may enroll with permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 5040 - Communication, Prisons, and Social Justice

Summer 2010 Registration **CMMU 5040**

Examines the U.S. prison-industrial complex and enables students to envision ways of reducing crime and improving democracy by engaging in community service. Note: This course fulfills the communication department's exit class requirement. Prereq: COMM 2020, or permission of instructor. Cross-listed with COMM 4040. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 5041 - Theories and Methods in Interpersonal Communication

Summer 2010 Registration **CMMU 5041**

Examines theories and methods used in interpersonal communication and the role of communication in the development, maintenance, and deterioration of personal relationships. Attention is also given to major types of personal relationships, such as marriage and friendship, and how communication reflects and determines the dynamics

of those relationships. Prereq: Undergraduates with senior standing may enroll with permission of instructor. Cross-listed with COMM 4041.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 5045 - Female-Male Friendships

Summer 2010 Registration **CMMU 5045**

Explores friendships between women and men across the life cycle and the role of communication in those friendships. Topics include how such friendships impact self-concepts, advantages of female-male friendships, and barriers to female-male friendships. Prereq: Undergraduates with senior standing may enroll with permission of instructor. Cross-listed with COMM 4045.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 5111 - Theories of Leadership

Summer 2010 Registration **CMMU 5111**

Examines research and applications related to the major theories of leadership. Emphasizes a critical reading of research confirming or denying various theories, and stresses the historical development of theories of leadership behavior and characteristics. Prereq: Undergraduates with senior standing may enroll with permission of instructor. Cross-listed with COMM 4111.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 5120 - Writing Technical Reports

Summer 2010 Registration **CMMU 5120**

Studies various aspects of technical reports, including the theoretical applications behind making reports persuasive. Topics include informal and formal reports, progress reports, feasibility reports, empirical reports and recommendation reports. Prereq: COMM 5405. Undergraduates with senior standing may enroll with permission of instructor. Cross-listed with COMM 4120.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 5130 - User Interface Design and Analysis

Summer 2010 Registration **CMMU 5130**

Introduces graphical user interface design through analysis of empirical studies and hands-on application of human-computer interaction principles. Prereq: Undergraduates with senior standing may enroll with permission of instructor. Cross-listed with COMM 4130.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 5140 - Argumentation

Summer 2010 Registration **CMMU 5140**

Examines classical through contemporary theories, with special attention to types of propositions, burden of proof, analysis of issues, evidence, reasoning, fallacies, case constructions, refutation and ethics. Prereq: Undergraduates with senior standing may enroll with permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 5151 - Group Communication

Summer 2010 Registration **CMMU 5151**

Analysis of the impact of small groups on individual behavior in social and task settings. Focuses on the dynamics of small groups, including leadership, roles, norms, goals and cohesion. Prereq: Undergraduates with senior standing may enroll with permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 5210 - Communication and Discourse Analysis

Summer 2010 Registration **CMMU 5210**

Examines the structural and functional factors affecting the formation, comprehension, and retention of speech. Topics include language norms, speech acts, implicature and meaning, and the analysis of conversations. Prereq: Undergraduates with senior standing may enroll with permission of instructor. Cross-listed with COMM 4210. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 5212 - Software Documentation

Summer 2010 Registration **CMMU 5212**

Covers all aspects of software documentation, including project management, audience/use analysis, document design, organization, writing and interviewing techniques, editing, production, and diagnostic and usability testing. Prereq: Undergraduates with senior standing may enroll with permission of instructor. Previous technical writing course or industry experience. Cross-listed with COMM 4212. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 5215 - Ethics in Communication

Summer 2010 Registration **CMMU 5215**

Designed to help students identify and address the daily ethical challenges that occur in private, social, and professional contexts. Focus is on recognizing, analyzing, and

resolving real-world ethical dilemmas using diverse approaches to ethical decision making. Prereq: Undergraduates with senior standing may enroll with permission of instructor. Cross-listed with COMM 4215. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 5220 - Human Information Processing

Summer 2010 Registration **CMMU 5220**

Examines the formation of attitude, mental set, and perception as a response to discourse organization. Examines several methods to analyze human responses to linguistic, graphic, and mathematical or statistical representations. Prereq: Undergraduates with senior standing may enroll with permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 5221 - Research Methods: Qualitative

Summer 2010 Registration **CMMU 5221**

Applies qualitative research methods to human communication practices, including the processes of designing qualitative studies, collecting data, analyzing and interpreting data, and reporting results. Prereq: Undergraduates with senior standing may enroll with permission of instructor. Cross-listed with COMM 4221. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 5222 - Professional Communication

Summer 2010 Registration **CMMU 5222**

Provides strategies for analyzing workplace situations, constructing clear and persuasive arguments and narratives to bring about positive change in organizations, and assessing the effectiveness of communication. Prereq: Undergraduates with senior standing may enroll with permission of instructor. Cross-listed with COMM 4222. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 5230 - Nonverbal Communication

Summer 2010 Registration **CMMU 5230**

Studies nonverbal behaviors that accompany or replace verbal communication, including macrospace, proxemics, kinesics, facial expression, eye contact, gestures, vocal characteristics, touch and personal adornment. Prereq: Undergraduates with senior standing may enroll with permission of instructor. Cross-listed with COMM 4230. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 5240 - Organizational Communication

Summer 2010 Registration **CMMU 5240**

Relationships among such communication factors as flow, media, channel, diversity, information delivery and organization functioning, morale, and productivity. Prereq: Undergraduates with senior standing may enroll with permission of instructor. Cross-listed with COMM 4240. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 5245 - Advanced Organizational Communication

Summer 2010 Registration **CMMU 5245**

Explores critical theoretical perspectives on communication in complex organizations, including issues and standpoints that have not been included in mainstream theory and research. Analyzes assumptions and pragmatic solutions associated with these theories.

Prereq: Undergraduates with senior standing may enroll with permission of instructor.

Cross-listed with COMM 4245. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 5250 - Difference Matters and Organizational Communication

Summer 2010 Registration **CMMU 5250**

Explores theoretical and practical issues regarding relationships between communication processes in contemporary U.S. organizations and socially constructed aspects of individuals' identity (e.g., race, gender, sexual orientation, class, ability and age). Prereq: Undergraduates with senior standing may enroll with permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 5255 - Negotiations and Bargaining

Summer 2010 Registration **CMMU 5255**

Designed to allow students to study theories and apply concepts that explain the influences of various forms of mediating, reducing, and/or resolving conflict among individuals, groups, organizations, nations and cultures. Prereq: Undergraduates with senior standing may enroll with permission of instructor. Cross-listed with COMM 4255. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 5260 - Communication and Conflict

Summer 2010 Registration **CMMU 5260**

Studies the influence of communication on intrapersonal, interpersonal, intragroup and intergroup conflict situations. Prereq: Undergraduates with senior standing may enroll

with permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 5262 - Mediation

Summer 2010 Registration **CMMU 5262**

Explores theoretical and practical aspects of mediation in a variety of contexts ranging from divorce mediation to labor-management disputes. Prereq: Undergraduates with senior standing may enroll with permission of instructor. Cross-listed with COMM 4262. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 5265 - Gender and Communication

Summer 2010 Registration **CMMU 5265**

Explores the relationship between gender and communication, including how language treats women and men differently and verbal and nonverbal differences in women's and men's communication. Prereq: Undergraduates with senior standing may enroll with permission of instructor. Cross-listed with COMM 4265. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 5268 - Communication and Diversity in U.S. History

Summer 2010 Registration **CMMU 5268**

Explores issues of diversity and community in the construction of U.S. culture. Emphasis on legal and historical texts that codify or challenge majoritarian notions of difference and systems of social control. Prereq: Undergraduates with senior standing may enroll with permission of instructor. Cross-listed with COMM 4268. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 5270 - Intercultural Communication

Summer 2010 Registration **CMMU 5270**

Examines the philosophy, process, problems, and potentials unique to communication across cultural boundaries. Prereq: Undergraduates with senior standing may enroll with permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 5275 - Family Communication

Summer 2010 Registration **CMMU 5275**

Explores family communication processes in traditional and nontraditional families through examination of theories and research on the family. Topics covered include conflict, family secrets, decision making, and practical guidelines for improved

communication in families. Prereq: Undergraduates with senior standing may enroll with permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 5280 - Communication and Change

Summer 2010 Registration **CMMU 5280**

Examines the role of communication in change processes of various kinds, including social change and diffusion of innovations. Prereq: Undergraduates with senior standing may enroll with permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 5282 - Environmental Communication

Summer 2010 Registration **CMMU 5282**

Studies the communication processes involved in policies and practices affecting natural and human environments. Prereq: Undergraduates with senior standing may enroll with permission of instructor. Cross-listed with COMM 4282. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 5285 - Communication Processes in Technology Transfer

Summer 2010 Registration **CMMU 5285**

Surveys research addressing technology transfer processes. Students examine and critique models of technology transfers and the role of individuals, artifacts, and small teams in technology transfers. Prereq: Undergraduates with senior standing may enroll with permission of instructor. Cross-listed with COMM 4285. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 5290 - Web Design

Summer 2010 Registration **CMMU 5290**

Covers writing web pages in Html, beginning Photoshop, style sheets, bitmapped animations, issues of usable layout, navigability, structure, typography, and color on the web. Projects require students to develop static web sites. Prereq: COMM 5405, COMM 5505, COMM 5805. Undergraduates with senior standing may enroll with permission of instructor. Cross-listed with COMM 4290. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 5300 - Multimedia Authoring

Summer 2010 Registration **CMMU 5300**

Analysis and evaluation of components of multimedia development and hands-on instruction featuring computer animation for advertising, training, and educational

projects. Prereq: Undergraduates with senior standing may enroll with permission of instructor. Cross-listed with COMM 4300.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 5310 - Advanced Multimedia Authoring

Summer 2010 Registration **CMMU 5310**

Builds upon the fundamentals of multimedia authoring to develop advanced skills and theory. Students concentrate on developing advanced multimedia applications for education or industry. Prereq: COMM 5300, COMM 4300, previous multimedia experience. Undergraduates with senior standing may enroll with permission of instructor. Cross-listed with COMM 4310.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 5320 - Content Management

Summer 2010 Registration **CMMU 5320**

Centers on large-scale documentation development using XML. Students learn "Single-source" documentation management, a cost-effective way to centralize information and extend it across different platforms and different audiences. Prereq: COMM 5290, COMM 4290. Undergraduates with senior standing may enroll with permission of instructor. Cross-listed with COMM 4320.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 5330 - Dynamic Web Design Workshop

Summer 2010 Registration **CMMU 5330**

Introduces large-scale website development using XML and PHP. Students learn "Single-source" documentation management, a cost-effective way to centralize information and extend it across different platforms (wireless, browsers, help files) and audiences (specialists, managers, customers). Note: Independently taught modules may be taken separately or concurrently. Prereq: COMM 5290, COMM 4290 or knowledge of HTML, CSS, and Photoshop. Undergraduates with senior standing may enroll with permission of instructor. Cross-listed with COMM 4330.**Semester Hours:** 1to 1
Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 5340 - Advanced Web Design

Summer 2010 Registration **CMMU 5340**

Focuses on user interface design for the World Wide Web using Dynamic HTML, pre-designed CGI scripts downloadable from the Web, animated vector and bitmapped graphics. Note: continuation of COMM 5290, 4290. Prereq: COMM 5290, COMM 4290 or knowledge of HTML, and CSS, and Photoshop. Undergraduates with senior standing may enroll with permission of instructor. Cross-listed with COMM 4340.**Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 5405 - Technical Communication: Writing

Summer 2010 Registration **CMMU 5405**

Provides intensive practice in technical writing using simulations of professional writing situations. Students analyze diverse audience and communication problems, including those with challenging technical content. Special emphasis is placed on the document-design process and techniques of self-editing. Prereq: Undergraduates with senior standing may enroll with permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 5410 - Science Writing

Summer 2010 Registration **CMMU 5410**

An intensive practice in composing for diverse science publication genres and venues and practice in analyzing the ways consumers obtain and process information about scientific developments and controversies. Prereq: Undergraduates with senior standing may enroll with permission of instructor. Cross-listed with COMM 4410. **Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 5500 - Health Communication

Summer 2010 Registration **CMMU 5500**

Examines the role of communication in a wide range of health contexts. Topics include cultural constructions of health and illness, public health communication campaigns, client-provider interactions, telemedicine, community-based health programs and medical journalism. Prereq: Undergraduates with senior standing may enroll with permission of instructor. Cross-listed with COMM 4500. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 5505 - Technical Communication: Editing

Summer 2010 Registration **CMMU 5505**

Provides intensive practice in editing technical documents. Emphasis is on contextual editing (i.e., editing parts of a document as they relate to the whole document and the communication purpose). Students discuss the editor's role, review editing strategies, and examine methods of increasing document usability and readability. Prereq: COMM 5405. Undergraduates with senior standing may enroll with permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 5510 - Usability Testing

Summer 2010 Registration **CMMU 5510**

Teaches students how to evaluate technical documentation testing needs, evaluate testing options for their feasibility and costs/benefits, design and carry out a usability testing plan, evaluate and write up test results for actual client documents and products. Prereq: COMM 5405. Undergraduates with senior standing may enroll with permission of instructor. Cross-listed with COMM 4510. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 5605 - Rhetorical Theory for Technical Communication

Summer 2010 Registration **CMMU 5605**

Examines the principles of rhetorical theory and its relationship to technical communication. Students analyze traditional and contemporary rhetorical theories and apply them to contemporary issues of document design. Prereq: Undergraduates with senior standing may enroll with permission of instructor. Cross-listed with COMM 4605. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 5620 - Health Risk Communication

Summer 2010 Registration **CMMU 5620**

Acquaints students with contemporary theory, research, and practice in health risk communication. Prereq: Undergraduates with senior standing may enroll with permission of instructor. Cross-listed with COMM 4620, HBSC 5620, HBSC 4620, and ENVS 5620. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 5621 - Visual Communication

Summer 2010 Registration **CMMU 5621**

Explores the social, cultural, and behavioral effects of visual images in a variety of contexts, including graffiti, film, advertising, art and architecture. Prereq: Undergraduates with senior standing may enroll with permission of instructor. Cross-listed with COMM 4621. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 5635 - Principles of Public Relations

Summer 2010 Registration **CMMU 5635**

Introduces theory and practice in the field of public relations, including topics such as effects upon society, public opinion, target audiences, adaptation to the media, uses, laws and ethics. Prereq: Undergraduates with senior standing may enroll with

permission of instructor. Cross-listed with COMM 4635. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 5640 - Advanced Public Relations

Summer 2010 Registration **CMMU 5640**

Examines key public relations practices in private, not-for-profit and public sectors. Strategic planning processes, research methods, evaluation, reports, and collateral development are addressed, with an emphasis on the intersection of theory and practice. Prereq: COMM 4635 or COMM 5635. Undergraduates with senior standing may enroll with permission of instructor. Cross-listed with COMM 4640. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 5665 - Principles of Advertising

Summer 2010 Registration **CMMU 5665**

Provides a fundamental understanding and appreciation of advertising in today's global society, including consumer motivation, buying behavior, research, creative development and media planning. Prereq: Undergraduates with senior standing may enroll with permission of instructor. Cross-listed with COMM 4665. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 5680 - Mass Communication Law and Policy

Summer 2010 Registration **CMMU 5680**

Covers issues of mass communication and the law and ethics, including issues of the First and Fourth Amendments, communication regulations, intellectual property, public access and obscenity. Prereq: Undergraduates with senior standing may enroll by permission of instructor. Cross-listed with COMM 4680. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 5681 - Communication Issues in Trial Court Practices and Processes

Summer 2010 Registration **CMMU 5681**

Introduces students to communication and language research aimed at improving the fairness, reliability, and validity of court and judicial processes, including lawyer-client interviews, interrogatories, jury selection, jury instructions, witness examination, and the use of language evidence in court. Prereq: Undergraduates with senior standing may enroll by permission of instructor. Cross-listed with COMM 4681. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 5682 - Political Communication

Summer 2010 Registration **CMMU 5682**

Examines the communication processes involved in mediated political events. Topics include the stages of the campaign process, media coverage of the political campaign process, and literacy skills needed to understand political advertising. Prereq:

Undergraduates with senior standing may enroll by permission of instructor. **Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 5710 - Topics in Communication

Summer 2010 Registration **CMMU 5710**

Special classes for faculty-directed experiences examining communication issues and problems not generally covered in the curriculum. Prereq: Undergraduates with senior standing may enroll by permission of instructor. Cross-listed with COMM 4710. **Semester**

Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 5750 - Legal Reasoning and Writing

Summer 2010 Registration **CMMU 5750**

Introduces the fundamentals of legal reasoning and legal argumentation through intensive class discussion, formal debate and writing. Attention is given to the relationship between case and statutory law and their application in trial and appeals courts in the United States. Prereq: Undergraduates with senior standing may enroll by permission of instructor. Cross-listed with COMM 4750, PSCI 4757, 5747. **Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 5755 - Universal Internet Usability

Summer 2010 Registration **CMMU 5755**

Beginning web design course that introduces students to writing websites for non-native English speakers and for users with disabilities. Students learn HTML, style sheets, basic Photoshop, layout, navigability, and usability for these groups. Prereq: COMM 3120 (or equivalent). Undergraduates with senior standing may enroll by permission of instructor. Cross-listed with COMM 4755. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 5760 - Computer-Mediated Communication

Summer 2010 Registration **CMMU 5760**

Analysis and discussion of the nature, use, and effects of computer-mediated communication in interpersonal, work, educational, societal and international contexts.

Focus is on the social aspects of computer-mediated communication rather than on

specific software or hardware technologies. Prereq: Undergraduates with senior standing may enroll by permission of instructor. Cross-listed with COMM 4760.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 5805 - Graphics

Summer 2010 Registration **CMMU 5805**

Instructs technical communicators in designing information that communicates visually as well as verbally. Students focus on document design; illustration; information retrieval; desktop publishing using Quark Xpress; and working with typesetters, printers and graphic artists. Prereq: COMM 5405. Undergraduates with senior standing may enroll by permission of instructor. Cross-listed with COMM 4805.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 5830 - Visual Principles in Technical Communication

Summer 2010 Registration **CMMU 5830**

Explores the rhetoric and usability of typography and text displays, tables and charts, data graphics, technical pictorials, page and screen layout, and other visual elements of technical communication. The course focuses on principles and research, not software training. Prereq: COMM 5405. Undergraduates with senior standing may enroll by permission of instructor. Cross-listed with COMM 4830.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 5840 - Independent Study

Summer 2010 Registration **CMMU 5840**

Prereq: Permission of instructor.**Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 5939 - Internship/Cooperative Education

Summer 2010 Registration **CMMU 5939**

Applies communication or technical communication concepts and skills in supervised employment situations.**Semester Hours:** 1to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 5995 - Travel Study Topics

Summer 2010 Registration **CMMU 5995**

Students study various topics in a foreign country led by a CU-Denver instructor; register through the Office of International Education. Prereq: Undergraduates with senior standing may enroll by permission of instructor. Cross-listed with COMM 4995.**Semester**

Hours: 1to 15

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 6013 - Introduction to Graduate Work in Communication

Summer 2010 Registration **CMMU 6013**

Designed to familiarize students with the philosophical, ideological, and methodological bases of study in communication. Note: Required of all graduate students in M.A. program in communication. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 6205 - Empirical Research Methods for Communication and Technical Communication

Summer 2010 Registration **CMMU 6205**

Provides exposure to empirical research methods involved in communication and technical communication research: surveys, experimental design, meta-analysis, case study, ethnography, textual analysis, and process tracing. Basic quantitative data analysis methods (correlation, chi-square, t-tests, and analysis of variance) are introduced. Prereq: COMM 5405 and 5505 or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 6300 - Educational Perspectives on Communication

Summer 2010 Registration **CMMU 6300**

Explores various relationships between education and communication. Note: May repeat this course up to three times with differing topics. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 6410 - Usability Test Design Project

Summer 2010 Registration **CMMU 6410**

Students collaborate with faculty and client to design and implement a usability test and evaluate its results, focusing upon an actual computer interface, or instructional documentation (in online form, hard copy, or both). Prereq: COMM 5510 and COMM 6205. **Semester Hours:** 3to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 6950 - Master's Thesis

Summer 2010 Registration **CMMU 6950**

Semester Hours: 1to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

COMM 6960 - Master's Project

Summer 2010 Registration **CMMU 6960**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CPCE 5010 - Counseling Theories

Summer 2010 Registration **CPCE 5010**

Focuses on counseling theories: Psychodynamic, Adlerian, Person-Centered, Existential, Behavioral, including DBT, Cognitive Behavioral, Gestalt, & Reality Therapy. Also includes an overview of the history of the counseling profession and the role and function of counselors in various settings. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CPCE 5100 - Techniques of Counseling

Summer 2010 Registration **CPCE 5100**

Students practice basic counseling skills, develop therapeutic intervention strategies, and improve the effectiveness of their communication by practicing listening and responding. Videotaped role-plays are utilized. Prereq: CPCE 5010. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CPCE 5110 - Group Counseling

Summer 2010 Registration **CPCE 5110**

Learn group theory and dynamics. Practice facilitating a group. Learn about screening, group membership and styles, roles and behavior, termination of groups. Extensive practice in laboratory setting. Prereq: CPCE 5010 and CPCE 5100. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CPCE 5150 - Family Therapy Theory

Summer 2010 Registration **CPCE 5150**

Introduces couple and family theories and intervention strategies. Emphasis on historical development of systems theory. Prereq: CPCE 5010. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CPCE 5160 - Techniques in Family Therapy

Summer 2010 Registration **CPCE 5160**

Intervention strategies with families. Emphasis on application of techniques evolving

from treatment models. Video-taped role plays are utilized. Prereq: CPCE 5150.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CPCE 5170 - Issues In Family Studies

Summer 2010 Registration **CPCE 5170**

A systemic overview of current family configurations and issues families face in today's society, including gender, intimate partner violence, step-families, grief, loss, divorce, homelessness and others. The course includes life cycle approaches and normal family processes. Prereq: CPCE 5010 and CPCE 5150.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CPCE 5180 - Counseling Couples

Summer 2010 Registration **CPCE 5180**

A didactic and experiential course dealing with techniques of couples counseling. Emphasis is on assessment, diagnosis and treatment of couples' problems. Special topics include gay and lesbian couples, cross-cultural couples, remarried couples, cohabiting couples and the effectiveness of couple therapy. Prereq: CPCE 5010, 5100, 5150 and 5160.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CPCE 5280 - Addictions Counseling

Summer 2010 Registration **CPCE 5280**

Includes treatment strategies for clinicians in addressing varieties of addictive behaviors including substance, abuse, eating disorders, gambling and sexual addiction. Cultural dimensions of addictions are also considered.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CPCE 5330 - Counseling Issues and Ethics

Summer 2010 Registration **CPCE 5330**

An in-depth examination of ethical and legal issues in the field. Topics include working with individuals and family systems, licensure, professional associations, record keeping and statutory requirements. Prereq: CPCE 5010 and CPCE 5100.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CPCE 5400 - Career Development

Summer 2010 Registration **CPCE 5400**

Development of competencies in career development counseling. Theories of work

systems, psychological dynamics, information systems, and decision making models are covered. Interacting with work or family systems and other subsystems is emphasized. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CPCE 5420 - Organizational Development

Summer 2010 Registration **CPCE 5420**

Organizational development and theory. The development and implementation of counseling programs in school settings, program development, implementation, consultation, and evaluation. Individual program evaluation projects required for course completion. Prereq: CPCE 5010 or permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CPCE 5810 - Multicultural Counseling Issues for Individuals and Families

Summer 2010 Registration **CPCE 5810**

Students engage in an in-depth racism, White privilege and other "isms," and assumptions as applied to ethnic-racial populations. Students learn alternative approaches to counseling African Americans, Asian Americans, Latino(a)s, American Indians, women, gays and lesbians. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CPCE 5815 - Introduction to School Counseling

Summer 2010 Registration **CPCE 5815**

This course emphasizes the unique and varied role of the school counselor and school counseling programs in diverse public schools. The course focus will be on learning the various skills necessary to meet the needs of school age students and others in the school community. In addition, the course will cover The ASCA model of comprehensive developmental school counseling activities, and focus on practical resources for counseling students in diverse school settings. Prereq: CPCE 5010. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CPCE 5820 - Strategies of Agency Counseling

Summer 2010 Registration **CPCE 5820**

Students learn the role and function of the counselor in community agency settings. Intervention strategies, consultation, administration of community mental health agencies. Prereq: CPCE 5010. **Semester Hours:** 3to 6
Registration is changing. Visit our website for details ucdenver.edu/registration.

CPCE 5830 - Special Topics: 5830-5839

Summer 2010 Registration **CPCE 5830**

Specific topics vary from semester to semester. Intervention strategies with children, issues in abuse, violence, incest, legal issues, adult counseling, grief, death and dying, private practice. **Semester Hours:** 1to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

CPCE 5840 - Independent Study: CPCE

Summer 2010 Registration **CPCE 5840**

Individually directed research activity on special topics not covered by course offerings. Degree students only, with advance approval by major, professor and department chair. **Semester Hours:** 1to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

CPCE 5910 - Practicum in CPCE

Summer 2010 Registration **CPCE 5910**

Supervised counseling practice in the counseling lab and appropriate settings (150 clock hours). Emphasis on individual and group counseling techniques and therapeutic intervention strategies. Prereq: all counseling course work must be completed. **Semester Hours:** 6to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

CPCE 5915 - Practicum in School Counseling

Summer 2010 Registration **CPCE 5915**

This class will provide school track students with 3 credits of fieldwork at a developmental level of their choice. The course will require students to work with a school counselor activities that the counselor is assigned under supervision. Students will develop skills in needs assessment, developing classroom guidance activities and running the activities; they will sit in on IEP conferences, help conduct college fairs, administer career assessment inventories and standardized assessments, learn to place students in appropriate classes, and provide responsive counseling services on an as needed basis. Prereq: CPCE 5010, CPCE 5110, CPCE 5400, CPCE 5420, CPCE 5810, CPCE 5815, CPCE 6220. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CPCE 5930 - Internship in Counseling

Summer 2010 Registration **CPCE 5930**

Psychology and Counselor Education. Supervised internship of 600 clock hours. Intern performs activities of a regularly employed professional in an approved community site.

Prereq: Satisfactory completion of CPCE 5910. **Semester Hours:** 1to 6
Registration is changing. Visit our website for details ucdenver.edu/registration.

CPCE 6000 - Introduction to Sex Therapy

Summer 2010 Registration **CPCE 6000**

Provides an overview of human sexuality over the life cycle, addressing social, psychological, and physiological aspects of human sexuality. Etiology of human sexuality diagnoses and treatment of problems related to human sexuality are addressed. Note: This course is a component in the couple and family program and required for MFT licensure. Prereq: CPCE 5010, CPCE 5100, CPCE 5150 and CPCE 5160 may be taken concurrently. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CPCE 6100 - Spiritual Dimensions of Counseling

Summer 2010 Registration **CPCE 6100**

A didactic and experiential course involving the following content areas: theories of spiritual development, a survey of religious traditions, assessment, ethical issues, self-of-the-therapist issues, and treatment interventions and strategies in working with clients' values. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CPCE 6140 - Counseling Children, Adolescents and Their Parents

Summer 2010 Registration **CPCE 6140**

A didactic and experiential course addressing child, adolescent, and parental/family issues. Counseling techniques, including play therapy, and parent education are taught and practiced. Assessment tools and specific strategies are used to increase positive family relationships. Prereq: CPCE 5010, CPCE 5100, CPCE 5150 and EPSY 6200. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CPCE 6160 - Advanced Assessment: Theory and Treatment in Family Systems

Summer 2010 Registration **CPCE 6160**

Emphasis is on family diagnosis or assessment and treatment and psychological processes. Major family therapy assessment methods and instruments are covered, as well as experiential application of advanced intervention strategies. Prereq: CPCE 5010, 5100, 5150, 5160 and RSEM 5300. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CPCE 6220 - Youth Challenges and Resiliency

Summer 2010 Registration **CPCE 6220**

Provides the student with theory and practical exposure to contemporary youth at risk. Focuses on prevention and intervention with youth at risk from a counseling perspective.

Prereq: CPCE 5010 and 5100. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CPCE 6240 - Consultation Strategies

Summer 2010 Registration **CPCE 6240**

Focuses on the development of consultation skills and implementation of strategies.

Students are exposed to major theories of the consultation process. In addition, this course provides the opportunity to practice consultation and implementation strategies within a system: an agency, business setting, or educational setting. Prereq: CPCE 5010 or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CPCE 6250 - Mental Health Diagnosis

Summer 2010 Registration **CPCE 6250**

Students develop a professional level of understanding of the major disorders commonly subsumed under the term "psychopathology." Classification of disorders in the DSM IV is utilized. Treatment alternatives are discussed. Prereq: CPCE 5010 and CPCE 5100 or permission of instructor. Cross-listed with EPSY 6250. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CPCE 6330 - Advanced Seminar in Counseling and Psychotherapy

Summer 2010 Registration **CPCE 6330**

Professional analysis of major trends in counseling and psychotherapy. Specific emphasis topics identified. Prereq: CPCE 5010, 5100 and 5330. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CPCE 6350 - Theories of Personality Development and Change

Summer 2010 Registration **CPCE 6350**

An advanced course in personality theory with a focus on assumptions of each theory and each as a mechanism for change. Implications of each theory for personal growth and therapy's addressed. Cross-listed with EPSY 6350. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CPCE 6810 - Advanced Multicultural Counseling

Summer 2010 Registration **CPCE 6810**

Offers essential preparation for competent multicultural counseling practice with racially

diverse clients in an urban setting. Students learn, build and practice effective multicultural counseling skills. Explores the impact of race and ethnicity on individual behavior, interpersonal relationships and learn techniques for addressing these issues in counseling. Prereq: CPCE 5810. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CPCE 6840 - Independent Study

Summer 2010 Registration **CPCE 6840**

Semester Hours: 1to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

CPCE 6910 - Advanced Practicum in Counseling

Summer 2010 Registration **CPCE 6910**

Semester Hours: 3to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

CPCE 6950 - Master's Thesis

Summer 2010 Registration **CPCE 6950**

Semester Hours: 4to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

CPCE 7100 - Advanced Theories and Techniques in Psychotherapy

Summer 2010 Registration **CPCE 7100**

Learn and practice advanced techniques for addressing adult and adolescent clinical problems. Examine efficacy research on specific counseling techniques as associated with particular approaches in counseling. Prereq: CPCE 5010, 5100, 5820 and 6250. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CPCE 7800 - Supervision in Counseling and Psychotherapy

Summer 2010 Registration **CPCE 7800**

Examines training principles, processes, and practices in clinical supervision. Emphasis on individual and family therapy supervision. Prereq: CPCE 5010, 5100, 5910 and 5930. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 1001 - Introduction to Criminal Justice

Summer 2010 Registration **C J 1001**

This course is designed to provide an overview of the criminal justice process and the criminal justice system in general. Concepts of crime, deviance and justice are discussed and general theories of crime causality are examined. Special emphasis is placed on the components of the criminal justice system: the police, the prosecutorial and defense functions, the judiciary and the field of corrections. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 1111 - Law & Order: Anatomy of the Criminal Justice System

Summer 2010 Registration **C J 1111**

This course explores contemporary issues and cases in the criminal justice system. Topical issues cover various forms of crime; including environmental hazards, mass murder, and sexual assault. The course also focuses on current controversies in policing, courts, corrections, and the juvenile justice system. Prereq: Open only to new Freshmen. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 2041 - Crime Theory and Causes

Summer 2010 Registration **C J 2041**

This course provides a general survey of the nature and causes of crime and efforts of the criminal justice system to predict, prevent, modify and correct this behavior. This course involves a critical appraisal of various theories of crime causation, including an examination of biological, psychological, economic and sociological perspectives that explain crime and deviance. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 2110 - Drugs, Alcohol and Crime

Summer 2010 Registration **C J 2110**

This course looks at the socially constructed nature of drugs and drug policy. The course explores the connection between drugs and crime within the socio- historical context of contemporary U.S. drug policy. Special emphasis is placed on the relationships between drugs and alcohol abuse and criminal offending, including the historical and contemporary criminal justice system responses to illegal substances. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 2210 - Probation and Parole

Summer 2010 Registration **C J 2210**

This course is appropriate for students who have a specific interest in the role of probation and parole as correctional sanctions in community settings. Particular attention

is paid to evaluations research evidence on the success of probation and parole, factors that contribute to the successful completions of probation and parole and the role that the community and citizens play in the community corrections process. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 2320 - Police-Community Relations

Summer 2010 Registration C J 2320

This course focuses on the police and community response to crime. Course content includes an overview of the major concepts and issues involved in what many consider to be a major fundamental shift in the approach and operations of modern policing. The origins, meaning, development and experiences of community policing and various assessments of the advantages and disadvantages of community policing are emphasized. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 2510 - Juvenile Justice Administration

Summer 2010 Registration C J 2510

This course examines the development, change and operation of the American juvenile justice system and the social factors that shape the identification and treatment of juvenile offenders. Special emphasis is placed on the nature of juvenile law and methods of dealing with youthful offenders. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 3100 - Criminal Justice Research Methods

Summer 2010 Registration C J 3100

This course introduces students to the formulation of research questions covering crime and justice, research designs, data collection and the interpretation and reporting of these data in criminological and justice-system settings. Course content also includes experimental and non- experimental research designs, probability and non- probability sampling techniques and construction of scales and indexes for research purposes. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 3150 - Statistics for Criminal Justice

Summer 2010 Registration C J 3150

This course serves as an introduction to descriptive and inferential statistics and the computer analysis of criminology and criminal justice data. Course content includes basic procedures of hypothesis testing, correlation and regression analysis and the analysis of continuous and binary dependent variables. Emphasis is placed on the

examination of research problems and issues in the field of criminology and criminal justice.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 3160 - White-Collar Crime

Summer 2010 Registration C J 3160

This course introduces students to a variety of topics and issues in white-collar crime including types, causes and the measurement of white-collar crime. The class examines the debate surrounding the definition of white-collar crime, provides an overview of the costs of white-collar crime and corporate crime to society, considers competing theories that explain white-collar criminality and explores the use of criminal sanctions to deter misconduct involving corporations and elite offenders.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 3220 - Community-Based Corrections

Summer 2010 Registration C J 3220

This course focuses on innovative community-based strategies for dealing with criminal offenders. Correctional alternatives to imprisonment discussed in this course include probation and parole and various community programs such as day reporting centers, electronic monitoring, half-way houses and boot camp programs.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 3250 - Violence in Society

Summer 2010 Registration C J 3250

This course examines various aspects of violence including distribution over time and space, situations and circumstances associated with violent victimization and offending and how social institutions, community structure and cultural factors shape violent events.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 3251 - Crime and Media

Summer 2010 Registration C J 3250

This course surveys the relationships between mass media, crime, offenders, victims and criminal justice. It explores how the criminal justice system is portrayed in the media and the influence of these portrayals on society, public policy, and the criminal justice system.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 3252 - Violent Offenders

Summer 2010 Registration **C J 3252**

This course consists of a historical overview of violence in American society. Course content includes an examination of violent crime rates over time, societal explanations for changes in rates and an examination of the theoretical causes and preventative strategies for acts of violence. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 3310 - Police in Contemporary Society

Summer 2010 Registration **C J 3310**

This course examines law enforcement's role in contemporary society and the impact of police interaction on other segments of the criminal justice system. Special attention is paid to controversies related to police training and education, career development and community relations. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 3420 - Pleas, Trials and Sentences

Summer 2010 Registration **C J 3420**

This course focuses on analysis of case materials involving pleas, trials and sentences. Course content includes an examination of the basic dimensions of criminality, the specific elements of major crimes, the use of confessions, fair trial procedures and the nature of criminal sanctions including cruel and unusual punishments. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 3540 - Crime and Delinquency Prevention

Summer 2010 Registration **C J 3540**

This course provides students with an overview of issues related to crime and delinquency prevention, both from criminological and criminal justice points of view. Crime prevention programs that encompass both the individual and community levels are examined. Responses to juvenile offenders-ranging from prevention and diversion to institutional corrections and after care are explored in context of youth policy generally. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 4042 - Corrections

Summer 2010 Registration **C J 4042**

This course consists of an overview of the field of penology and corrections. Attention is paid to conflicting philosophies of punishment, criminological theory as it applies to the field of corrections, the selectivity of the process through which offenders move prior to their involvement in correctional programs, alternative correctional placements and

empirical assessments of the short and long-term consequences of one's involvement in correctional programs. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 4043 - Law Enforcement

Summer 2010 Registration C J 4043

This course presents an overview of the role of police in the United States. Attention is placed on the origins of policing, the nature of police organizations and police work, patterns of relations between the police and the public, discretion and police role in a sociolegal context. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 4044 - Courts and Judicial Process

Summer 2010 Registration C J 4044

This course examines the basic functions, structure and organization of the federal and state court system, with special attention on the criminal court system. This course also focuses on the influence of judicial behavior on the court process by examining judges' policy preferences, legal considerations, group processes within courts and courts' political and social environments. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 4120 - Race, Class and Crime

Summer 2010 Registration C J 4120

This course examines the relationships between race, social class and crime. Attention is given to theoretical explanations, empirical research and patterns of criminal behavior and focuses on historical frameworks that are relevant to current perspectives on the impact and interactions of race, class and crime in the field. Prereq: CRJU 3041. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 4130 - Poverty and Crime

Summer 2010 Registration C J 4130

This course involves an economic analysis of crime and the criminal justice system. Topics include empirical and theoretical analysis of the economic causes of criminal behavior, the social costs of crime and its prevention and the design of crime enforcement policies. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 4140 - Domestic Violence and Crime

Summer 2010 Registration **C J 4140**

This course examines the criminal justice systems response to intimate partner violence by focusing on the interactions between victims, offenders and the individual components of the criminal justice system (law enforcement and the judiciary). By exploring the dynamics of intimate partner violence this course addresses the theory, history, research, legislation and policy implications related to the criminal justice system's response to violence against women. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 4170 - Victim Studies

Summer 2010 Registration **C J 4170**

This course involves the scientific study of crime victims and focuses on the physical, emotional and financial harm people suffer at the hands of criminals. Focus is placed on the victim-offender relationships, interactions between victims and the criminal justice system and connections between victims and other social groups and institutions. The theory, history, research, legislation and policy implications related to the social construction of "The victim" are explored. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 4180 - Comparative Study of Criminal Justice Systems

Summer 2010 Registration **C J 4180**

This course analyzes the dynamics of criminality and the social response to criminality across countries. Special emphasis is placed on the methods of comparative legal analysis utilized to examine international differences in crime and justice, international cooperation in criminal justice and crime and development. Prereq: CRJU 1001. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 4190 - Women and Crime

Summer 2010 Registration **C J 4190**

This course explores issues surrounding women as offenders and victims, and investigates explanations for the involvement of women in illegal activities. The course also examines the participations of women in criminal justice professions, including law enforcement, corrections, judicial processes, and law. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 4230 - Corrections and Treatment

Summer 2010 Registration **C J 4230**

This course examines the origins and historical development of prisons and jails in America. Particular attention is given to the impact of reform movements, the rise of

centralized correctional systems and regional variations in the practice of punishment.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 4252 - Criminal Offenders

Summer 2010 Registration C J 4230

This course will introduce the core principles of evidence based programming and tools of motivational interviewing as it is used currently with the offender population. In addition, students will learn how to utilize these skills working with specific offender populations.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 4310 - Leadership Roles in Criminal Justice

Summer 2010 Registration C J 4310

The course is designed to enhance interest, experience and knowledge in leadership that promotes professionalism and ethical behavior. Individual and organizational dynamics are explored through a critical perspective, focusing on criminal justice roles and responsibilities. The class teaches effective leadership skills in areas such as team building, strategic planning, and decision making.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 4410 - Criminal Law and Constitutional Procedures

Summer 2010 Registration C J 4410

This course focuses on substantive criminal law and constitutional rights of the accused in criminal proceedings. Course content includes legal aspects of the investigation and arrest processes as well as the rules governing the admissibility of evidence in court.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 4430 - Law and Society

Summer 2010 Registration C J 4430

This course introduces students to the scholarly study of law. Students will have an opportunity to become familiar with social science perspectives of the law, legal institutions, the legal process and the impact of law on behavior, with particular emphasis on the study of criminal behavior and the criminal justice process in American society. Additional topics include theories of law and legality, comparative legal systems, lawyers, judges and juries and the use of social science in the courts.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 4440 - Courts and Social Policy

Summer 2010 Registration C J 4440

This course involves the study of emerging trends and issues in the administration of the courts, the emerging role of the judiciary in the administration of programs in the public and private sectors and the implications of court administration on social policy. Course content includes the history of the judicial approaches to the criminal justice administrative process and substantive social policy. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 4520 - Gangs and Criminal Organizations

Summer 2010 Registration C J 4520

This course traces the origins and historical development of the activities known as "Organized Crime." These crimes are some of the most dangerous to American society and range from the commonly known offenses of gambling and narcotics to the more subtle and sophisticated, less understood but equally serious, crimes of extortion, commercial bribery and political corruption. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 4530 - Families and Intergenerational Crime

Summer 2010 Registration C J 4530

This course focuses on the family as the primary institutional mechanism of social control. The course is structured around social learning theory and explores the relationships between exposure to childhood violence and violence in dating relationships during adolescence and later violent marital relationships. The "Cycle of Violence" is also discussed in terms of the impact on early childhood violence on juvenile delinquency, adult criminality and violent behavior in general. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 4600 - Special Topics in Criminal Justice

Summer 2010 Registration C J 4600

This highly specialized seminar addresses cutting-edge and emerging developments in the field of criminal justice and provides students and faculty with the opportunity to explore significant themes, issues and problems from a broad interdisciplinary perspective. Topics vary from semester to semester. Prereq: CRJU 1001 and CRJU 2041 or permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 4840 - Independent Study: C J

Summer 2010 Registration **C J 4840**

This course consists of faculty-guided research in an area of mutual interest to the student and instructor. Students are responsible for selecting their area of inquiry prior to contacting the instructor. Permission of instructor is required. **Semester Hours:** 1to 6
Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 4939 - Internship/Cooperative Education

Summer 2010 Registration **C J 4939**

Internships involve a career-related supervised experiential course in a criminal justice agency. Permission to enroll must be preceded by an application for an internship. Permission of instructor and advisor is required for undergraduate students. **Semester Hours:** 1to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 5000 - Law and Social Control

Summer 2010 Registration **C J 5000**

Provides an overview of the theory and application of criminal law in the context of social control. The course reviews various theoretical perspectives on law and society, focusing on the relationship between law and the structure and function of other social institutions. The course also examines aspects of the criminal law in action, assessing how legal definitions and sanctions are differentially interpreted and applied. Cross-listed with CRJU 7000. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 5100 - Administration of Criminal Justice

Summer 2010 Registration **C J 5100**

Analyzes the policies and practices of agencies involved in the criminal justice process, from the detection of crime and arrest of suspects through prosecution, adjudication, sentencing and imprisonment, to release. The patterns of decisions and practices are reviewed in the context of a systems approach. Cross-listed with CRJU 7100. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 5120 - Nature and Causes of Crime

Summer 2010 Registration **C J 5120**

Analyzes the social origins of criminal behavior and the impact of crime on society. Various categories of deviant, delinquent, and criminal behaviors are examined, and attempts to control such behavior are assessed. Connections between social institutions, social problems, and illegal activities, and the response of the public to the threat of

crime are examined. Cross-listed with CRJU 7120. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 5200 - Wrongful Convictions

Summer 2010 Registration C J 5200

This seminar examines the dark figure of the criminal justice system; wrongful convictions of innocent people. This course explores the continuum of justice-system errors ranging from persons who are falsely accused (arrested, prosecuted, and tried) to those who are wrongly convicted and imprisoned, to death row inmates who are erroneously executed. Cross-listed with CRJU 7200. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 5210 - Prisoner Reentry

Summer 2010 Registration C J 5210

This seminar examines the harsh realities of prisoner reentry and offers solutions to prepare inmates for release, reduce recidivism, and restore them to adjustment once back in the community, while simultaneously meeting the demands of public safety. Cross-listed with CRJU 7210. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 5220 - The American Jury System

Summer 2010 Registration C J 5220

This seminar examines historical and current issues in jury decision making and dynamics. The course explores issues such as jury size, eyewitness testimony, and jury reform. Court decisions are examined as a comprehensive understanding of jurors and their role. Cross-listed with CRJU 7220. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 5230 - Gun Rights and Gun Control

Summer 2010 Registration C J 5230

This seminar provides an in-depth analysis of the contemporary issues - constitutional, legal, political, criminological, sociological - involved in developing criminal justice policy regarding gun control. Cross-listed with CRJU 7230. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 5250 - Criminal Offenders

Summer 2010 Registration C J 5250

Crime can have a devastating effect on the lives of victims, families and communities with extraordinary costs to society as a whole. Documented evidence suggests that

community safety is best achieved through promoting rehabilitation of offenders rather than relying solely on prisons and containment. This course introduces the core principles and tools of motivational interviewing as it is used currently with the offender population. Students learn how to utilize these skills working with specific offender populations and how to motivate these often resistive clients to change their thinking patterns and behaviors. Cross-listed with CRJU 7250. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 5260 - Crime and Literature

Summer 2010 Registration C J 5260

This seminar focuses on non-fiction literature as it relates to criminality and the Criminal Justice System. A substantial number of people in the United States form impressions and evaluate the effectiveness of the Criminal Justice System based on accounts presented within various types of nonfiction literature, either as social commentary or in biographical/autobiographical form. This course explores samples of these types of commentary, in order to more fully understand and appreciate their impact on shaping public opinion of the Criminal Justice System. Cross-listed with CRJU 7260. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 5270 - Case Studies in Crim Justice

Summer 2010 Registration C J 5270

This seminar attempts to examine the lives of people who live on the margins of a society that perceives them as outsiders. Ethnographic studies which utilized observation, participant observations and interviews as their primary research methodology are assigned in order to develop a critical understanding of the social marginalization and cultural aspects of the lives of real human beings living on the constant edge of the law. Cross-listed with CRJU 7270. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 5280 - Computer Crime

Summer 2010 Registration C J 5280

The course is designed to enhance interest, experience and knowledge in leadership that promotes professionalism and ethical behavior. Individual and organizational dynamics are explored through a critical perspective, focusing on criminal justice roles and responsibilities. The class teaches effective leadership skills in areas such as team building, strategic planning, and decision making. Cross-listed with CRJU 7280. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 5301 - Crime and Media

Summer 2010 Registration C J 5280

This course surveys the relationship between mass media and the U.S. criminal justice system. Special attention is given to the role of media in the social construction of reality. Emphasis is placed on the application of social constructionism to criminal justice related social problems. Cross-listed with CRJU 7301. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 5320 - Police Administration

Summer 2010 Registration C J 5320

Considers the major issues confronting police executives, such as professionalism, recruitment, selection, training, deployment, innovation, evaluation, and charges of brutality, inefficiency, and corruption. Cross-listed with CRJU 7320. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 5321 - Research Methods

Summer 2010 Registration C J 5321

Provides an assessment of research strategies in criminal justice through an examination of applied research designs and analytical models. The logic and rationale of these various strategies are contrasted, and their relative merits are critiqued. Selected research problems in the criminal justice system are utilized to illustrate the application and interpretation of alternative strategies. Cross-listed with CRJU 7321. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 5325 - Qualitative Methods for Criminal Justice

Summer 2010 Registration C J 5325

Focuses on qualitative methods applicable to research in the field of criminal justice. The primary focus is on ethnographic approaches employing such fieldwork techniques as observation, participant observation, interviews, content analysis, life histories and case studies. Cross-listed with CRJU 7325. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 5330 - Gangs and Criminal Organizations

Summer 2010 Registration C J 5325

This course examines extent, nature and trends of gangs and criminal organizations. We focus on contemporary studies and theories of gang behavior and organized crime. The course examines types of crime, gender and race issues, transnational violence, and

public policies regarding criminal organizations. Cross-listed with CRJU 7330. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 5391 - Sex Offenders and Offenses

Summer 2010 Registration C J 5325

This course will focus on challenges practitioners face in the management of sex offenders. It covers development of programs and partnerships that can effectively assess inform, manage and treat sex offenders through all phases of the system and reduce recidivism. Cross-listed with CRJU 7391. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 5410 - Victimology

Summer 2010 Registration C J 5410

This course examines victim-offender relationships, the interactions between victims and the criminal justice system and the connections between victims and other social groups and institutions among various populations. This course addresses the theory, history, research, legislation and policy implications related to the social construction of "The Victim." Cross-listed with CRJU 7410. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 5420 - Violence in Society

Summer 2010 Registration C J 5420

This course examines various aspects of violence including distribution over time and space, situations and circumstances associated with violent victimization and offending, and how social institutions, community structure and cultural factors shape violent events. Cross-listed with CRJU 7420. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 5430 - Drugs, Alcohol and Crime

Summer 2010 Registration C J 5430

This course provides an interdisciplinary overview of theory, research and policy issues surrounding the relationship between drugs, alcohol and crime; and the criminal justice system response. The course explores the socially constructed nature of illegal substances and connections to U.S. drug policy. Cross-listed with CRJU 7430. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 5510 - Contemporary Issues in Law Enforcement

Summer 2010 Registration **C J 5510**

Examines current thinking and experience with respect to changing and reforming police programs and practices. The course focuses primarily on the American police experience, reviewing major innovations, exploring their rationale, and examining organizational impediments to their implementation. Cross-listed with CRJU

7510. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 5520 - Corrections

Summer 2010 Registration **C J 5520**

Provides a critical examination of the development and implementation of correctional systems in America. The course presents the origins of correctional efforts and the evolution of the prison; reviews punishment and rehabilitation rationales in the context of sentencing models; examines the social organization of the prison, including inmate subcultures and staff work strategies; and assesses the inmates' rights movement and the impact of judicial intervention in correctional settings. Cross-listed with CRJU

7520. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 5530 - Community Corrections

Summer 2010 Registration **C J 5530**

Analyzes the theories and practices of probation and parole, responses of paroling authorities to public pressures and court controls, and their implications for rehabilitation. Efforts to bridge institutional settings and community life, as well as the feasibility and effectiveness of treating individuals under sentence in the community, are reviewed.

Cross-listed with CRJU 7530. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 5540 - Juvenile Justice Administration

Summer 2010 Registration **C J 5540**

Examines the policies and practices of agencies in processing youthful offenders through the juvenile court system, reviews trends in juvenile justice policymaking, and assesses changes in response to juvenile crime by both the juvenile justice and criminal justice systems. Cross-listed with CRJU 7540. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 5550 - Criminal Justice Policy and Planning

Summer 2010 Registration **C J 5550**

Provides a survey of conceptual and design strategies in criminal justice policy analysis. The logic and rationale of these various strategies are contrasted, and their relative

merits are critiqued. Selected policy issues in the criminal justice system are utilized to illustrate the application and interpretation of alternative strategies. Cross-listed with CRJU 7550.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 5551 - Judicial Administration

Summer 2010 Registration C J 5551

Analyzes judicial organization, court administration, and criminal court judicial decision making practices within the context of the broader operation of the criminal justice system. Special attention is paid to the social organization of the courtroom, examining the special roles of judges, prosecutors, and defense attorneys. Cross-listed with CRJU 7551.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 5552 - Criminal Justice Ethics

Summer 2010 Registration C J 5552

Offers a normative framework within which to explore ways to increase sensitivity to the demands of ethical behavior among criminal justice personnel. The application of a normative perspective enhances the possibility that moral problems are better understood, more carefully analyzed, and rendered more tractable applied ethics forces a reflection not just on ethics, but also on the nature and operation of the criminal justice system itself. Cross-listed with CRJU 7552.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 5553 - Women and Crime

Summer 2010 Registration C J 5553

Explores issues surrounding women as offenders, victims, and criminal justice professionals. Investigates explanations for the involvement of women in illegal activities. Analyzes the plight of battered women, rape victims, and other female victims. Examines the participation of women in law enforcement judicial processes, corrections and lawmaking. Cross-listed with CRJU 7553.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 5554 - Criminal Justice Reform

Summer 2010 Registration C J 5554

Provides an overview of reform efforts in the criminal justice system. Selected theoretical approaches and policies are examined and assessed in light of their assumptions and programmatic applications. The rational and process underlying selected reform strategies are explored. The implications of the effects of reform in criminal justice policy making and decision making are analyzed. Cross-listed with CRJU 7554.**Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 5561 - Advanced Seminar in Criminal Justice

Summer 2010 Registration C J 5561

In this seminar, students demonstrate their mastery of the knowledge and skills acquired in core courses, as applied to either their chosen program concentration or individualized program, by conducting a Program Integration Project. The PIP may be either an independent research project or client-oriented project. Students also make a juried oral presentation of the professional paper which reports project findings. This is the cumulative opportunity for students to apply concepts and theory to professional practice, and thus should be taken at or near the end of a student's program of study.

Prereq: CRJU 5000, CRJU 5100, CRJU 5120, CRJU 5321. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 5571 - The Social Organization of Crime

Summer 2010 Registration C J 5571

Explores the relationship of neighborhood social disorganization to the dynamics of crime from a social ecology perspective. The course examines the underlying social causes of phenomena such as criminal victimization, violent and property crime, neighborhood fear, neighborhood deterioration, and recidivism. The course examines social, structural, and ecological characteristics of neighborhoods and communities in affecting crime. Cross-listed with CRJU 7571. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 5572 - Race, Crime and Justice

Summer 2010 Registration C J 5572

Examines the role of race in criminal justice processing. This course examines the research findings, interpretations, issues, and implications in assessing the impact of race in the administration of criminal justice. Explores the policy implications concerning the nature and extent of racial disparities in the criminal justice system and lays out a research agenda to more strategically address these issues within criminal justice policy making. Cross-listed with CRJU 7572. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 5574 - White Collar Crime

Summer 2010 Registration C J 5574

Employs both the social science and legal approaches to examine crime committed by corporations as well as by individuals in white collar occupations. The course covers how such crimes are socially defined, who commits them, who is victimized by them,

which social contexts promote them, and how society and the criminal justice system respond to them. Cross-listed with CRJU 7574. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 5575 - The Mentally Disordered Offender

Summer 2010 Registration C J 5575

Examines the offender who may be mentally disordered. A survey is made of the various phases of the criminal justice system where psychiatrists are involved, e.g., diversion, fitness, insanity and sentencing. Dangerous sex offender legislation, "Not guilty by reason of insanity" and "Guilty but mentally ill" statutes, and issues concerning confidentiality, informed consent, and treatment are addressed. Cross-listed with CRJU 7575. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 5576 - Social Science in the Criminal Justice System

Summer 2010 Registration C J 5576

Examines the use of social science as a tool for legal analysis within the criminal justice system. The course examines how social science research is used to resolve relatively simple factual disputes, then moves on to more complex issues that arise when social science is invoked to make or to change law, both constitutional law (particularly the First, Sixth, Eighth, and Fourteenth amendments) and common law, particularly the construction of procedural rules that govern the operations of the criminal justice system. Cross-listed with CRJU 7576. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 5910 - Women and Violence: a Sociological Perspective

Summer 2010 Registration C J 5910

This course is a sociological, feminist analysis of violence against women and girls that addresses the intersection of sexism and other forms of oppression such as racism, classism and heterosexism within historical, cultural, social and institutional contexts. Topics covered focus on overt and covert forms of sexual coercion, harassment and assault, battering and stalking. Cross-listed with CRJU 7910, PUAD 5910 and 7910. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 5920 - Psychology of Violence Against Women

Summer 2010 Registration C J 5920

This class addresses the contributions and the limitations of current empirical and clinical psychological literatures about domestic violence. Topics covered include: distinguishing among mental health professionals regarding work with DV clients; the

psychological impacts of domestic violence; services useful for responding to the needs of women and children; and an introduction to the psychology and treatment of batterers. Cross-listed with CRJU 5920, PUAD 5920 and 7920. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 5930 - Battered Women and The Legal System

Summer 2010 Registration C J 5930

This course provides a practical understanding of how the following relate to battered women and their children; a) major developments in federal, state, tribal, administrative, statutory and case law; b) the role and responses of the law enforcement, judges, attorneys, victim assistance providers and other legal system agents; and c) the role and process of victim advocacy. Cross-listed with CRJU 7930, PUAD 5930 and 7930. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 5940 - Domestic Violence Social Change and Advocacy

Summer 2010 Registration C J 5940

This course provides students information on the theories and strategies behind contemporary social change movements and the skills necessary to organize and implement actions to influence public awareness and policy. The values of American society are complex and require advocates/activists to develop a heightened sense of self, community and an ethical framework while confronting sexism, racism and other forms of oppression. Cross-listed with CRJU 7940, PUAD 5940 and 7940. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 6600 - Special Topics in Criminal Justice

Summer 2010 Registration C J 6600

This highly specialized seminar addresses cutting-edge and emerging developments in the field of criminal justice and provides students and faculty with the opportunity to explore significant themes, issues, and problems from a broad interdisciplinary perspective. Topics vary from semester to semester. Course may be taken for credit more than once, provided subject matter is not repeated. Cross-listed with CRJU 7600. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 6840 - Independent Study

Summer 2010 Registration C J 6840

Affords the student the opportunity to pursue creative research activities under the individual supervision of a full-time faculty member. No more than six semester hours of

credit for independent study may be applied toward the MCJ degree. MCJ Prereq: 12 semester hours of criminal justice course work and permission of instructor. **Semester Hours: 1to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 6910 - Field Study in Criminal Justice

Summer 2010 Registration C J 6910

For students who have not had practitioner experience, a full- or part-time internship is required. Prereq: 18 hours of criminal justice course work and permission of instructor and/or advisor. **Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 6950 - Master's Thesis

Summer 2010 Registration C J 6950

Independent original research project supervised and evaluated by a thesis committee. Prereq: 33 semester hours of course work and permission of MCJ director, program advisor and thesis chair. **Semester Hours: 3to 6**

Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 7000 - Law and Social Control

Summer 2010 Registration C J 7000

Provides an overview of the theory and application of criminal law in the context of social control. The course reviews various theoretical perspectives on law and society, focusing on the relationship between law and the structure and function of other social institutions. The course also examines aspects of the criminal law in action, assessing how legal definitions and sanctions are differentially interpreted and applied. Cross-listed with CRJU 5000. **Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 7100 - Administration of Criminal Justice

Summer 2010 Registration C J 7100

Analyzes the policies and practices of agencies involved in the criminal justice process, from the detection of crime and arrest of suspects through prosecution, adjudication, sentencing and imprisonment, to release. The patterns of decisions and practices are reviewed in the context of a systems approach. Cross-listed with CRJU 5100. **Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 7120 - Nature and Causes of Crime

Summer 2010 Registration **C J 7120**

Analyzes the social origins of criminal behavior and the impact of crime on society. Various categories of deviant, delinquent, and criminal behaviors are examined, and attempts to control such behavior are assessed. Connections between social institutions, social problems, and illegal activities, and the response of the public to the threat of crime are examined. Cross-listed with CRJU 5120. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 7200 - Wrongful Convictions

Summer 2010 Registration **C J 7200**

This seminar examines the dark figure of the criminal justice system; wrongful convictions of innocent people. This course explores the continuum of justice-system errors ranging from persons who are falsely accused (arrested, prosecuted, and tried) to those who are wrongly convicted and imprisoned, to death row inmates who are erroneously executed. Cross-listed with CRJU 5200. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 7210 - Prisoner Reentry

Summer 2010 Registration **C J 7210**

This seminar examines the harsh realities of prisoner reentry and offers solutions to prepare inmates for release, reduce recidivism, and restore them to adjustment once back in the community, while simultaneously meeting the demands of public safety. Cross-listed with CRJU 5210. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 7220 - The American Jury System

Summer 2010 Registration **C J 7220**

The aim of this seminar is to raise most of the issues that have to be considered by anyone who wants to understand the American jury. This course attempts to determine what kind of complex matrix of legal functions, social symbols, practical reforms, political philosophy and human psychology the jury can be located. Cross-listed with CRJU 5220. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 7230 - Gun Rights and Gun Control

Summer 2010 Registration **C J 7230**

This seminar provides an in-depth analysis of the contemporary issues - constitutional, legal, political, criminological, sociological - involved in developing criminal justice policy regarding gun control. Cross-listed with CRJU 5230. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 7250 - Criminal Offenders

Summer 2010 Registration C J 7250

Crime can have a devastating effect on the lives of victims, families and communities with extraordinary costs to society as a whole. Documented evidence suggests that community safety is best achieved through promoting rehabilitation of offenders rather than relying solely on prisons and containment. This course introduces the core principles and tools of motivational interviewing as it is used currently with the offender population. Students learn how to utilize these skills working with specific offender populations and how to motivate these often resistive clients to change their thinking patterns and behaviors. Cross-listed with CRJU 5250. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 7260 - Crime and Literature

Summer 2010 Registration C J 7260

This seminar focuses on non-fiction literature as it relates to criminality and the Criminal Justice System. A substantial number of people in the United States form impressions and evaluate the effectiveness of the Criminal Justice System based on accounts presented within various types of nonfiction literature, either as social commentary or in biographical/autobiographical form. This course explores samples of these types of commentary, in order to more fully understand and appreciate their impact on shaping public opinion of the Criminal Justice System. Cross-listed with CRJU 5260. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 7270 - Case Studies in Criminal Justice

Summer 2010 Registration C J 7270

This seminar attempts to examine the lives of people who live on the margins of a society that perceives them as outsiders. Ethnographic studies which utilized observation, participant observations and interviews as their primary research methodology are assigned in order to develop a critical understanding of the social marginalization and cultural aspects of the lives of real human beings living on the constant edge of the law. Cross-listed with CRJU 5270. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 7280 - Leadership in the Modern Criminal Justice System

Summer 2010 Registration C J 7280

The course is designed to enhance interest, experience and knowledge in leadership that promotes professionalism and ethical behavior. Individual and organizational dynamics are explored through a critical perspective, focusing on criminal justice roles and responsibilities. The class teaches effective leadership skills in areas such as team

building, strategic planning, and decision making. Cross-listed with CRJU 5280.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 7301 - Crime and Media

Summer 2010 Registration C J 7280

This course surveys the relationship between mass media and the U.S. criminal justice system. Special attention is given to the role of media in the social construction of reality. Emphasis is placed on the application of social constructionism to criminal justice related social problems. Cross-listed with CRJU 5301.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 7320 - Seminar: Police Administration

Summer 2010 Registration C J 7320

Considers the major issues confronting police executives, such as professionalism, recruitment, selection, training, deployment, innovation, evaluation, and charges of brutality, in efficiency and corruption. Cross-listed with CRJU 5320.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 7321 - Research Methods in Criminal Justice

Summer 2010 Registration C J 7321

Provides an assessment of research strategies in criminal justice through an examination of applied research designs and analytical models. The logic and rationale of these various strategies are contrasted, and their relative merits are critiqued. Selected research problems in the criminal justice system are utilized to illustrate the application and interpretation of alternative strategies. Cross-listed with CRJU 5321.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 7325 - Qualitative Methods for Criminal Justice

Summer 2010 Registration C J 7325

Focuses on qualitative methods applicable to research in the field of criminal justice. The primary focus is on ethnographic approaches employing such fieldwork techniques as observation, participant observation, interviews, content analysis, life histories and case studies. Cross-listed with CRJU 5325.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 7330 - Gangs and Criminal Organizations

Summer 2010 Registration **C J 7325**

This course examines extent, nature and trends of gangs and criminal organizations. We focus on contemporary studies and theories of gang behavior and organized crime. The course examines types of crime, gender and race issues, transnational violence, and public policies regarding criminal organizations. Cross-listed with CRJU 5330. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 7391 - Sex Offenders and Offenses

Summer 2010 Registration **C J 7325**

This course will focus on challenges practitioners face in the management of sex offenders. It covers development of programs and partnerships that can effectively assess inform, manage and treat sex offenders through all phases of the system and reduce recidivism. Cross-listed with CRJU 5391. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 7410 - Victimology

Summer 2010 Registration **C J 7410**

This course examines victim-offender relationships, the interactions between victims and the criminal justice system and the connections between victims and other social groups and institutions among various populations. This course addresses the theory, history, research, legislation and policy implications related to the social construction of "The Victim." Cross-listed with CRJU 5410. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 7420 - Violence in Society

Summer 2010 Registration **C J 7420**

This course examines various aspects of violence including distribution over time and space, situations and circumstances associated with violent victimization and offending, and how social institutions, community structure and cultural factors shape violent events. Cross-listed with CRJU 5420. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 7430 - Drugs, Alcohol and Crime

Summer 2010 Registration **C J 7430**

This course provides an interdisciplinary overview of theory, research and policy issues surrounding the relationship between drugs, alcohol and crime; and the criminal justice system response. The course explores the socially constructed nature of illegal substances and connections to U.S. drug policy. Cross-listed with CRJU 5430. **Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 7510 - Seminar: Contemporary Issues in Law Enforcement

Summer 2010 Registration **C J 7510**

Examines current thinking and experience with respect to changing and reforming police programs and practices. The course focuses primarily on the American police experience, reviewing major innovations, exploring their rationale, and examining organizational impediments to their implementation. Cross-listed with CRJU

5510.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 7520 - Seminar: Corrections

Summer 2010 Registration **C J 7520**

Provides a critical examination of the development and implementation of correctional systems in America. The course presents the origins of correctional efforts and the evolution of the prison; reviews punishment and rehabilitation rationales in the context of sentencing models; examines the social organization of the prison, including inmate subcultures and staff work strategies; and assesses the inmates' rights movement and the impact of judicial intervention in correctional settings. Cross-listed with CRJU

5520.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 7530 - Seminar: Community Corrections

Summer 2010 Registration **C J 7530**

Analyzes the theories and practices of probation and parole, responses of paroling authorities to public pressures and court controls, and their implications for rehabilitation. Efforts to bridge institutional settings and community life, as well as the feasibility and effectiveness of treating individuals under sentence in the community, are reviewed.

Cross-listed with CRJU 5530.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 7540 - Seminar: Juvenile Justice Administration

Summer 2010 Registration **C J 7540**

Examines the policies and practices of agencies in processing youthful offenders through the juvenile court system, reviews trends in juvenile justice policy making, and assesses changes in response to juvenile crime by both the juvenile justice and criminal justice systems. Cross-listed with CRJU 5540.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 7550 - Seminar: Criminal Justice Policy Analysis

Summer 2010 Registration C J 7550

Provides a survey of conceptual and design strategies in criminal justice policy analysis. The logic and rationale of these various strategies are contrasted, and their relative merits are critiqued. Selected policy issues in the criminal justice system are utilized to illustrate the application and interpretation of alternative strategies. Cross-listed with CRJU 5550.

Semester Hours: 3 to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 7551 - Seminar: Judicial Administration

Summer 2010 Registration C J 7551

Analyzes judicial organization, court administration, and criminal court judicial decision making practices within the context of the broader operation of the criminal justice system. Special attention is paid to the social organization of the courtroom, examining the special roles of judges, prosecutors and defense attorneys. Cross-listed with CRJU 5551.

Semester Hours: 3 to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 7552 - Seminar: Criminal Justice Ethics

Summer 2010 Registration C J 7552

Offers a normative framework within which to explore ways to increase sensitivity to the demands of ethical behavior among criminal justice personnel. The application of a normative perspective enhances the possibility that moral problems are better understood, more carefully analyzed, and rendered more tractable. Applied ethics forces a reflection not just on ethics, but also on the nature and operation of the criminal justice system itself. Cross-listed with CRJU 5552.

Semester Hours: 3 to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 7553 - Seminar: Women and Criminal Justice

Summer 2010 Registration C J 7553

Explores issues surrounding women as offenders, victims, and criminal justice professionals. Investigates explanations for the involvement of women in illegal activities. Analyzes the plight of battered women, rape victims, and other female victims. Examines the participation of women in law enforcement, judicial processes, corrections and lawmaking. Cross-listed with CRJU 5553.

Semester Hours: 3 to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 7554 - Seminar: Criminal Justice Reform

Summer 2010 Registration **C J 7554**

Provides an overview of reform efforts in the criminal justice system. Selected theoretical approaches and policies are examined and assessed in light of their assumptions and programmatic applications. The rational and process underlying selected reform strategies are explored. The implications of the effects of reform in criminal justice policy making and decision making are analyzed. Cross-listed with CRJU 5554. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 7571 - Advanced Seminar: The Social Organization of Crime

Summer 2010 Registration **C J 7571**

Explores the relationship of neighborhood social disorganization to the dynamics of crime from a social ecology perspective. The course examines the underlying social causes of phenomena such as criminal victimization, violent and property crime, neighborhood fear, neighborhood deterioration and recidivism. The course examines social, structural, and ecological characteristics of neighborhoods and communities in affecting crime. Cross-listed with CRJU 5571. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 7572 - Advanced Seminar: Race, Crime and Justice

Summer 2010 Registration **C J 7572**

Examines the role of race in criminal justice processing. This course examines the research findings, interpretations, issues, and implications in assessing the impact of race in the administration of criminal justice. Explores the policy implications concerning the nature and extent of racial disparities in the criminal justice system and lays out a research agenda to more strategically address these issues within criminal justice policy making. Cross-listed with CRJU 5572. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 7574 - Advanced Seminar: White Collar Crime

Summer 2010 Registration **C J 7574**

Employs both the social science and legal approaches to examine crime committed by corporations as well as by individuals in white collar occupations. The course covers how such crimes are socially defined, who commits them, who is victimized by them, which social contexts promote them, and how society and the criminal justice system respond to them. Cross-listed with CRJU 5574. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 7575 - Advanced Seminar: The Mentally Disordered Offender

Summer 2010 Registration C J 7575

Examines the offender who may be mentally disordered. A survey is made of the various phases of the criminal justice system where psychiatrists are involved, e.g., diversion, fitness, insanity and sentencing. Dangerous sex offender legislation, "Not guilty by reason of insanity" and "Guilty but mentally ill" statutes, and issues concerning confidentiality, informed consent, and treatment are addressed. Cross-listed with CRJU 5575. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 7576 - Advanced Seminar: Social Science in the Criminal Justice System

Summer 2010 Registration C J 7576

Examines the use of social science as a tool for legal analysis within the criminal justice system. The course examines how social science research is used to resolve relatively simple factual disputes, then moves on to more complex issues that arise when social science is invoked to make or to change law, both constitutional law (particularly the First, Sixth, Eighth and Fourteenth Amendments) and common law, particularly the construction of procedural rules that govern the operations of the criminal justice system. Cross-listed with CRJU 5576. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 7600 - Special Topics in Criminal Justice

Summer 2010 Registration C J 7600

This highly specialized seminar addresses cutting-edge and emerging developments in the field of criminal justice and provides students and faculty with the opportunity to explore significant themes, issues, and problems from a broad interdisciplinary perspective. Topics vary from semester to semester. Course may be taken for credit more than once, provided subject matter is not repeated. Cross-listed with CRJU 6600. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 7910 - Women and Violence: a Sociological Perspective

Summer 2010 Registration C J 7910

This course is a sociological, feminist analysis of violence against women and girls that addresses the intersection of sexism and other forms of oppression such as racism, classism and heterosexism within historical, cultural, social and institutional contexts. Topics covered focus on overt and covert forms of sexual coercion, harassment and assault, battering and stalking. Cross-listed with CRJU 5910, PUAD 5910 and 7910. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 7920 - Psychology of Violence Against Women

Summer 2010 Registration C J 7920

This class addresses the contributions and the limitations of current empirical and clinical psychological literatures about domestic violence. Topics covered include: distinguishing among mental health professionals regarding work with DV clients; the psychological impacts of domestic violence; services useful for responding to the needs of women and children; and an introduction to the psychology and treatment of batterers. Cross-listed with CRJU 5920, PUAD 5920 and 7920. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 7930 - Battered Women and the Legal System

Summer 2010 Registration C J 7930

This course provides a practical understanding of how the following relate to battered women and their children; a) major developments in federal, state, tribal, administrative, statutory and case law; b) the role and responses of the law enforcement, judges, attorneys, victim assistance providers and other legal system agents; and c) the role and process of victim advocacy. Cross-listed with CRJU 5930, PUAD 5930 and 7930. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 7940 - Domestic Violence Social Change and Advocacy

Summer 2010 Registration C J 7940

This course provides students information on the theories and strategies behind contemporary social change movements and the skills necessary to organize and implement actions to influence public awareness and policy. The values of American society are complex and require advocates/activists to develop a heightened sense of self, community and an ethical framework while confronting sexism, racism and other forms of oppression. Cross-listed with CRJU 5940, PUAD 5940 and 7940. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 8840 - Independent Study

Summer 2010 Registration C J 8840

Affords the student the opportunity to pursue creative research activities under the individual supervision of a full-time faculty member. No more than six semester hours of credit for independent study may be applied toward the PhD degree. Prereq: 12 semester hours of criminal justice course work and permission of instructor. **Semester Hours:** 1to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CRJU 8990 - Doctoral Dissertation

Summer 2010 Registration C J 8990

Upon admittance to candidacy, students must be continuously registered for dissertation credit each fall and spring semester or be automatically dropped from the program. Students must register for 7.0 credit hours per semester. In cases where students will not be using any university resources during a particular semester, they may petition the PhD director to register for only 3.0 credit hours to maintain continuous enrollment. Students must be registered for dissertation credit during the semester they have a colloquium or defense. **Semester Hours:** 1to 10
Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 1320 - Introduction to Computing

Summer 2010 Registration C SC 1320

A course in programming for students in all disciplines who are non-computer science majors. Learning essential programming skills using a modern language like Ruby or Python, both of which are easier to learn than traditional programming languages such as C++ and Java. The student is introduced to the flow of control: selection, iteration, subprograms. Data structures: strings, arrays, records, lists, tables. Introduction to testing and debugging. Prereq: MATH 1120. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 1410 - Fundamentals of Computing

Summer 2010 Registration C SC 1410

First course in computing for those who will take additional computer science courses. Covers the capabilities of a computer, the elements of the computer language C++, and basic techniques for solving problems using a computer. Coreq: CSCI 1411. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 1411 - Fundamentals of Computing Laboratory

Summer 2010 Registration C SC 1411

This laboratory is taken with CSCI 1410 and will provide students with additional help with problem solving and computer exercise to compliment the course material covered in CSCI 1410. Prereq: Freshman status. Coreq: CSCI 1410. **Semester Hours:** 1to 1
Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 1510 - Logic Design

Summer 2010 Registration C SC 1510

The design and analysis of combinational and sequential logic circuits. Topics include

binary and hexadecimal number systems, Boolean algebra and Boolean function minimization, and algorithmic state machines. Lecture/lab includes experiments with computer-aided design tools. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 1800 - Special Topics: 1800-1839

Summer 2010 Registration C SC 1800

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 2132 - Circuit Analysis I

Summer 2010 Registration C SC 2132

Basic theorems of circuit analysis. Transient solution of circuits by classical techniques. Ideal operational amplifier analysis techniques and applications. Prereq: MATH 2411 and PHYS 2331. Cross-listed with ELEC 2132. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 2312 - Intermediate Programming

Summer 2010 Registration C SC 2312

Programming topics in the C++ language. The emphasis is on problem solving using object oriented and Generic Programming. Topics include advanced I/O, classes, inheritance, polymorphism and virtual functions, abstract base classes, exception handling, templates, and the Standard Template Library. Prereq: CSCI 1410. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 2421 - Data Structures and Program Design

Summer 2010 Registration C SC 2421

Topics include a first look at an algorithm, data structures, abstract data types, and basic techniques such as sorting, searching, and recursion. Programming exercises are assigned through the semester. Prereq: ENGL 1020, CSCI 2312. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 2511 - Discrete Structures

Summer 2010 Registration C SC 2511

Covers the fundamentals of discrete mathematics, including: logic, sets, functions, asymptotics, mathematical reasoning, induction, combinatorics, discrete probability, relations and graphs. Emphasis on how discrete mathematics applies to computer

science in general and algorithm analysis in particular. Prereq: MATH 1401. **Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 2525 - Assembly Language and Computer Organization

Summer 2010 Registration C SC 2525

Topics include computer architecture, program execution at the hardware level, programming in assembly language, the assembly process, hardware support of some high-level language features, and a program's interface to the operating system. Programming exercises are assigned in this course. These exercises involve the use of specific hardware in designated laboratories. Prereq: CSCI 1410 and 1510. **Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 2571 - Fundamentals of UNIX

Summer 2010 Registration C SC 2571

Introduces the UNIX operating system and its family of related utility programs. History and overview, versions, and common features. File operations, utilities, shells, editors, filters and data manipulation. Shell programming communications and networking, windowing environments, mail and Internet. Programming tools. Simple system administration. Credit will not count toward BSCSE degree. Prereq: familiarity with operating systems and/or a programming course. **Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 2800 - Special Topics: 2800-2939

Summer 2010 Registration C SC 2800

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 3287 - Database System Concepts

Summer 2010 Registration C SC 3287

Introduces database design, database management systems, and the SQL standard database language. Includes data modeling techniques, conceptual database design, theory of object-relational and relational databases, relational algebra, relational calculus, normalization and database integrity. Prereq: CSCI 2421. **Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 3320 - Advanced Programming

Summer 2010 Registration **C SC 3320**

A continuation of programming and problem solving methodologies. The focus will be on generic programming with C++ templates and the standard template library, and will be supplemented with object-oriented programming and top-down design. Prereq: CSCI 2421. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 3412 - Algorithms

Summer 2010 Registration **C SC 3412**

Design and analysis of algorithms. Asymptotic analysis as a means of evaluating algorithm efficiency. The application of induction and other mathematical techniques for proving the correctness of an algorithm. Data structures for simplifying algorithm design, such as hash tables, heaps and search trees. Elementary graph algorithms.

Assignments include written work and programming projects. Prereq: CSCI 2421 and CSCI 2511. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 3415 - Principles of Programming Languages

Summer 2010 Registration **C SC 3415**

Introduces programming language design concepts and implementation issues. Includes language concepts such as control structures and data types, formal language specification techniques, and syntactic and semantic implementation issues. Prereq: CSCI 2421 and 2525. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 3453 - Operating System Concepts

Summer 2010 Registration **C SC 3453**

Covers the principles of computer operating systems and the essential components of an operating system. Topics include: I/O devices, file systems, CPU scheduling and memory management. Prereq: CSCI 3412 (Algorithm). **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 3508 - Introduction to Software Engineering

Summer 2010 Registration **C SC 3508**

Introduces principles and practices of software engineering: software life-cycle models, requirements engineering, analysis and design tools, human factors risk management, program certification, project management and intellectual property rights. Prereq: ENGL 1020 and CSCI 3412. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 3511 - Hardware-Software Interface

Summer 2010 Registration C SC 3511

Hardware and software techniques needed to control and program device interfaces. Input and output devices, computer peripherals, device drivers and interfaces are introduced. Specific programmable devices are used in class projects. Prereq: CSCI 2525. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 3560 - Probability and Computing

Summer 2010 Registration C SC 3560

Events and probability. Discrete random variables and expectation. Moments and deviations. Chernoff bounds. The probabilistic method. Markov chains and random walks. Continuous distributions and the Poisson process. Entropy, randomness and information. The Monte Carlo method. Martingales. Pairwise independence and universal hash functions. Statistical inference. Bayesian methods. Prereq: MATH 2411. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 3840 - Independent Study: CSCI

Summer 2010 Registration C SC 3840

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 3963 - Network Structures

Summer 2010 Registration C SC 3963

This interdisciplinary course examines how the technological, social and economic worlds are connected and how the study of networks sheds light on these connections. Topics include: how opinions spread through society; the robustness and fragility of financial networks; the technology and economics of Web information and on-line communities. Prereqs: MATH 2411. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 4034 - Theoretical Foundations of Computer Science

Summer 2010 Registration C SC 4034

Introduces abstract models for computation, formal languages and machines. Topics include: automata theory, formal languages, grammars and Turing machines. Prereq: CSCI 3412. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 4202 - Introduction to Artificial Intelligence

Summer 2010 Registration **C SC 4202**

Topics include heuristic search, games playing algorithms, application of predicate calculus to AI, introduction to planning, application of formal grammars to AI. Prereq: CSCI 3412. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 4408 - Applied Graph Theory

Summer 2010 Registration **C SC 4408**

Introduces discrete structures applications of graph theory to computer science, engineering and operations research. Topics include connectivity, coloring, trees, Euler and Hamiltonian paths and circuits. Matching and covering problems, shortest route and network flows. Prereq: MATH 3000 or CSCI 2511. Cross-listed with MATH 4408. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 4411 - Computational Geometry

Summer 2010 Registration **C SC 5411**

Many practical and aesthetic algorithmic problems have their roots in geometry. Applications abound in the areas of computer graphics, robotics, computer-aided design, and geographic information systems, for example. A selection of topics from convex hull, art gallery problems, ray tracing, point location, motion planning, segment intersection, Voronoi diagrams, visibility and algorithmic folding will be covered. Prereq: CSCI 3412. Cross-listed with CSCI 5411. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 4501 - Java

Summer 2010 Registration **C SC 4501**

Comprehensive course on Java programming. Coverage of programming language constructs of Java and the core libraries that come with Java: coverage of advanced topics, including technologies for building distributed applications, and interacting with a database. Prereq: CSCI 2421. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 4555 - Compiler Design

Summer 2010 Registration **C SC 4555**

Introduces the basic techniques used in translating programming languages: scanning, parsing, symbol table management, code generation, code optimization and error

recovery. Prereq: CSCI 3412 and 3415. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 4565 - Introduction to Computer Graphics

Summer 2010 Registration C SC 4565

Introduces two and three dimensional computer graphics. Topics include scan conversion, geometric primitives, transformation, viewing, basic rendering, and illumination. Emphasis is on programming using "C" and "C++" Open Gl. Prereq: CSCI 3412 and MATH 3191 or 3195. Cross-listed with CSCI 5565. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 4591 - Computer Architecture

Summer 2010 Registration C SC 4591

Deals with how assembly language maps to hardware, and basic hardware techniques implemented in computers. Topics include logic design of arithmetic units, data control path processor logic, pipelining, memory systems, and input-output units. The emphasis is on logic structure rather than electronic circuitry. Students must know basic control logic design and be familiar with an assembly language before taking this course. Prereq: CSCI 2525 or ELEC 2651. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 4630 - Linguistic Geometry

Summer 2010 Registration C SC 4630

A new type of game theory in Artificial Intelligence for solving abstract board games (ABG). A number of real world systems including military combat, transportation, and internet cyber war can be modeled as ABG. Prereq: CSCI 3412. Cross-listed with CSCI 5630. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 4640 - Universal Compiler: Theory and Construction

Summer 2010 Registration C SC 4640

Theoretical foundations and step-by-step hands-on experience in the development of a compiler, which can tune itself to a new programming language. This is a must-take course for future software developers as well as those interested in applications of the theory of Computer Science. Cross-listed with CSCI 5640. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 4650 - Numerical Analysis I

Summer 2010 Registration **C SC 4650**

Methods and analysis of techniques used to resolve continuous mathematical problems on the computer. Solution of linear and nonlinear equations, interpolation and integration. Prereq: MATH 2411, MATH 3191 or MATH 3195, and programming experience. Cross-listed with CSCI 5660, MATH 4650, and MATH 5660. **Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 4660 - Numerical Analysis II

Summer 2010 Registration **C SC 4660**

Numerical differentiation and integration, numerical solution of ordinary differential equations, and numerical solutions of partial differential equations as time allows. Prereq: MATH 3195 or both 3191 and 3200; MATH or CSCI 4650 or 5660; or programming experience. Cross-listed with CSCI 5661, MATH 4660 and 5661. **Semester**

Hours: 3to 3 **When Offered:** *SPRING*

Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 4738 - Senior Design I

Summer 2010 Registration **C SC 4738**

This is an advanced practical course in which students design, implement, and document and test software systems for use in industry, non-profits, government and research institutions. The course offers practical experience by working closely with project sponsors. It also offers extensive experience in oral and written communication throughout the software lifecycle. Prereq: CSCI 3508. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 4739 - Senior Design II

Summer 2010 Registration **C SC 4739**

This course is a continuation of Senior Design I. Students must have taken Senior Design I in order to enroll for Senior Design II. In this course, the projects begun in Senior Design I are completed and presented. Prereq: CSCI 4738. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 4740 - Computer Security

Summer 2010 Registration **C SC 4740**

Introduces basic knowledge from the computer security area. Concepts and techniques of cryptography, including history of codes and ciphers, basic cryptography techniques like data encryption standards, public key systems and digital signatures. Prereq: MATH

1120.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 4761 - Introduction To Computer Networks

Summer 2010 Registration **C SC 4761**

Introduction and overview of computer networks. Topics include protocols, quality of services and performance issues. Prereq: CSCI 2421.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 4771 - Introduction To Mobile Computing

Summer 2010 Registration **C SC 4771**

Provides an in-depth understanding of the fundamentals in mobile computing and studies the existing and proposed solutions for ubiquitous computing. This course focuses on systems and networking issues involved with supporting mobility. Prereq: CSCI 3453 and 4761. Cross-listed with CSCI 5771.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 4788 - Bioinformatics

Summer 2010 Registration **C SC 4788**

Provides a broad exposure to the basic concepts and methodologies of bioinformatics and their application to analyzing genomic and proteomic data. Topics may include dynamic programming algorithms, graph theoretic techniques, hidden Markov models, phylogenetic trees, RNA/protein structure prediction and microarray analysis. Prereq: CSCI 1410 and MATH 3195 or 3191. Cross-listed with MATH 4788, PHYS 4788.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 4800 - Special Topics: 4800-4839

Summer 2010 Registration **C SC 4800**

Credit and subject matter to be arranged. Prereq: as determined by instructor.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 4840 - Independent Study

Summer 2010 Registration **C SC 4840**

For seniors majoring in computer science.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 4910 - User Experience Design

Summer 2010 Registration C SC 4910

A how-to course for any technologist who has endured difficult interfaces and want to design effective user interfaces that respect and advance the user experience. Course includes: Psychology, HCI personas, scenarios, prototyping, and evaluation for desktop and mobile applications. Prereq: CSCI 2312 - Intermediate Programming. **Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 4920 - Computer Game Design and Programming

Summer 2010 Registration C SC 4920

Computer Game Design and Programming introduces practical and example driven approaches to modern 3D game development. Topics include 3D modeling, character animation, UI design, scripting, texture mapping, and sound effect. Prereq: CSCI 2421. **Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 4939 - Cooperative Education

Summer 2010 Registration C SC 4939

Faculty or employer-supervised employment in industry. Enrollment is limited to students who fully completed a contract for cooperative education credit by the last day of the drop or add period. Prereq: CSCI 3415. **Semester Hours: 1to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 5098 - Computer Science For Bioscientists

Summer 2010 Registration C SC 5098

Provides a broad but detailed overview of the computer science field to graduate students in the biosciences, with emphasis on web technologies, programming languages, algorithms and database systems. No credit for CS graduate students. Prereq: working knowledge of programming language (e.g., Java). **Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 5217 - Information Theory

Summer 2010 Registration C SC 5217

Introduces information theory and its application in computer science, communication theory, coding and applied mathematics. Entropy, mutual information, data compression and storage, channel capacity, rate distortion, hypothesis testing. Error detecting and correcting codes, block codes and sequential codes. Prereq: CSCI 4535. **Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 5255 - Object Oriented Design

Summer 2010 Registration **C SC 5255**

Software system design using object-oriented techniques, responsibility driven design and agile development practices. Topics include objects, classes, interfaces, inheritance, polymorphism, exception handling and testing. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 5408 - Applied Graph Theory

Summer 2010 Registration **C SC 5408**

Introduces discrete structures applications of graph theory to computer science, engineering and operations research. Topics include connectivity, coloring, trees, Euler and Hamiltonian paths and circuits. Matching and covering problems, shortest route and network flows. Prereq: MATH 3000 or CSCI 2511. Cross-listed with MATH

4408. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 5409 - Graph Theory and Graph Algorithms

Summer 2010 Registration **C SC 5409**

Studies geometric graphs and other geometric objects, both analysis and algorithmic construction, leads to interesting connections among VLSI design, graph theory and graph algorithms. Studies a subset of the recent literature, with special emphasis on visibility graphs, thickness of graphs, graph coloring and the surprising and elegant connections among them all. Other topics are introduced as time permits. Prereq: CSCI 3412, CSCI 4408, CSCI 5451 or MATH 4408 or permission of instructor. **Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 5411 - Computational Geometry

Summer 2010 Registration **C SC 5411**

Many practical and aesthetic algorithmic problems have their roots in geometry. Applications abound in the areas of computer graphics, robotics, computer-aided design, and geographic information systems, for example. A selection of topics from convex hull, art gallery problems, ray tracing, point location, motion planning, segment intersection, Voronoi diagrams, visibility and algorithmic folding will be covered. Prereq: CSCI 3412.

Cross-listed with CSCI 4411. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 5446 - Theory of Automata

Summer 2010 Registration **C SC 5446**

Studies the relationships between classes of formal languages (regular, context-free, context-sensitive, phrase-structure) and classes of automata (finite-state, pushdown, Turing machines). Additional topics include decidability and computability issues. Prereq: CSCI 3412. Cross-listed with MATH 5446. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 5451 - Algorithms

Summer 2010 Registration **C SC 5451**

Advanced design and analysis techniques: dynamic programming, greedy algorithms, amortized analysis. Advanced data structures: Fibonacci heaps, union-find data structures. Study of variety of special topics, which may include: graph algorithms, optimization problems, Fast Fourier Transform, string matching, geometric algorithms, Np-completeness and approximation algorithms. Prereq: CSCI 3412. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 5542 - Neural Networks

Summer 2010 Registration **C SC 5542**

Parallel distributed representations, dynamics of Hopfield-style networks, content addressable memories, and Hebbian learning are the major topics of the first half. The last half consists of simulated annealing back propagation, competitive learning, and self-organizing networks. Prereq: CSCI 3412. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 5551 - Parallel and Distributed Systems

Summer 2010 Registration **C SC 5551**

Examines a range of topics involving parallel and distributed systems to improve computational performance. Topics include parallel and distributed programming languages, architectures, networks, algorithms and applications. Prereq: Graduate Standing. Cross-listed with CSCI 7551. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 5552 - Advanced Topics in Parallel Processing

Summer 2010 Registration **C SC 5552**

Examines the advances of sequential computers for gaining speed and application of these techniques to high-speed supercomputers of today. Programming methodologies of distributed and shared memory multiprocessors, vector processors and systolic arrays

are compared. Performance analysis methods for architectures and programs are described. Prereq: CSCI 5551. Cross-listed with CSCI 7552. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 5559 - Database Systems

Summer 2010 Registration C SC 5559

Introduces database system concepts, with examination of relational database systems from conceptual design through relational schema design and physical implementation. Topics include database design and implementation for large database systems, transaction management, concurrency control, object-oriented and distributed database management systems. Prereq: CSCI 3287. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 5565 - Introduction to Computer Graphics

Summer 2010 Registration C SC 5565

Introduces two and three dimensional computer graphics. Topics include scan conversion, geometric primitives, transformation, viewing, basic rendering, and illumination. Emphasis is on the programming using C and C++ Open Gl. Prereq: CSCI 3412 and MATH 3191/3195. Cross-listed with CSCI 4565. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 5573 - Operating Systems

Summer 2010 Registration C SC 5573

Students study the principles of computer operating systems and their essential components. Team projects expose students to variety of system design issues as they relate to the functionality and performance of the system. Topics include I/O devices, Disk Scheduling, File System Organizations, Directory Systems, Sequential and Concurrent process, CPU Scheduling, Memory Management, Deadlock and review of some related articles in the literature. Prereq: CSCI 3412 and 3415. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 5574 - Advanced Topics in Operating Systems

Summer 2010 Registration C SC 5574

Covers the advanced topics in operating systems by examining functionality and performance issues in CPU Scheduling, communications, distributed file systems, distributed operating systems, shared-memory multiprocessors and real-time operating systems. In addition to studying papers, reviews and presentations, students carry out a semester long team project within the scope of one of the above topics Prereq: CSCI

3453 or CSCI 5573. Cross-listed with CSCI 7574. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 5582 - Artificial Intelligence

Summer 2010 Registration **C SC 5582**

Approaches to design of systems for solving problems usually solved by humans, especially those related to intelligent decision making. Emphasis on various types of knowledge representation. Cross-listed with CSCI 7582. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 5585 - Advanced Computer Graphics

Summer 2010 Registration **C SC 5585**

An in-depth study of active research topics in computer graphics. Topics include advanced rendering, global illumination, scientific visualization, geometric modeling, simulation and animation. Emphasis is on readings from literature and on a term project. Prereq: CSCI 5565 or 4565. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 5593 - Advanced Computer Architecture

Summer 2010 Registration **C SC 5593**

Important concepts in the structural design of computer systems are covered. Topics include memory hierarchy, super pipelining and super scalar techniques, dynamic execution, vector computers and multiprocessors. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 5610 - Computational Biology

Summer 2010 Registration **C SC 5610**

Designed to introduce a broad range of computational problems in molecular biology. Solution techniques draw from several branches of mathematics: combinatorics, probability, optimization, and dynamical systems. No prior knowledge of biology is critical, but it would be at least helpful to have the equivalent of BIOL 5099. Prereq: CSCI 2421. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 5619 - Complex Intelligent Systems

Summer 2010 Registration **C SC 5619**

Presents the cutting-edge results of research in AI: advanced topics in linguistic geometry. LG is an approach to construction of mathematical models for reasoning about large-scale multi-agent concurrent games. The purpose of LG is to provide

strategies to guide the participants of a game to reach their goals. Prereq: CSCI 4202, 5582 or 5690. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 5630 - Linguistic Geometry

Summer 2010 Registration C SC 5630

A new type of game theory in Artificial Intelligence for solving abstract board games (ABG). a number of real world systems including military combat, transportation, and internet cyber war can be modeled as Abg. Prereq: CSCI 4202, 5582 or 5690. Cross-listed with CSCI 4630. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 5640 - Universal Compiler: Theory and Construction

Summer 2010 Registration C SC 5640

Theoretical foundations and step-by-step hands-on experience in the development of a compiler, which can tune itself to a new programming language. This is a must-take course for future software developers as well as those interested in applications of the theory of Computer Science. Cross-listed with CSCI 4640. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 5654 - Algorithms for Communication Networks

Summer 2010 Registration C SC 5654

Algorithmic and mathematical underpinnings of communication networks. a taxonomy of data-packet networks depending on modes of communication: fixed-interconnection networks, radio networks and multiple-access channel. Algorithms to implement packet routing and broadcasting. Prereq: CSCI 3412. Cross-listed with CSCI 7654. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 5660 - Numerical Analysis I

Summer 2010 Registration C SC 5660

Methods and analysis of techniques used to resolve continuous mathematical problems on the computer. Solution of linear and nonlinear equations, interpolation and integration. Prereq: MATH 2411, MATH 3191 or MATH 3195, and programming experience. Cross-listed with CSCI 4650, MATH 4650, and MATH 5660. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 5661 - Numerical Analysis II

Summer 2010 Registration **C SC 5661**

Numerical differentiation and integration, numerical solution of ordinary differential equations, and numerical solutions of partial differential equations as time allows.

Prereq: MATH 3195 or both 3191 and 3200; MATH or CSCI 4650 or 5660; or programming experience. Cross-listed with CSCI 4660, MATH 4660 and 5661. **Semester**

Hours: 3to 3**When Offered:** *SPRING*

Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 5667 - Introduction to Approximation Theory

Summer 2010 Registration **C SC 5667**

Normed linear spaces, convexity, existence and uniqueness of best approximations.

Tchebychev approximation by polynomials and other related families. Least squares approximation and splines. Prereq: MATH 4320. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 5682 - Expert Systems

Summer 2010 Registration **C SC 5682**

Reviews and analyzes many expert systems documented in the literature, such as Mycin, Macsyma, and Xcon. Emphasis is given to the design of rule-based systems, the use of uncertain and incomplete information and system shells. Prereq: CSCI

3412. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 5690 - Knowledge Representation for Intelligent Systems

Summer 2010 Registration **C SC 5690**

An in-depth study of different types of knowledge representation in artificial intelligence for the efficient control of complex real-world systems like autonomous robots, space vehicles, and military units. Major emphasis is on search algorithms and heuristics, logical representation with applications to planning, formal linguistic representation. At the conclusion, all the theories studied are combined in the form of introduction to the state-of-the-art linguistic geometrical representation of complex control systems. Prereq: CSCI 3412. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 5701 - High-Performance Communication Systems and Network Analysis

Summer 2010 Registration **C SC 5701**

Protocols and architectures related to high performance communication systems as well as network performance analysis techniques are covered. Topics include Integrated Services Digital Networks (ISDN), Broadband ISDN, protocols such as ATM and SONET, and high performance network architectures such as optical networks.

Analytical analysis of network performance includes queuing theory and stochastic processes. Prereq: CSCI 4761 or 5761. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 5702 - Data Mining

Summer 2010 Registration C SC 5702

Introduces data mining and knowledge discovery. Topics include: preprocessing, clustering, machine learning, neural networks, fuzzy sets, evolutionary computation. Prereq: CSCI 3412 and MATH 3191/3195. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 5704 - Introduction to Distributed Systems

Summer 2010 Registration C SC 5704

Studies design, implementation and management of distributed systems, including communication issues, security reliability, resource sharing, and remote execution. Prereq: CSCI 3453 and 4591. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 5728 - Software Engineering

Summer 2010 Registration C SC 5728

Groups of students plan, analyze and design large software projects. Prereq: CSCI 3412 and 3415. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 5765 - Computer Networks

Summer 2010 Registration C SC 5765

An in-depth study of active research topics in computer networks. Topics include: Internet protocols, TCP/UDP, congestion and flow control, IP routings, mobile IP, P2P overlay networks, network security, performance, and other current research topics. Prereq: Graduate Standing. Cross-listed with CSCI 7765. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 5771 - Introduction to Mobile Computing

Summer 2010 Registration C SC 5771

Provides the fundamentals of mobile computing. Studies existing and proposed solutions for ubiquitous computing. This course focuses on systems and networking issues involved with supporting mobility. Prereq: CSCI 3453 and 4761. Cross-listed with CSCI 4771. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 5780 - Theory Of Distributed Computing

Summer 2010 Registration C SC 5780

Elements of the theory of distributed computing through fundamental algorithmic ideas, lower bound techniques, and impossibility results. Timing assumptions (asynchrony and synchrony), simulations between models (message passing and shared memory), failure types (crash and Byzantine). Prereq: CSCI 3412. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 5799 - Topics in Network Computing

Summer 2010 Registration C SC 5799

Studies the active research topics in network based computing such as Cluster, Grid computing, P2P Computing, Pervasive Computing. Workflow system and Cloud Computing. Students will study key papers in the literature, and submit a research term project. Prereq: Graduate standing. Cross-listed with CSCI 7799. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 5800 - Special Topics: 5800-5839

Summer 2010 Registration C SC 5800

These special topics courses cover recent developments in an aspect of computer science. Prereq: as determined by instructor. **Semester Hours:** 1to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 5840 - Independent Study

Summer 2010 Registration C SC 5840

For graduate computer science students. **Semester Hours:** 1to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 5941 - Directed Study: Programming Project

Summer 2010 Registration C SC 5941

Software development project supervised by a faculty member approved by the Center for Computational Biology. Used towards a certificate in Computational Biology. Counts as an independent study. Prereq: CSCI 5451 and CSCI 5610. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 6595 - Computational Methods in Nonlinear Programming

Summer 2010 Registration C SC 6595

Introduces fundamental algorithms and theory for nonlinear optimization problems. Topics include Newton, quasi-Newton and conjugate directional methods; line search

and trust-region methods; active set, penalty and barrier methods for constrained optimization; convergence analysis and duality theory. Prereq: MATH 4320, MATH 5718. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 6664 - Numerical Linear Algebra

Summer 2010 Registration C SC 6664

Offered every other year. Solution of linear equations, eigenvector and eigen value calculation, matrix error analysis, orthogonal transformation, iterative methods. Prereq: MATH 5660 and 5718. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 6840 - Independent Study

Summer 2010 Registration C SC 6840

For doctoral computer science students. **Semester Hours:** 1to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 6950 - Master's Thesis

Summer 2010 Registration C SC 6950

Semester Hours: 1to 9

Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 6960 - Master's Report

Summer 2010 Registration C SC 6960

Students seeking a Master of Science in computer science, who do not choose to do a thesis, must complete an individual project of an investigative and creative nature under supervision of a full-time CS graduate faculty. Student must present their results to a faculty committee. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 7002 - Computer Security

Summer 2010 Registration C SC 7002

A broad overview of computer security, roughly divided into three unequal components: a) the history of codes and ciphers; b) basic cryptographic techniques, for example, symmetric cryptography, authentication techniques, and asymmetric crypto systems, and: c) applications to current and future computer-related technologies, for example, network security, wireless communication, quantum cryptography, and more. Prereq: CSCI 5451. Cross-listed with ISMG 7002. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 7200 - Advances In Management Information Systems

Summer 2010 Registration C SC 7200

Provides a broad coverage of research on the management of information technology. The course covers the systems-oriented research, organizational-oriented research, and information systems economics research. Prereq: PhD standing. Cross-listed with ISMG 7200. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 7210 - Topics In Analytical Research In Management Information Systems

Summer 2010 Registration C SC 7210

Covers a variety of analytical research topics of interest to the IS research community including the evaluation of data mining algorithm performance, cost sensitive learning and outlier detection. Prereq: Admission to the CSIS PhD program. Cross-listed with ISMG 7210. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 7211 - Topics In Behavioral-Organizational Research In Managemnt Information Systems

Summer 2010 Registration C SC 7211

Provides in-depth exposure to some key behavioral, management and organizational theories and models used in Information Systems research. Covers topics in socio-technical, trust, computer self-efficacy, organizational transformation, organizational learning, resource-based and coordination theories. Prereq: Admission to the CSIS PhD program. Cross-listed with ISMG 7211. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 7502 - Research Methods

Summer 2010 Registration C SC 7502

Promotes research skills. Involves presenting a research topic and discussions of its merits, reviewing journal articles, writing a paper and/or a proposal in the NIH / NSF format in the student's area of research. Prereq: PhD student standing or permission of instructor for MS students who are writing a thesis. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 7551 - Parallel and Distributed Systems

Summer 2010 Registration C SC 7551

Examines a range of topics involving parallel and distributed systems to improve computational performance. Topics include parallel and distributed programming languages, architectures, networks, algorithms and applications. Prereq: Graduate

Standing. Cross-listed with CSCI 5551. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 7552 - Advanced Topics in Parallel Processing

Summer 2010 Registration C SC 7552

Examines the advances of sequential computers for gaining speed and application of these techniques to high-speed supercomputers of today. Programming methodologies of distributed and shared memory multiprocessors, vector processors and systolic arrays are compared. Performance analysis methods for architectures and programs are described. Cross-listed with CSCI 5552. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 7574 - Advanced Topics in Operating Systems

Summer 2010 Registration C SC 7574

Covers the advanced topics in operating systems by examining functionality and performance issues in CPU Scheduling, communications, distributed file systems, distributed operating systems, shared-memory multiprocessors and real-time operating systems. In addition to studying papers, reviews and presentations, students carry out a semester long team project within the scope of one of the above topics Prereq: CSCI 3453 or CSCI 5573. Cross-listed with CSCI 5574. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 7582 - Artificial Intelligence

Summer 2010 Registration C SC 7582

Approaches to design of systems for solving problems usually solved by humans, especially those related to intelligent decision making. Emphasis on various types of knowledge representation. Cross-listed with CSCI 5582. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 7654 - Algorithms for Communication Networks

Summer 2010 Registration C SC 7654

Algorithmic and mathematical underpinnings of communication networks. A taxonomy of data-packet networks depending on modes of communication: fixed-interconnection networks, radio networks and multiple-access channel. Algorithms to implement packet routing and broadcasting. Prereq: Permission of instructor. Cross-listed with CSCI 5654. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 7711 - Bioinformatics I

Summer 2010 Registration **C SC 7711**

(BIOI 7711-Offered on a semester basis from H.S.C.) What is Bioinformatics and why study it? How is large-scale molecular biology data generated, where and how can researchers gain access to it, what computational analyses are possible and computational techniques for solving inference problems in molecular biology? Prereq: Permission of instructor. **Semester Hours:** 4to 4**When Offered:** FALL
Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 7712 - Bioinformatics II

Summer 2010 Registration **C SC 7712**

(BIOI 7712-offered on a semester basis from H.S.C.) Inference problems and computational techniques for molecular biology, with emphasis on machine learning approaches. Use of computational induction techniques focused on information extraction from biomedical literature, inference of biochemical networks from high-throughput data and prediction of protein function. Estimation, clustering, discrimination and regression. Prereq: CSCI 7711. **Semester Hours:** 4to 4**When Offered:** SPRING
Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 7765 - Computer Networks

Summer 2010 Registration **C SC 7765**

An in-depth study of active research topics in computer networks. Topics include: Internet protocols, TCP/UDP, congestion and flow control, IP routings, mobile IP, P2P overlay networks, network security, performance, and other current research topics. Prereq: Graduate Standing. Cross-listed with CSCI 5765. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 7799 - Topics in Network Computing

Summer 2010 Registration **C SC 7799**

Studies the active research topics in network based computing such as Cluster, Grid computing, P2P Computing, Pervasive Computing. Workflow system and Cloud Computing. Students will study key papers in the literature, and submit a research term project. Prereq: Graduate standing. Cross-listed with CSCI 5799. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 7800 - Special Topics: 7800-7839

Summer 2010 Registration **C SC 7800**

These special topics courses cover recent developments in an aspect of computer science. Prereq: As determined by instructor. **Semester Hours:** 1to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 8990 - Doctoral Dissertation

Summer 2010 Registration C SC 8990

Semester Hours: 1to 9

Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 8991 - Doctoral Dissertation

Summer 2010 Registration C SC 8991

Semester Hours: 1to 9

Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 8992 - Doctoral Dissertation

Summer 2010 Registration C SC 8992

Semester Hours: 1to 9

Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 8993 - Doctoral Dissertation

Summer 2010 Registration C SC 8993

Semester Hours: 1to 9

Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 8994 - Doctoral Dissertation

Summer 2010 Registration C SC 8994

Semester Hours: 1to 9

Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 8995 - Doctoral Dissertation

Summer 2010 Registration C SC 8995

Semester Hours: 1to 9

Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 8996 - Doctoral Dissertation

Summer 2010 Registration C SC 8996

Semester Hours: 1to 9

Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 8997 - Doctoral Dissertation

Summer 2010 Registration **C SC 8997**

Semester Hours: 1to 9

Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 8998 - Doctoral Dissertation

Summer 2010 Registration **C SC 8998**

Semester Hours: 1to 9

Registration is changing. Visit our website for details ucdenver.edu/registration.

CSCI 8999 - Doctoral Dissertation

Summer 2010 Registration **C SC 8999**

Semester Hours: 1to 9

Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 1025 - Civil Engineering Graphics & Computer Aided Design

Summer 2010 Registration **C E 1025**

Introduces microcomputer-based, menu-driven, 2-D and 3-D computer-aided design systems; standard Civil Engineering industry details and some three- dimensional modeling of solid objects; principles on engineering drawing and descriptive geometry with applications specifically geared for civil engineers. Prereq: High School Geometry and Algebra.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 1800 - Special Topics

Summer 2010 Registration **C E 1800**

Semester Hours: 1to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 1840 - Independent Study

Summer 2010 Registration **C E 1840**

This category is intended for topics which students may wish to pursue on their own initiative, with guidance from a professor who agrees to limited consultation on the work and to award credit when the project is completed. Departmental approval is required.**Semester Hours:** 1to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 2121 - Analytical Mechanics I

Summer 2010 Registration **C E 2121**

A vector treatment of force systems and their resultants; equilibrium of trusses, beams, frames, and machines, including internal forces and three-dimensional configurations, static friction, properties of areas, distributed loads and hydrostatics. Prereq: PHYS 2311. Coreq: ENGR 1025, MATH 2422. Cross-listed with MECH 2023. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 2200 - Computing Methods in Civil Engineering

Summer 2010 Registration **C E 2200**

Introduces Fortran computer programming and advanced spreadsheet methods of solving civil engineering problems. Prereq: ENGR 1025 and MATH 2411. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 2212 - Plane Surveying

Summer 2010 Registration **C E 2212**

Observation, analysis and presentations of basic linear, angular, area and volume field measurements common to civil engineering endeavors. Prereq/Coreq: MATH 1401. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 2800 - Special Topics 2800-283X

Summer 2010 Registration **C E 2800**

Semester Hours: 1to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 2840 - Independent Study

Summer 2010 Registration **C E 2840**

This category is intended for topics which students may wish to pursue on their own initiative, with guidance from a professor who agrees to limited consultation on the work and to award credit when the project is completed. Departmental approval is required. **Semester Hours:** 1to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 3111 - Analytical Mechanics II

Summer 2010 Registration **C E 3111**

A vector treatment of dynamics of particles and rigid bodies, including rectilinear translation, central-force, general motion of particles, kinematics of rigid bodies, the

inertia tensor, plane motion of rigid bodies; energy and momentum methods for particles, systems of particles and rigid bodies. Prereq: CVEN 2121. Cross-listed with MECH 2033.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 3121 - Mechanics of Materials

Summer 2010 Registration C E 3121

Mechanical properties of materials, stresses and strains in members subjected to tension, compression and shear, combined stresses, flexural and shearing stresses in beams, deflections of beams, column analysis, principal stresses. Prereq: CVEN 2121. Cross-listed with MECH 3043.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 3131 - Applied Mechanics

Summer 2010 Registration C E 3131

A limited study of particle and rigid body mechanics. Subject coverage introduces vector concepts of force, moment and equilibrium, then concentrates on kinematics and kinetics of particles in motion, including oscillatory and orbital and finally discusses rigid body motion with emphasis on energy and momentum methods. Prereq: MATH 2422 and PHYS 2311. (Not for Civil Engineer or Mechanical Engineer majors.)**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 3141 - Introduction to Structural Materials

Summer 2010 Registration C E 3141

Introduces the production, properties, and behavior of common engineering materials. Emphasis is placed on concrete, steel, and wood. Includes the techniques used to determine material properties. Coreq: CVEN 3121.**Semester Hours:** 2to 2
Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 3154 - Water Quality Laboratory

Summer 2010 Registration C E 3154

Lecture and lab weekly, discussing techniques and making measurements of water purity parameters. Prereq: CHEM 1130/2031 and 2038; Prereq or Coreq: MATH 2411.**Semester Hours:** 2to 2
Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 3313 - Theoretical Fluid Mechanics

Summer 2010 Registration **C E 3313**

Introduces the fundamentals of fluid mechanics. Subject matter includes fluid properties, hydrostatics, the continuity principle, the energy principle, the momentum principle, similitude and dimensional analysis, forces on immersed bodies and laminar and turbulent flow in a closed conduit. Prereq: CVEN 2121. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 3323 - Applied Fluid Mechanics

Summer 2010 Registration **C E 3323**

Applies the principles of fluid mechanics to analysis and design of hydraulic systems involving pressurized pipelines, open channels and pumps. Introduces fluid measurements which includes laboratory demonstrations and experiments. Prereq: CVEN 2200 and CVEN 3313. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 3401 - Introduction to Environmental Engineering

Summer 2010 Registration **C E 3401**

An introductory course that provides a unique systems approach to environmental engineering, examining the source-to-receptor feedback loop for pollution control. Physical, chemical and biological processes are integrated across atmospheric, wastewater and sub-surface systems. Laboratory exercises provide direct experiential learning of key concepts. Prereq: CHEM 1130 or equivalent. Cross-listed with CVEN 5401. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 3414 - Design of Water and Wastewater Systems

Summer 2010 Registration **C E 3414**

Covers the design of water distribution and wastewater collection systems. Topics include the design process, estimation of water demand and sewage flows, analysis of pipe networks and sewer systems, cost estimating, and design selection. Field trips are required. Prereq/Coreq: CVEN 3323. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 3505 - Structural Analysis

Summer 2010 Registration **C E 3505**

Principles of structural analysis applied to statically determinate and indeterminate structures. Prereq: CVEN 3121. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 3602 - Transportation Engineering

Summer 2010 Registration C E 3602

This course will introduce you to the concepts and methods of transportation engineering, planning and management. This course will emphasize traffic engineering. Topics will include vehicle dynamics, traffic flow fundamentals, accident analysis, signal timing, highway capacity analysis, level of service analysis, freeway operations, and evaluation procedures for alternative transportation projects. Prereq: Junior standing or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 3708 - Introduction to Geotechnical Engineering

Summer 2010 Registration C E 3708

Index properties of soils, soil classification, clay minerals, compaction and other soil improvement methods; shrinkage, swelling and frost action; permeability and seepage analysis, consolidation settlement and time rate of consolidation, shear strength of soils, bearing capacity and lateral earth pressure. Prereq: CVEN 3121. Prereq/Coreq: CVEN 3313. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 3800 - Special Topics: 3800-3839

Summer 2010 Registration C E 3800

Semester Hours: 1to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 3840 - Independent Study

Summer 2010 Registration C E 3840

This category is intended for topics which students may wish to pursue on their own initiative, with guidance from a professor who agrees to limited consultation on the work and to award credit when the project is completed. Departmental approval is required. **Semester Hours:** 1to 8

Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 3842 - Independent Study

Summer 2010 Registration C E 3842

Semester Hours: 1to 8

Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 4000 - Senior Seminar

Summer 2010 Registration **C E 4000**

Required of all Civil Engineering majors. Each student shall take the state-administered Fundamentals of Engineering (F.E.) examination. This course must be taken prior to the semester of graduation. Prereq: CVEN 3111, ENGR 3012, ELEC 3030, senior standing and approved 30 credit hour check. **Semester Hours:** 0to 0**When Offered:** *FALL SPR* Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 4067 - Senior Design Projects

Summer 2010 Registration **C E 4067**

Senior civil engineering students, working in teams, are assigned significant open-ended design problems requiring the synthesis of material learned in previous engineering courses for solution. Design teams work independently under the supervision of a civil engineering faculty member. Prereq: An approved graduation agreement. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 4077 - Engineering Economy

Summer 2010 Registration **C E 4077**

Applies economic and financial principles to evaluation of engineering alternatives. Calculation of annual costs, present worth and prospective rates of return on investment. Review of systems analysis techniques, including simulation, linear programming, and project scheduling. Prereq: Junior standing. Cross-listed with MECH 4147. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 4087 - Engineering Contracts

Summer 2010 Registration **C E 4087**

Laws met by the practicing engineer, types of contracts, specification writing, laws on contracts, agency, partnership, sales and property, with primary emphasis on rights and duties of the engineer. Prereq: Senior standing. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 4115 - Introduction to Structural Dynamics

Summer 2010 Registration **C E 4115**

Single degree-of-freedom systems, two degree-of-freedom systems. Complex representation, step and impulse loads, many degrees of freedom, influence coefficients, matrix methods, stability of solution, vibration of strings, beams and membranes, approximate methods. Prereq: CVEN 3111, MATH 3191 and 3200. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 4388 - Site Engineering

Summer 2010 Registration C E 4388

Course introduces the fundamentals of site engineering which require understanding and interpreting landforms, slopes, contour lines, grading, drainage, and earthwork to storm water management, hydrology reports, designing roadways, and street networks. Other topics include designing for ADA and concepts of sustainability in site design.

Note: CAD experience is recommended. Cross-listed with CVEN 5388.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 4405 - Environmental and Water Systems Analysis

Summer 2010 Registration C E 4405

The primary focus of this course is on quantitative techniques for environmental systems modeling analysis. The course primarily covers life cycle assessments (LCA) based concepts. The course will review basic steps in conducting an LCA, data collection and data processing. Other concepts such as EIOA, energy and exergy analysis would be introduced.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 4427 - Storm Water System Design

Summer 2010 Registration C E 4427

This course covers urban watershed analysis, design rainfall and hydrologic losses, flood frequency and design event, rational method for peak runoff prediction, street hydraulic capacity and safety, culvert hydraulics, street inlet collection system and storm sewer system design and flow analysis. Prereq: CVEN 3323 and senior standing. Cross-listed with CVEN 5427.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 4537 - Numerical Methods for Engineers

Summer 2010 Registration C E 4537

Introduces numerical analysis. Solution of linear and non-linear equation systems. Numerical methods for ordinary and partial differential equations. Engineering applications. Prereq: CSCI 1100/1410, MATH 3191 and 3200.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 4565 - Timber Structure Design

Summer 2010 Registration C E 4565

Design of wood roof, wall, and floor systems including beams, columns, trusses, diaphragms and shear walls for vertical and lateral loads. Connection design, glued-

laminated members, plywood, and engineered lumber are incorporated. Prereq: CVEN 3505 and CVEN 3141. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 4575 - Structural Steel Design

Summer 2010 Registration C E 4575

Design of structural steel members and their connections. Prereq: CVEN 3505 and CVEN 3141. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 4585 - Reinforced Concrete Design

Summer 2010 Registration C E 4585

Ultimate strength methods for design of reinforced concrete structures. Prereq: CVEN 3505 and CVEN 3141. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 4602 - Highway Engineering

Summer 2010 Registration C E 4602

Evaluates alternate highway routes. Discusses highway drainage, finance, maintenance, pavement design, traffic operations and principles of economic analysis. Analyses of the impact of the highway on the environment. Prereq: CVEN 3602 and CVEN 3708. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 4718 - Intermediate Soils Engineering

Summer 2010 Registration C E 4718

Continuation of CVEN 3708 into selected topics in soils engineering. Laboratory experiments are performed to assess index properties of soils including gradation, soil consistency and specific gravity; moisture/density relations; soil classification, permeability, compressibility; and shear strength of soils. These soil parameters are then used in a design project required for the course. Prereq/Coreq: CVEN 3708. **Semester Hours:** 2to 2
Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 4738 - Intermediate Foundation Engineering

Summer 2010 Registration C E 4738

Applies principles of soil mechanics to the analysis and design of foundations and earth structure. Theories of consolidation, earth pressure, slope stability, and bearing capacity. Studies settlement of structures, shallow and deep foundations, retaining walls and

excavations. Prereq: CVEN 3708 and CVEN 3141. Coreq: CVEN 4718. **Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 4780 - Engineering Geology

Summer 2010 Registration C E 4780

Studies geology as utilized in engineering and environmental practice. Emphasizes a conceptual integration of geologic materials, processes, and rates of change as a basis for successful application of geologic knowledge to environmental planning and engineering design projects. Prereq: MATH 2411 and CVEN 2121. Cross-listed with CVEN 5780 and GEOL 4780, 5780. **Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 4800 - Special Topics: 4800-4839

Summer 2010 Registration C E 4800

Supervised study of special topics of interest to students under guidance of instructor.

Prereq: Permission of instructor. **Semester Hours: 1to 6**

Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 4840 - Independent Study

Summer 2010 Registration C E 4840

This category is intended for topics which students may wish to pursue on their own initiative, with guidance from a professor who agrees to limited consultation on the work and to award credit when the project is completed. Departmental approval is required. **Semester Hours: 1to 6**

Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 5111 - Structural Dynamics

Summer 2010 Registration C E 5111

Vibration and dynamic response of simple linear and nonlinear structures to periodic and general disturbing forces. Frequency domain analysis, response analysis of multi-degree-of-freedom systems. Wind and earthquake effects. Prereq: CVEN 3505 and CVEN 4115. **Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 5121 - Intermediate Mechanics of Materials

Summer 2010 Registration C E 5121

Intermediate-level course in the mechanics of deformable bodies. Plane stress and strain; stress-strain relation with emphasis on elastic and inelastic behavior of members,

and theories of failure. Discussion of basic methods of structural mechanics, with applications to asymmetric and curved beams, thick walled pressure vessels, torsion of members of noncircular section, and other selected problems in stress analysis. Prereq: CVEN 3121, MATH 3191 and 3200. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 5333 - Applied Hydrology

Summer 2010 Registration C E 5333

Engineering application of principles of hydrology. Subject matter includes precipitation measurement and data analysis, stream flow measurement and water budget analysis, evaporation and evapotranspiration, infiltration and rainfall-runoff relationships, hydrograph properties and unit hydrograph analysis, flood frequency, analysis and flood routing. Prereq: Permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 5334 - Groundwater Hydrology

Summer 2010 Registration C E 5334

Topics include groundwater occurrence, hydrologic cycle and budget, interactions with surface waters, principles of groundwater flow, well hydraulics, well field design, regional flow systems, water and pollutant chemistry, computer modeling and groundwater management. Emphasis is on quantitative analysis methods for groundwater resource inventory, design and management. Prereq: Graduate standing or permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 5336 - Urban Runoff Quality and Quantity Modeling

Summer 2010 Registration C E 5336

This course covers rainfall/runoff data base, rain gage under-catch, statistical models for frequency analysis, Unit Graph and Kinematic Wave method for runoff prediction, urban watershed modeling, event-based flood prediction, continuous flow predictions, modeling consistency and sensitivity, impact assessments, master drainage planning, and storm centering technique. Prereq: CVEN 5333 - Graduate Standing or permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 5343 - Open Channel Hydraulics

Summer 2010 Registration C E 5343

Engineering analysis and design of natural and artificial open channels. Application of uniform flow concept to design of erodible and non-erodible channels. Application of energy and momentum principles to conditions of gradually varied flow, spatially varied

flow and rapidly varied flow. Prereq: CVEN 3323 or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 5344 - Unsteady Open Channel Hydraulics

Summer 2010 Registration C E 5344

Derivation of basic principles of unsteady open channel flow. Application of kinematic wave, diffusive wave and dynamic wave approaches to open channel, including overland flow and flow in a drainage or river network. Introduction of numerical finite difference methods, characteristic method and simplified analytical method for the solution of unsteady open channel flow problems. Evaluation of computer simulation models such as DWOPER and SWMM. Prereq: CVEN 5343 and CVEN 5333 or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 5345 - Computational Methods for Water Resources

Summer 2010 Registration C E 5345

This course covers two major areas: hydrologic and hydraulic numerical routing schemes. The hydrologic routing includes linear and nonlinear reservoir operations using the characteristic curves derived from the reservoir geometry. The hydrologic routing numerical scheme will be applied to optimize the reservoir operations for power generation, irrigation, and flood control. The hydraulic routing covers Dynamic Flood Wave, Diffusive Wave, and Kinematic Wave. The finite difference method is used to develop numerical models to predict flood flows through channels. This course also covers probable maximum precipitation and dam break flow analysis. Prereq: CVEN 3323. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 5381 - Introduction to Geographic Information Systems

Summer 2010 Registration C E 5381

Provides an over-view exposure and experience with various aspects of GIS technology and its uses for natural resource and infrastructure, planning, design and management. This course involves a survey of GIS software and hardware, review of cartographic mapping principles, hands-on applications to environmental impact assessment, municipal facilities management, transportation, water resources and demographics. GIS project management factors are addressed. Prereq: Graduate and/or upper division standing. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 5382 - GIS Spatial Database Development

Summer 2010 Registration **C E 5382**

This second GIS course builds on the introductory course and addresses principles and technologies for development and conversion of spatial databases, including photogrammetry, surveying and geodesy, coordinate systems and transformations, and remote sensing. Prereq: Graduate and/or upper division standing; completion of CVEN 5381 (or equivalent) and MEng-GIS program prerequisites (especially surveying, mapping and computing); background in algebra, calculus fundamentals and facility to compute DOS/UNIX, spreadsheet, and FORTRAN; familiarity with various CAD (e.g. AutoCAD) and GIS (e.g. Arc Info, GRASS) software is also required. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 5383 - GIS Analysis -- Theory and Practice

Summer 2010 Registration **C E 5383**

This third course reviews GIS software functions and terminology, including data entry (input, editing), manipulation (projection, merge, window, aggregate), analysis (map algebra, overlay, Boolean, interpolation network, measurements, distance, terrain modeling, statistical analysis), query (spatial, attribute), and display/reporting. Integration of various domain-specific systems analysis models with GIS databases is also addressed. Laboratory activities involve programming applications using available GIS. Prereq: graduate and/or upper division standing; completion of CVEN 5381 (or equivalent) and completion of MEng-GIS prerequisites (especially applied Statistics); background in algebra, calculus fundamentals, facility to compute DOS/UNIX, OS/UNIX, spreadsheet, and FORTRAN; familiarity with various CAD (e.g., AutoCAD) and GIS (e.g., Arc Info, GRASS), software is also required. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 5384 - GIS Management and Policies

Summer 2010 Registration **C E 5384**

This fourth course addresses aspects of GIS planning and development. These include topics of benefit-cost and financial analysis, scheduling, project management, internal and external marketing. Also, addressed are issues of GIS institutional acceptance, the role of computerized spatial data systems indecision making, application of planning techniques for accomplishing resource goals, administrative structure which enhances efficiency of use, and legal considerations involved with development and use of such databases. Prereq: Graduate and/or upper division standing; completion of CVEN 5381 (or equivalent); familiarity with various CAD (e.g. AutoCAD) and GIS (e.g. Arc Info, GRASS) software is also required. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 5385 - GIS Relational Database Systems

Summer 2010 Registration **C E 5385**

Introduces relational database management system concepts with emphasis on GIS. Includes examination of relational database systems from conceptual design through relational schema design and physical implementation. Topics include SQL, database design and implementation for large database systems, transaction management, concurrency control, distributed database management systems and the interaction and progressive integration of GIS technologies and RDBMS technologies. Prereq: Graduate and/or upper division standing; completion of CVEN 5381 or equivalent and completion of MEng-GIS program prerequisites. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 5386 - GIS Laboratory

Summer 2010 Registration **C E 5386**

Provides in-depth experience with use and programming of a particular GIS software, including Arc GIS and related object-oriented programming languages. Advanced functionality for user authoring of software interface, data management and analysis functions and output generation. Exact content will vary by semester. Prereq: Computing and Introduction to GIS or their equivalent. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 5387 - Advanced Remote Sensing

Summer 2010 Registration **C E 5387**

Addresses remote sensing concepts including 1) imaging sensors and geo-referencing; 2) image processing for radiometric, multi-spectral image enhancement, and multi-sensor image fusion; and 3) multi-spectral image classification, including feature extraction, supervised and unsupervised classification, and extensions to hyper-spectral data. Prereq: Calculus II, Statistics, Surveying and Mapping, Introduction to GIS, GIS Spatial Data Development (CVEN 5382) or Introduction to Remote Sensing. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 5388 - Site Engineering

Summer 2010 Registration **C E 5388**

Course introduces the fundamentals of site engineering which require understanding and interpreting landforms, slopes, contour lines, grading, drainage, and earthwork to storm water management, hydrology reports, designing roadways, and street networks. Other topics include designing for ADA and concepts of sustainability in site design. Note: CAD experience is recommended. Cross-listed with CVEN 4388. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 5393 - Water Resources Development and Management

Summer 2010 Registration C E 5393

A multidisciplinary exploration of the principles governing water resources planning and development. Emphasis is on the sciences of water (physical, engineering, chemical, biological and social) and their interrelationships. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 5394 - Water Resources Systems

Summer 2010 Registration C E 5394

Addresses the concepts, general processes, and quantification methods used in planning and analysis of water resource system planning and operations problems and goals, analysis methods, computer simulation and optimization. Prereq: Graduate standing or permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 5401 - Introduction to Environmental Engineering

Summer 2010 Registration C E 5401

Provides a broad overview of the environmental engineering and pollution control system. Offers a unique systems approach to environmental engineering, examining the source-to-receptor feedback loop system of pollution control. Process principles underlying pollutant, transport, abatement, and control are presented in a unified manner, cross-cutting atmospheric, wastewater and sub-surface systems. Prereq: Graduate standing in MSCE or MSES programs or permission of instructor. Cross-listed with CVEN 3401. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 5402 - Environmental and Water Quality Modeling

Summer 2010 Registration C E 5402

Provides unified understanding of fundamental physical, chemical and biological processes that govern the transport and fate of pollutants in environmental systems - water, air and subsurface. Includes hands-on experience in modeling surface and ground water systems. Prereq: CVEN 5401. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 5403 - Environmental Regulations and Management Systems

Summer 2010 Registration C E 5403

Students will receive an overview and understanding of major environmental laws and will be introduced to legal concepts used to develop environmental laws. In addition, students will learn about environmental management systems and their applications to

environmental problems. Prereq: Graduate standing or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 5404 - Chemical Processes in Environmental Engineering

Summer 2010 Registration C E 5404

Design and analysis of chemical processes in environmental systems - air, water and subsurface. Incorporates equilibrium, coordination, and oxidation-reduction chemistry concepts. Prereq: Graduate standing or permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 5405 - Environmental and Water Systems Analysis

Summer 2010 Registration C E 5405

The primary focus of this course is on quantitative techniques for environmental systems modeling analysis. The course primarily covers life cycle assessments (LCA) based concepts. The course will review basic steps in conducting an LCA, data collection and data processing. Other concepts such as EIOA, energy and exergy analysis would be introduced. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 5414 - Physical Processes in Environmental Engineering

Summer 2010 Registration C E 5414

Design and analysis of physical processes in environmental systems - air, water and subsurface. Topics include mixing models, volatilization, sedimentation, filtration, absorption and membrane processes. Prereq: Graduate standing or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 5427 - Storm Water System Design

Summer 2010 Registration C E 5427

This course covers urban watershed analysis, design rainfall and hydrologic losses, flood frequency and design event, rational method for peak runoff prediction, street hydraulic capacity and safety, culvert hydraulics, street inlet collection system and storm sewer system design and flow analysis. Prereq: CVEN 3323. Cross-listed with CVEN 4427. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 5434 - Biological Processes in Environmental Engineering

Summer 2010 Registration **C E 5434**

Covers the theory and application of biological processes in environmental systems. Topics include microbial metabolisms and the application of fundamental principles to treatment and energy recovery processes, including bioreactor configurations and design considerations. Prereq: graduate standing or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 5444 - Design of Solid Residuals and Natural Treatment Systems

Summer 2010 Registration **C E 5444**

Solid residuals treatment topics include thickening, dewatering, digestion, land application and composting. Natural treatment systems topics include slow rate, rapid, and overland flow land treatment systems; and constructed wetlands. Field trip required. Prereq: graduate standing, MATH 2411, PHYS 2311 and ability to use spreadsheets. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 5456 - Engineering Practice

Summer 2010 Registration **C E 5456**

Consulting engineering practice and management. Professional practice and organization. Marketing, ethics, personnel selection, and training. Planning, budgeting, work scheduling, resource allocation, and balancing. Oral and written communication, quality standards, and engineering management. Prereq: Graduate standing or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 5457 - Administration of Public Works

Summer 2010 Registration **C E 5457**

A descriptive course concerned with the administration of engineering and planning aspects of urban public works. Prereq: Graduate standing in civil engineering or public administration, or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 5460 - Intro Sustainable Urban Infrastructure

Summer 2010 Registration **C E 5460**

Focuses on developing uniform vocabulary on sustainable infrastructure across science & technology, architecture & planning, public policy, and health & behavioral sciences. Students learn concepts, principles/pathways and evaluation techniques for promoting the diffusion of sustainable urban infrastructures. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 5461 - Defining & Measuring Sustainability

Summer 2010 Registration C E 5461

Unique cross-disciplinary course that teaches students community engagement strategies to define sustainability goals. Life cycle assessment and material flow analysis tools used to measure environmental sustainability benchmarks. Field work applies both tools to cities in Colorado. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 5480 - Hazardous Wastes and Site Remediation

Summer 2010 Registration C E 5480

Students learn to: (1) define and classify hazardous wastes encountered at hazardous waste-contaminated sites, (2) learn basic principles underlying currently available technologies for site remediation, (3) use EPA's technology screening matrix for technology selection, and (4) provide engineering design for selected remediation systems, e.g. ground-water pump-and-treat, soil vapor extraction, soil washing, and bioremediation. Prereq: CVEN 5402. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 5481 - Sustainable Urban Water Systems

Summer 2010 Registration C E 5481

Design of sustainable water systems. Defines sustainable water systems, then discusses sustainable aspects of water resources, water treatment, water distribution, wastewater treatment, and water policy. Also covers planning for climate change, and designing urban environments for decreased water usage. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 5494 - Risk Assessment in Environmental Engineering

Summer 2010 Registration C E 5494

The process of determining the likelihood and extent of harm that may result from an activity or event. Topics covered are: hazard identification, dose-response evaluation, exposure assessment, and risk characterization. The subjects of risk management, risk perception, and risk communication are also discussed. Prereq: Graduate standing or permission of instructor. Cross-listed with ENVS 6200, HBSC 7340. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 5514 - Matrix Analysis of Structures

Summer 2010 Registration C E 5514

Matrix analysis of skeletal structures. Systematic formulation of stiffness and flexibility

methods of analysis of skeletal structures. Application of modern computational tools to structural analysis, including introduction to the finite element method. Prereq: CVEN 3505.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 5515 - Introduction to Finite Element Analysis

Summer 2010 Registration C E 5515

Systematic formulation and application of the finite element approximation to the solution of engineering problems. Topics include one- and two-dimensional elasticity problems, two-dimensional heat flow and irrotational fluid flow. Elements considered include triangular and quadrilateral elements formulated by elementary and isoparametric techniques. Prereq: Graduate standing or permission of instructor.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 5537 - Numerical Methods in Civil Engineering

Summer 2010 Registration C E 5537

Introduces numerical analysis. Solution of linear and nonlinear equation systems. Numerical methods for ordinary and partial differential equations. Engineering applications. Differs from CVEN 4537 by the addition of individual student projects. Prereq: CSCI 1100/1410, MATH 3191 and 3200. Cross-listed with ELEC 5210, MECH 5110.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 5575 - Advanced Topics in Structural Steel Design

Summer 2010 Registration C E 5575

Plate buckling, plate girder design and other topics determined by class interest. Prereq: CVEN 4575.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 5585 - Advanced Topics in Reinforced Concrete

Summer 2010 Registration C E 5585

Advanced topics relating to design and analysis of reinforced concrete structures. Prereq: CVEN 4585.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 5602 - Advanced Highway Design

Summer 2010 Registration C E 5602

Design and location of various classes of rural and urban highways. Development of

theory as a rational basis of design for highway alignment, cross-section, intersections, and interchanges is stressed. Prereq: CVEN 4602. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 5611 - Traffic and Safety Data Analysis

Summer 2010 Registration C E 5611

Covers statistical analysis methods for engineering studies in general, and for highway accident and traffic flow data in particular. Topics include data needs, sampling designs, survey methods, hypothesis testing, tests of proportions, non-parametric tests, analysis of variance, multivariate regression, and other tests of fit. Introductory overview of state and federal accident databases. Comparisons of accident rates by highway type, vehicle speeds, vehicle types, weather conditions and other factors also presented. Prereq: Graduate standing or permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 5612 - Traffic Impact Assessment

Summer 2010 Registration C E 5612

Covers (1) procedures to satisfy state and local requirements for transportation impact studies, (2) methods to perform trip generation, distribution, and traffic assignment for impact analyses, and (3) analysis of transportation impacts on residential communities, mode choice, regional business (downtown or suburban), peak and off-peak travel times, noise, safety, parking and pedestrians. A course project requires students to develop an application of analysis software to a case study area. Prereq: Graduate standing or permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 5613 - Traffic Flow Theory and Fundamentals

Summer 2010 Registration C E 5613

Emphasizes the mathematical and probabilistic aspects of traffic flows on interrupted (signalized) and uninterrupted (unsignalized) roadways. The course examines the properties of vehicle motion in traffic streams, and then examines the traffic interactions affected by the relationship between supply (signal timings and road designs) and demand (vehicle arrival rates and traffic patterns). Both macroscopic and microscopic models of traffic flow characteristics are presented, as well as queuing models and statistical distributions of headways. Prereq: CVEN 5611 and CVEN 5621 or permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 5621 - Highway Capacity Analysis

Summer 2010 Registration **C E 5621**

Covers the principles and applications of highway capacity analysis for freeways and arterials, ramps and interchanges, weave and merge sections, signalized and unsignalized intersections, roundabouts, pedestrian areas and transit. Emphasis is on level-of-service analysis procedures in the Highway Capacity Manual, although other approaches are also discussed. Additional topics include roadway characteristics, vehicle dynamics, human factors, speed and volume studies, travel time surveys and traffic flow characteristics. Prereq: Graduate standing or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 5622 - Traffic Operations and Control

Summer 2010 Registration **C E 5622**

Covers principles of traffic flow and analysis methods for surface street traffic systems. Emphasis is on network modeling and simulation of coordinated signal systems, together with unsignalized intersections and freeway junctions using modern software tools. Additional topics include alternative signal timing plans, signal controllers, vehicle detection systems for volume, speed, occupancy and ramp metering. A course project requires students to develop and apply modeling software to a case study area. Prereq: CVEN 5621 or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 5631 - Transportation Planning Methods

Summer 2010 Registration **C E 5631**

Introduces the urban transportation planning process as conducted by metropolitan planning organizations throughout the U.S. Course covers the four-step modeling process (trip generation, trip distribution, mode split and assignment). Topics also include data needs, survey methods, and statistical models for origin-destination estimation and travel demand forecasting. Prereq: Graduate standing or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 5632 - Urban Transportation Modeling

Summer 2010 Registration **C E 5632**

An advanced coverage of urban and regional transportation planning models, procedures and software. Mathematical formulations, properties, and solution algorithms are presented. Additional topics include methods of data acquisition from public domain databases for use in modeling software. a course project requires students to develop an application of modeling software to a case study area. Prereq: CVEN 5631 or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 5652 - Airport Planning and Design

Summer 2010 Registration C E 5652

National airport system plan, air travel demand, geometric design of airport facilities, design of airport pavement and drainage structures, and airport environmental impact. Prereq: CVEN 3602 and graduate standing or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 5662 - Transportation System Safety

Summer 2010 Registration C E 5662

Safety aspects of highway, railroad, and airway transportation systems. Accident analysis, accident prevention, economic consequences of accidents. Prereq: CVEN 3602 and graduate standing or permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 5682 - Pavement Design

Summer 2010 Registration C E 5682

Design of flexible and rigid pavements for highways and airports; stress analysis in flexible and rigid pavements; design of joints and reinforcing steel for rigid pavements; principles of subgrade stabilization. Prereq: CVEN 3602 and CVEN 4718. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 5692 - Urban Traffic Workshop

Summer 2010 Registration C E 5692

Selected laboratory problems related to urban traffic. Prereq: CVEN 5642 or equivalent. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 5708 - Advanced Soils Engineering

Summer 2010 Registration C E 5708

A unified treatment of the foundation of soil engineering analysis. Topics include stress-strain-strength of soils; generalized limiting equilibrium analysis; stability analyses of earth-retaining structures, slopes, and shallow foundations; probabilistic approach of stability assessment; computation of settlement of foundations in sand and clay and time-rate of consolidation and critical state concept. Special attention is directed toward the illustration of theory through practical examples. Prereq: CVEN 3708, CVEN 4718,

and graduate standing or permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 5709 - Settlement Analysis

Summer 2010 Registration C E 5709

A unified treatment of settlement analysis on sand and clay. Topics include settlement of shallow foundation, settlement of deep foundation, and settlement of embankments, walls and excavations. Conventional methods of analysis and the finite element method of analysis are covered. Critical design implications are emphasized. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 5718 - Engineering Properties of Soils

Summer 2010 Registration C E 5718

Engineering properties of soils, including index properties, permeability, stress-strain behaviors, shear strength, compressibility, critical state soil models and their application in interpreting soil behaviors. Attention also is directed to laboratory and in-situ tests to examine the validity of shear strength and compressibility theories and their application to stability and settlement analysis. Prereq: CVEN 3708, CVEN 4718, and graduate standing or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 5719 - Design and Construction of Geosynthetic-Reinforced Soil Structures

Summer 2010 Registration C E 5719

Theory of reinforced soil; mechanical and hydraulic properties of geosynthetics; soil-geosynthetic interaction behavior; design concepts of GRS structures; design and construction of GRS retaining walls; design and construction of GRS embankments and slopes; design and construction of GRS foundations. Prereq: CVEN 5708. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 5728 - Groundwater and Seepage

Summer 2010 Registration C E 5728

Principles governing flow of water through soils. Approximate methods for confined and unconfined seepage problems, including flow nets, analog models, numerical methods, and method of finite elements. Analytical solutions for unconfined flow problems. Drainage filter design. Seepage toward wells. Stability of earth structures due to seepage. Prereq: CVEN 3708, CVEN 4718, and graduate standing or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 5738 - Foundation Engineering

Summer 2010 Registration C E 5738

Methods of subsurface exploration and sampling of soils, lateral support in open cuts, control of groundwater, analysis and design of shallow foundations, analysis and design of deep foundations, bridge abutments and cofferdams, underpinning, and application of modern computational techniques to analysis and design of foundations. Prereq: CVEN 5708, CVEN 5718, and graduate standing or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 5748 - Design of Earth Embankment Dams

Summer 2010 Registration C E 5748

Theory, design, and construction of earth embankments. Use of published data, field exploration, laboratory tests on soils and rock in investigating foundations, and construction materials. Principles of compaction and settlement. Slope stability analysis, landslide, recognition and control, use of benches and beams. Prereq: CVEN 3708, CVEN 4718, and graduate standing or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 5758 - Foundations on Expansive Soils

Summer 2010 Registration C E 5758

Expansive soils swell upon wetting because of the swelling nature of constituent clay minerals, particularly montmorillonite. This course studies swelling nature of different clay minerals, effects of wetting, swelling potential, swelling pressures, and design of different foundation systems. Prereq: CVEN 4738, B.S.C.E. or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 5768 - Introduction to Rock Engineering

Summer 2010 Registration C E 5768

Nature of rock masses, geological exploration, deformability and strength, in-situ stresses and deformation, rock hydraulics. Prereq: CVEN 3708, CVEN 4718 and graduate standing or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 5778 - Applied and Experimental Rock Mechanics

Summer 2010 Registration C E 5778

Surface exploration and characterization of rock masses, slope stability, analysis of rock masses; rock mass reinforcement; tunnel and shaft designs, design of underground rock

chambers; foundations on rocks; and dam design. Prereq: CVEN 5768 or permission of instructor.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 5780 - Engineering Geology

Summer 2010 Registration C E 5780

Studies geology as utilized in engineering and environmental practice. Emphasizes a conceptual integration of geologic materials, processes, and rates of change as a basis for successful application of geologic knowledge to environmental planning and engineering design projects. Prereq: MATH 2411 and CVEN 2121. Cross-listed with CVEN 4780 and GEOL 4780/5780.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 5788 - Design and Construction of Municipal Solid Waste Disposal Facilities

Summer 2010 Registration CVEN 5788

NIMBY (Not In My Back Yard) and environmental regulations demand that all landfills receive proper engineering design. This course covers regulations, management (reduction, collection, transportation, transformation, recycling, incineration, disposal), and disposal facility design. Prereq: Senior in CVEN, B.S.C.E. or permission of instructor.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 5798 - Dynamics of Soils and Foundations

Summer 2010 Registration C E 5798

Principles of vibrations of, and wave propagation in, elastic, homogeneous, isotropic media; laboratory and in-situ measurements of soil properties; applications of these principles and properties to the design of foundations subject to dynamic loading generated by machinery, earthquakes, or blasts. Prereq: CVEN 5708, 5718, and graduate standing or permission of instructor.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 5800 - Special Topics: 5800-5839

Summer 2010 Registration C E 5800

Topical courses offered once or on irregular intervals. Typical topics include: computer-aided structural engineering, pre-stressed concrete, non-matrix structural analysis, geotechnical aspects of hazardous waste management, geographic information systems and facility management, groundwater hydrology, engineering project management, structural planning, engineering practice, spreadsheet application, field instrumentation, hazardous wastes engineering, bridge super and substructure design, advanced steel design, hydraulic transients, foundations -- expansive soils, sludge process design.

Prereq: Variable. **Semester Hours:** 1to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 5840 - Independent Study

Summer 2010 Registration **C E 5840**

Available only through approval of the graduate advisor. Subjects arranged to fit needs of particular student. **Semester Hours:** 1to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 5950 - Master's Thesis

Summer 2010 Registration **C E 5950**

Semester Hours: 1to 8

Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 5960 - Master's Report

Summer 2010 Registration **C E 5960**

Semester Hours: 1to 8

Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 6110 - PhD Seminar

Summer 2010 Registration **C E 6110**

Introduces PhD students to the process of doctoral research, addresses important milestones and hurdles in the PhD process, and provides advanced doctoral students with the opportunity for presenting and discussing their research with peers. Prereq: admission to the PhD program. **Semester Hours:** 0to 0

Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 6111 - Dynamics of Structures

Summer 2010 Registration **C E 6111**

Linear and nonlinear dynamic matrix analysis of multi-degree-of-freedom structural systems. Analysis and design for wind and earthquake loads including modal analysis and sub structuring techniques. Computer programming. Prereq: CVEN 5111. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 6131 - Theory of Elasticity

Summer 2010 Registration **C E 6131**

Mathematical theory of elasticity and its applications to engineering problems.

Discussion of the basic analytical and numerical methods of solutions. Prereq: CVEN 5121.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 6165 - Buckling in Structures

Summer 2010 Registration C E 6165

Buckling of columns, beams, frames, plates, and shells in the elastic and plastic range. Post-buckling strength of plates. Beam-columns. Analysis by exact and approximate methods with special emphasis on practical implications and application of solutions. Prereq: CVEN 3121.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 6336 - Urban Flood Control System Design

Summer 2010 Registration C E 6336

This course covers urbanization impact on watershed regime, flood control measures, detention and retention system, infiltration basin, sand filter, water quality control basin, wetland preservation, storm water Best Management Practices, low impact development, outlet structure design, pond safety, stream restoration, overflow risk analysis and optimal operation. Prereq: CVEN 5333, 5343 and graduate standing.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 6353 - Hydraulic Design

Summer 2010 Registration C E 6353

Design of small dams, including reservoir sizing, spillways, and energy dissipaters. Design of urban drainage and flood control facilities such as culvert transitions, roadside ditches, street inlets, detention/retention ponds, storm sewer systems, drainage channels, and channel erosion controls including vegetation, concrete, riprap protection. Design of floodplain encroachment, natural channel improvement, and bridge hydraulics. Prereq: CVEN 5333 and 5343.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 6515 - Advanced Theory of Structures

Summer 2010 Registration C E 6515

Generalized approaches to the analysis of civil engineering and continuous elastic structures (such as plates and plane stress bodies) by force and displacement methods. Emphasis is on formulation by finite elements and solution by matrix methods. Prereq: CVEN 5515 and basic knowledge of computer programming.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 6738 - Finite Element Method in Geotechnical Engineering

Summer 2010 Registration C E 6738

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 6840 - Independent Study

Summer 2010 Registration C E 6840

Semester Hours: 1to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 7800 - Special Topics

Summer 2010 Registration C E 7800

Credit and subject matter to be arranged. Prereq: Variable. **Semester Hours:** 1to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 7801 - Special Topics

Summer 2010 Registration C E 7801

Semester Hours: 1to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 7840 - Independent Study

Summer 2010 Registration C E 7840

Available only through approval of the graduate advisor. Subjects arranged to fit needs of particular student. **Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 7990 - Doctoral Dissertation

Summer 2010 Registration C E 7990

Semester Hours: 1to 10

Registration is changing. Visit our website for details ucdenver.edu/registration.

CVEN 8990 - Doctoral Dissertation

Summer 2010 Registration C E 8990

Semester Hours: 1to 10

Registration is changing. Visit our website for details ucdenver.edu/registration.

DSCI 2010 - Business Statistics

Summer 2010 Registration **DSCI 2010**

Basic principles of probability and statistics with applications in business. Includes descriptive statistics, probability and probability distributions, data collection, sampling distributions, statistical inference, simple regression and the use of a computer to perform statistical analysis. Students are required to present their analyses in written and/or oral form and defend their conclusions. This is a business core course. Therefore a grade of a 'C' or better must be earned to satisfy Business graduation requirements and prerequisites for other business courses. Prereq: MATH 1070, MATH 1080, and computer literacy (working knowledge of basic operating system and file manipulation commands, email, the world-wide web, a word processing package and spreadsheets). **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

DSCI 3000 - Operations Management

Summer 2010 Registration **DSCI 3000**

Introduces the concepts and methods commonly used in manufacturing and service operations. Topics include aggregate planning, inventory control, scheduling, quality control, and linear programming. This is a business core course. Therefore a grade of a 'C' or better must be earned to satisfy Business graduation requirements. Prereq: ACCT 2200, DSCI 2010, and MATH 1080. It is important to take this course junior year. **Semester Hours:** 3to 3 **When Offered:** FASPRSUM

Registration is changing. Visit our website for details ucdenver.edu/registration.

DSCI 3780 - Supply Chain Management

Summer 2010 Registration **DSCI 3780**

Over the last decade businesses have started to understand how the design and operation of their supplier network can actually be a source of competitive advantage. Supply chain management is concerned with the activities around communication, managing inventory, warehousing, transportation and facility location. The course objectives are to understand a supply chain/network from the strategic, planning and operations perspectives and to develop skills that allow you to analyze the responsiveness and effectiveness of the network. Prereq: DSCI 2010. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

DSCI 4840 - Independent Study

Summer 2010 Registration **DSCI 4840**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

DSCI 4950 - Special Topics in Decision Sciences

Summer 2010 Registration **DSCI 4950**

Courses offered on an irregular basis for the purpose of presenting new subject matter in Decision Sciences. Prereq: Will vary depending upon the particular topic and instructor.

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

DSCI 5939 - Cooperative Education

Summer 2010 Registration **DSCI 5939**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

DSCI 6010 - Deterministic Models

Summer 2010 Registration **DSCI 6010**

Seldom offered. Linear programming and its application, network analysis, including scheduling models, dynamic programming, integer programming, non-linear programming. Prereq: BUSN 6530 and 6630.

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

DSCI 6020 - Stochastic Models

Summer 2010 Registration **DSCI 6020**

Seldom offered. A variety of stochastic models and their application are discussed.

Simulation modeling and analysis is emphasized as an approach for addressing such problems. Prereq: BUSN 6530 and 6630.

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

DSCI 6220 - Research methods: Design and Analysis

Summer 2010 Registration **DSCI 6220**

Research methods: Design and Analysis. Topics include: research design, approaches to gathering data; sampling methods; linear multivariate analysis methods emphasizing structural equations models; and a brief survey of other methods such as cluster analysis, multidimensional scaling, methods such as neural nets, Cart and/or genetic algorithms. While much of the material is of general interest, the course emphasizes methods and situations to prepare students in the CS/IS PhD program for research in their field(s). The course includes student projects involving the analysis of data using

appropriate software, whose results are presented to the class. Note: Cannot receive credit for both ISMG 7220 and DSCI 6220. Prereq: BUSN 6530 (may be taken concurrently with permission of instructor) and either PhD student status or permission of instructor. Cross-listed with ISMG 7220. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

DSCI 6230 - Business Forecasting

Summer 2010 Registration **DSCI 6230**

Modern businesses use forecasts in marketing, finance, accounting, human resources management and supply chain and production management decision-making. This course focuses on practical application of forecasting techniques, choosing and comparing appropriate methods and applying the results to the business application. Note: Can only receive credit for either DSCI 6230, BUSN 6824, or FNCE 6372. Prereq: BUSN 6530 or FNCE 6290. Cross-listed with BUSN 6824 and FNCE 6372. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

DSCI 6440 - Quality and Process Improvement

Summer 2010 Registration **DSCI 6440**

Studies the identification, measurement and improvement of quality and the practical management issues related to implementing quality systems within organizations. Topics include historic and contemporary views of quality, statistical quality control tools including Six SigmaSM, work design and measurement and process flow and design. Note: Cannot receive credit for both DSCI 6440 and BUSN 6832. Prereq: BUSN 6530 or permission of instructor. Cross-listed with BUSN 6832. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

DSCI 6460 - Decision Analysis

Summer 2010 Registration **DSCI 6460**

Examines business decision making under conditions of risk and uncertainty using quantitative decision analysis methods such as utility theory, value of information, decisions with conflicting objectives and hierarchical structured models. Applications include decisions commonly encountered in capital acquisitions, financial investments, quality control, project selection, strategic planning, production control and human resource management. Student computer-assisted projects are conducted. Note: Cannot receive credit for both DSCI 6460 and BUSN 6836. Cross-listed with BUSN 6836. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

DSCI 6480 - Simulation Modeling

Summer 2010 Registration **DSCI 6480**

Students learn to model and analyze complex dynamic systems using state-of-the-art software such as Arena. Illustrative application areas include production systems, service systems, distribution systems and health care systems. Topics include creating reliable simulation models, analyzing the input and output from the model and managing simulation projects. A substantial part of the course will be devoted to projects where students define, model and analyze a significant system of their choosing. Note: Cannot receive credit for both DSCI 6480 and BUSN 6834. Prereq: Permission of instructor. Cross-listed with BUSN 6834. **Semester Hours:** 3 to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

DSCI 6600 - Purchasing, Materials Management and Negotiation

Summer 2010 Registration **DSCI 6600**

Seldom offered. Studies the purchasing function in manufacturing, service and public organizations. Topics include: course selection, make-buy analysis, material quality standards and specifications, value analysis, negotiations, and legal aspects. Prereq: BUSN 6630. **Semester Hours:** 3 to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

DSCI 6800 - Special Topics

Summer 2010 Registration **DSCI 6800**

Seldom offered. A number of different current topics in decision sciences are discussed in this course. Consult the current 'Schedule Planner' for semester offerings. Prereq: Permission of instructor. **Semester Hours:** 3 to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

DSCI 6820 - Project Management

Summer 2010 Registration **DSCI 6820**

Introduces the knowledge and skills of Project Management (PM) in a business environment. Emphasis will be on the entire project life cycle, the project management process groups and the knowledge areas as presented in the Project Management Body of Knowledge (PMBOK) from the Project Management Institute (PMI). Managerial aspects, quantitative tools and traditional techniques of Project Management will be covered. Application to various industries will be included. Note: cannot receive credit for both DSCI 6820 and BUSN 6820. Cross-listed with BUSN 6820 and URPL 6686. **Semester Hours:** 3 to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

DSCI 6822 - Services Operations

Summer 2010 Registration **DSCI 6822**

Examines the unique issues involved in the management of service operations. Operations management principles specific to service industries are given in-depth. In addition, simulation is introduced as a technique for studying service industries. Note: Cannot receive credit for both BUSN 6822 and DSCI 6822. Prereq: BUSN 6530 or permission of instructor. Cross-listed with BUSN 6822 **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

DSCI 6826 - Supply Chain Management

Summer 2010 Registration **DSCI 6826**

Introduces the application of purchasing, operations, and logistics to the entire supply chain of an organization. Because of globalization and the rapid advancement of information technology, emphasis is placed on integration management of processes and systems, relationship management of upstream and downstream players, and strategies that incorporate current and future trends. Note: Cannot receive credit for both BUSN 6826 and DSCI 6826. Cross-listed with BUSN 6826. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

DSCI 6828 - Business Applications of Data Mining

Summer 2010 Registration **DSCI 6828**

Addresses statistical approaches to the very large data sets increasingly common in business applications such as internet-based business, fraud detection, credit scoring and market segmentation. Topics include limitations of classical statistical when applied to large data sets, alternative approaches and applications of key data mining algorithms such as logistic regression, decision trees and cluster analysis. Emphasis is placed on proper choice of method, interpretation of the results and understanding of the strengths and limitations of the methods. Students are expected to analyze and report on a variety of data sets drawn from business application areas. Note: Cannot receive credit for both BUSN 6828 and DSCI 6828. Prereq: BUSN 6530 or permission of instructor. Cross-listed with BUSN 6828. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

DSCI 6840 - Independent Study

Summer 2010 Registration **DSCI 6840**

Instructor approval is required. Allowed only under special and unusual circumstances. Regularly scheduled courses cannot be taken as independent study. **Semester Hours:** 1to 8
Registration is changing. Visit our website for details ucdenver.edu/registration.

DSCI 6910 - Decision Sciences Practicum

Summer 2010 Registration **DSCI 6910**

Students apply decision science methodologies to a real-life business problem in cooperation with a local Denver organization. Under the supervision of faculty, students engage in problem definition, analysis and solution. Results are presented in oral and written form to the sponsoring organization. Prereq: Permission of instructor. **Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

DSEP 6000 - Academic Writing for Doctoral Students

Summer 2010 Registration **DSEP 6000**

Tailored for graduate students in education. Focuses on techniques for improving academic writing, particularly planning, organizing, drafting, revising, and editing papers, i.e. course assignments, portfolio products, doctoral proposals or dissertation chapters.

Prereq: Admission to doctoral program. **Semester Hours: 1to 1**

Registration is changing. Visit our website for details ucdenver.edu/registration.

DSEP 6010 - APA Conventions in Academic Writing

Summer 2010 Registration **DSEP 6010**

This workshop, specifically directed to doctoral students, concentrates on practical issues involved in documenting sources and following conventions for other text features using the current Publication Manual of the American Psychological Association and updates posted on the APA Web site. Prereq: admission to the doctoral program. **Semester Hours: 1to 1**

Registration is changing. Visit our website for details ucdenver.edu/registration.

DSEP 6020 - Advanced Academic Writing for Doctoral Students

Summer 2010 Registration **DSEP 6020**

This workshop is designed for doctoral students in education. Focuses on practical strategies for managing, organizing, revising and editing academic papers, especially complex writing projects such as dissertation proposals and dissertation chapters.

Prereq: DSEP 6000 or permission of instructor. **Semester Hours: 1to 1**

Registration is changing. Visit our website for details ucdenver.edu/registration.

DSEP 6994 - Introduction to Academic Discourse

Summer 2010 Registration **DSEP 6994**

Designed to be taken prior to beginning the doctoral program. Discusses the process of writing-emphasizing reading research articles critically with a focus on selecting and organizing sources into a review, developing a conceptual framework, and identifying the connectivity between frameworks and conclusions. Covers principles involved in critically reviewing the literature, including an examination of the purpose of the literature review,

its structures and an analysis of examples. Further the development of a scholarly writing culture, and set expectations for the type of writing necessary to be successful in the doctoral program and to be contributing members of the academic community of practice. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

DSEP 7000 - Doctoral Seminar in Research Methods

Summer 2010 Registration **DSEP 7000**

Designed for students beginning doctoral work, explores conceptional and practical bases for doing and evaluating educational research. The chain of reasoning linking the conceptualization of a research problem, the posing of questions in a social process of inquiry, and the collection and interpretation of evidence is examined through the use of examples. Prereq: RSEM 5100 or equivalent. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

DSEP 7010 - Dissertation Planning and Design

Summer 2010 Registration **DSEP 7010**

Provides doctoral students with conceptual, methodological, and social support during the early stages of the doctoral dissertation. Course content and discussion focuses on the first three chapters of the dissertation, including: posing research questions and hypotheses, conceptual and theoretical frameworks, literature reviews, and methodological (design, sampling, measurement, analysis) plans. Prereq: completion of all required course work; successful completion or scheduled doctoral comprehensive examination during the semester in which this course is taken. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

DSEP 7100 - Leadership/Innovation in Education

Summer 2010 Registration **DSEP 7100**

Introductory seminar for doctoral students in education. Orients students to the array of perspectives on leadership and innovation in education and develops doctoral-level analysis and writing skills. Students develop initial portfolio products and program plans. Prereq: admission to the doctoral program. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

DSEP 7200 - Administrative Leadership and Values Appraisals

Summer 2010 Registration **DSEP 7200**

Examines the core values underlying the program in education administration: value development in individuals as they relate to the purpose of public schooling in today's society. Prereq: permission of instructor. **Semester Hours:** 1to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

DSEP 7210 - Education Policy Making in a Democratic Society

Summer 2010 Registration **DSEP 7210**

Provides students with relevant theories, research, and practice related to administrative policy making educational organizations. Focuses on ways of thinking about societal and schooling tensions, and includes a focus on governance, planning, community participation, politics, working with groups, policy arenas, conflict management and the change process. Prereq: permission of instructor. **Semester Hours:** 1to 6
Registration is changing. Visit our website for details ucdenver.edu/registration.

DSEP 7220 - Leadership and Power

Summer 2010 Registration **DSEP 7220**

Part of a planned sequence of experiences for a cohort group of advanced doctoral students preparing for careers as senior policy administrators in education. Prereq: permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

DSEP 7230 - Organizational Performance in Schools

Summer 2010 Registration **DSEP 7230**

Examines ways of thinking about schools as organizations that deliver educational services, as well as places of employment for administrators, teachers, and other staff members. The course also focuses on ways to diagnose and change school performance. Prereq: permission of instructor. **Semester Hours:** 1to 6
Registration is changing. Visit our website for details ucdenver.edu/registration.

DSEP 7240 - Problems/Practices in Integrated Services

Summer 2010 Registration **DSEP 7240**

Examines the specific systems at local, state, and national levels that provide services and support for children, youth, and families including the regulatory and statutory criteria for program administration and funding, the nature and scope of services offered, and the goodness-of-fit between overlapping program mandates and existing needs of families. Prereq: admission to the Ph.D. program in educational leadership or permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

DSEP 7250 - Nature of Work in Schools

Summer 2010 Registration **DSEP 7250**

Policies and educational reforms affecting the technical core of schooling: curriculum, teaching, learning, assessment, and organization. Students develop research and policy analysis skills and investigate social and political factors affecting what is taught and

learned in schools. Prereq: DSEP 7000 and 7100. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

DSEP 7260 - Managing Integrated Services

Summer 2010 Registration **DSEP 7260**

Examines the dynamics of managing public policies and programs that support integrated services for children and families. Course focuses on managerial skills needed in a complex, multi-disciplinary setting. Course examines federal, state, and local government agency policies and their administrative implications. Prereq: core course in Integrated Services emphasis of the Ph.D. program in Educational Leadership and Innovation. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

DSEP 7300 - Individual and Organizational Change

Summer 2010 Registration **DSEP 7300**

Covers theory and practice of psychological change as this change relates to systems and individuals within organizations. Addresses the knowledge, understanding, and application of the change process. Prereq: permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

DSEP 7700 - Doctoral Pro Seminar

Summer 2010 Registration **DSEP 7700**

First semester students in DSEP are introduced to the faculty and the elements of the program. Prereq: admission to the Ph.D. program. **Semester Hours:** 1to 1
Registration is changing. Visit our website for details ucdenver.edu/registration.

DSEP 7710 - Theoretical Bases of Instructional Technology

Summer 2010 Registration **DSEP 7710**

Seminar on the theoretical foundations of the field of instructional technology, including behavioral, cognitive, and systems theories. Prereq: acceptance into the doctoral program. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

DSEP 7711 - Curriculum Reform in a Democracy

Summer 2010 Registration **DSEP 7711**

Students address major themes in curriculum improvement. Prereq: permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

DSEP 7712 - Seminar: Learning Theory and Learners

Summer 2010 Registration **DSEP 7712**

Students apply major issues from learning theories and development to problems of practice related to educational leadership and innovation. Prereq: EPSY 5110 or 5220 or (recommended: EPSY 5100, 5140 or 6000). **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

DSEP 7830 - Special Topics: 7830-7832

Summer 2010 Registration **DSEP 7830**

Special topics that reflect current research and scholarly exploration of leadership and innovation. **Semester Hours:** 1to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

DSEP 7833 - Culture and Critical Theory

Summer 2010 Registration **DSEP 7833**

Provides an introduction to critical inquiry. General topics include: the development and of the concept of culture, the development and application of critical theory, critical race theory and critical pedagogy. Through the course, students are guided to explore critical theory work in their own field. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

DSEP 7834 - Divergent Scholarly Work on Identity & Voice

Summer 2010 Registration **DSEP 7834**

This seminar is to prepare individuals to integrate theoretical and practical knowledge by cultivating habits of analysis, inquiry and judgment. Students formulate ways of constructing voice for their own individual sense of identity as a leader and innovator in response to social and political pressures. Prereq: DSEP 7831. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

DSEP 7840 - Independent Study: DSEP

Summer 2010 Registration **DSEP 7840**

Semester Hours: 1to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

DSPL 7011 - Research Design

Summer 2010 Registration **DSPL 7011**

Students are provided with a 'hands on' understanding of methodological issues to become both intelligent consumers of social science research and competent producers

of empirically based knowledge. The course moves through the research process covering hypothesis formulation, research design, data collection, measurement, and some fundamentals of statistical inference. Prereq: Admission to the PhD program in Design and Planning or permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

DSPL 7012 - Theories of Planning

Summer 2010 Registration **DSPL 7012**

Examines theories of planning and problems of plan implementation. Review and assesses a range of theories of intervention - market imperfections, political economy, regulations, community, rationality, and communication - relying on examples from students research as well as case studies developed by students. Prereq: Admission to the PhD program in Design and Planning or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

DSPL 7013 - Environment and Behavior

Summer 2010 Registration **DSPL 7013**

Explores contributions of social research to understanding what facilitates and motivates people's adoption of sustainable environmental behaviors. It examines personal and collective behaviors, at scales that range from buildings to global environmental change, in the developed and developing world. Prereq: Admission to the PhD program in Design and Planning or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

DSPL 7014 - Colloquium

Summer 2010 Registration **DSPL 7014**

Presentations of research projects by students, college faculty members and visitors. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

DSPL 7015 - Historiography and Architecture

Summer 2010 Registration **DSPL 7014**

Advanced seminar concerning the study of the written record of the past and how it is established. Readings focus on canonic texts formative to the discipline and the strategies they offer for historical research. Prereq: "Course is offered to doctoral students but masters students may enroll with instructor approval." **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

DSPL 7016 - Architecture, in Theory

Summer 2010 Registration **DSPL 7014**

Explores theories and texts that have influenced the analysis and the production of architectural form. The focus is on the expressive potential of architectural forms and the modalities of the realization of this potential. Prereq: "Course is offered to doctoral students but masters students may enroll with instructor approval." **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

DSPL 7017 - Pro-Seminar

Summer 2010 Registration **DSPL 7014**

Advanced, graduate-level course (seminar, independent-study, or other) addressing the history of architecture, landscape, or urbanism. Prereq: "Course is offered to doctoral students but masters students may enroll with instructor approval." **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

DSPL 7686 - Special Topics in Design and Planning

Summer 2010 Registration **DSPL 7686**

Various topical areas in design and planning are studied, including those in history, theory, methods, and practice. **Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

DSPL 7840 - Independent Study: DSPL

Summer 2010 Registration **DSPL 7840**

Studies initiated by students or faculty and sponsored by a faculty member to investigate a special topic or problem related to design and planning. Prereq: Permission of instructor. **Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

DSPL 7950 - Doctoral Thesis Research

Summer 2010 Registration **DSPL 7950**

Conducting research for doctoral dissertation, including data collection, analysis and presentation of findings. Prereq: Completion of core of PhD program. **Semester Hours:** 3to 10

Registration is changing. Visit our website for details ucdenver.edu/registration.

ECED 5000 - The Early Childhood Profession

Summer 2010 Registration **ECE 5000**

The first in the required sequence of early childhood courses. It provides an overview of the early childhood profession and philosophical, historical, and legal foundations of services to young children and their families. State and national standards for early childhood education and professional code of ethical conduct are examined. **Semester Hours: 1to 1**

Registration is changing. Visit our website for details ucdenver.edu/registration.

ECED 5010 - Curriculum and Program Development in Early Childhood Education

Summer 2010 Registration **ECE 5010**

Review of principles of early childhood curriculum and program development. Linkages are made between theoretical bases of development and curriculum planning. Curriculum areas considered include language, pre-academics, motor, social-emotional, science, social studies and aesthetic development. **Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

ECED 5020 - Approaches to Young Children's Learning

Summer 2010 Registration **ECE 5020**

Review of approaches for facilitating the learning and development of young children. Examined are programs for children from infancy through age eight. Approaches are considered in terms of (1) their differing views of intellectual, social, and physical development of young children; (2) their operation, activities and procedures; and (3) their effects on children's learning. **Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

ECED 5030 - Directing Programs for Young Children

Summer 2010 Registration **ECE 5030**

Analysis of organizational factors and instructional events in the classroom, facilitation of teacher effectiveness through supervisory feedback and in-service development. Special attention is given to supervisor or teacher relationships, parent-school-community relationships, and processes for feedback. **Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

ECED 5040 - Administrative Seminar

Summer 2010 Registration **ECE 5040**

Emphasis on those topics required of administrators and collaborator or consultants for early childhood socially inclusive classrooms or programs, such as philosophy, finance, programming, management, community or parent relations, supervision, ethical issues, teaming, professionalism, public policy and legislation, in service development and

service coordination.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ECED 5060 - Working with Parents and Families

Summer 2010 Registration **ECE 5060**

Review of historical factors and research related to current trends in working with parents and families of children with or without disabilities. The course presents content concerning family systems theory, various community services available to families, abused and neglected children, and attributes of successful programs that serve parents and families in early childhood.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ECED 5070 - Cognitive, Social, Emotional Development and Disorders in Young Children

Summer 2010 Registration **ECE 5070**

Focuses on the cognitive and social development of infants and young children and problems that may occur during the process. Emphasizes intervention approaches for preschool children with cognitive and social-emotional disabilities. Implications for intervention from current research are considered.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ECED 5080 - Language and Literacy in Young Children

Summer 2010 Registration **ECE 5080**

Overview of normal language and literacy development through age 5, language components and pertinent research relating to language and literacy acquisition. Emphasis is placed on language only disorders commonly demonstrated by young children with disabilities and appropriate intervention strategies.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ECED 5090 - Neuromotor Development and Disorders in Young Children

Summer 2010 Registration **ECE 5090**

Provides an overview of normal and abnormal motor and neurological development in the infant and young child. Current treatment approaches for children with neuromotor disorders are examined, with emphasis on sensory integration and neuro-developmental treatment. Also reviewed are sensory deficits; hearing and visual impairment.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ECED 5102 - Introduction to Developmentally Appropriate Curriculum

Summer 2010 Registration **ECE 5102**

Introduces developmentally appropriate curriculum and instructional practices in early education and the elementary grades. Subject areas considered include literacy, language arts; mathematics, computers, blocks; science, outdoor education; social studies, thematic units; and art, drama, music, physical activity. **Semester Hours:** 1to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ECED 5104 - Advanced Developmentally Appropriate Curriculum

Summer 2010 Registration **ECE 5104**

Extends earlier learning about developmentally appropriate curriculum and instructional practices in early education and the elementary grades. Students elaborate their knowledge of subject area materials and activities. A curriculum unit that is developmentally appropriate is planned, implemented and evaluated. Prereq: ECED 5102. **Semester Hours:** 1to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ECED 5140 - Measurement and Evaluation in Early Childhood Education

Summer 2010 Registration **ECE 5140**

Provides classroom experience in basic measurement concepts and in the screening and assessment of young children's cognitive, affective, language, and psychomotor capabilities and characteristics. Traditional measurement techniques as well as non-reactive measures, human and video-observational methods, and authentic assessment are included. Evaluation of programs and persons in early childhood education settings is examined. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ECED 5200 - Screening and Assessment of Young Children

Summer 2010 Registration **ECE 5200**

Provides a field-based experience in the administration and scoring of a sampling of the most widely used screening and assessment instruments designed for use with infants and in preschool classrooms. Students have the opportunity to administer a variety of formal and informal measures including screening, evaluation, play-based and curriculum-based measures. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ECED 5202 - Stress, Violence, and Behavior Challenges in Young Children's Lives

Summer 2010 Registration **ECE 5202**

Prepares early childhood educators to work with young children and their families to counteract the negative effects of stress and violence. Students are introduced to the effects of stress and violence on young children, the emotional needs of children in the

classroom and the use of specific intervention strategies to promote positive social skills, prevent behavior problems, and teach social problem solving to young children.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ECED 5204 - Early Childhood Mental Health

Summer 2010 Registration **ECE 5204**

Addresses the role of the early childhood practitioner in supporting young children emotional well-being and mental health. Topics include mental health disturbances or disorders of infancy or childhood, assessment of social or emotional development and behaviors related to mental health, relationship-based strategies for working with children with emotional and behavioral needs, and identification of community resources and services. Prereq: Students are encouraged to take ECED 5202 prior to this course for a specialization in early childhood mental health, however this is not an absolute prerequisite.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ECED 5800 - Workshop: Topics in Early Childhood Education

Summer 2010 Registration **ECE 5800**

Topics and credit hours vary from semester to semester.**Semester Hours:** 1to 4
Registration is changing. Visit our website for details ucdenver.edu/registration.

ECED 5840 - Independent Study

Summer 2010 Registration **ECE 5840**

Semester Hours: 1to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

ECED 5911 - Educational and Observational Practicum in Early Childhood Education

Summer 2010 Registration **ECE 5911**

Includes planned experiences built around the clinic and ECED classroom in operation. Students observe in public schools, Head Start, childcare, and private preschool programs. The practicum requires 30 to 40 clock hours of field placement experience with concurrent classroom meetings. Opportunities for observation in a variety of classroom types are provided.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ECED 5920 - Readings in Early Childhood Education

Summer 2010 Registration **ECE 5920**

Semester Hours: 1to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

ECED 6010 - Literacy and Mathematics K-2

Summer 2010 Registration **ECE 6010**

Principles of early reading and mathematical development for grades K-2. Approaches to reading and mathematics are reviewed in relationship to Colorado Model Content Standards and the Colorado and Literacy Act. Diverse instructional strategies and differentiation for children with disabilities and the roles of early childhood special education specialists in K-2 are described and critiqued. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ECED 6100 - Medical and Physiological Aspects of Developmental Disabilities

Summer 2010 Registration **ECE 6100**

Presents neurological or physiological development and disorders, as well as appropriate intervention techniques for the young child. Also considered are developmental issues and concerns related to medically fragile young children. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ECED 6110 - Intervention Strategies for Children with Disabilities and At-risk Infants

Summer 2010 Registration **ECE 6110**

An in-depth study of intervention strategies, curricula, and program models for young children, birth to three years. Topics include selection, implementation, and evaluation of the different techniques. The course has an interdisciplinary focus. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ECED 6200 - Early Intervention Strategies

Summer 2010 Registration **ECE 6200**

Explores current research, knowledge, and skills related to early intervention policies, teaching strategies, and service delivery focusing on the young child with disabilities. Infant and preschool service delivery options such as home or center or community-based programming, and social integration programming techniques are emphasized. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ECED 6600 - Seminar: Early Childhood Education Practices and Issues

Summer 2010 Registration **ECE 6600**

Current practices and issues in early childhood and primary education are reviewed, then certain topics are considered in-depth. Emphasis is on issues and problems of practice and care setting in early childhood education and primary grades. **Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

ECED 6690 - Seminar: Research and Current Issues in Early Childhood Education

Summer 2010 Registration **ECE 6690**

Research methods are reviewed and then selected topics are considered. Emphasis is on research findings and current issues of importance to teachers, administrators, specialists, collaborator/consultants, and researchers in early childhood and early childhood special education. **Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

ECED 6910 - Infant/Toddler Practicum in ECSE

Summer 2010 Registration **ECE 6910**

Field-based experiences in settings for children with disabilities and at-risk infants, toddlers, and their families. **Semester Hours: 1to 4**

Registration is changing. Visit our website for details ucdenver.edu/registration.

ECED 6911 - Practicum in Early Childhood Education

Summer 2010 Registration **ECE 6911**

Field-based experiences in settings for young children (preschool administration, day-care center management, community college teaching, parent program directorship, etc.) that are closely linked to the students' professional goals. Requires a minimum of 75, 150, 225, or 300 clock hours under supervision (for 1, 2, 3, or 4 credit hours, respectively). Prereq: Considerable course work in early childhood education. **Semester Hours: 1to 4**

Registration is changing. Visit our website for details ucdenver.edu/registration.

ECED 6912 - Preschool in ECSE

Summer 2010 Registration **ECE 6912**

Field-based experiences in settings for young children with disabilities and their families, including school districts and community agencies. The practicum requires a minimum of 85, 170, 255, or 340 clock hours under supervision (for 1,2,3, or 4 credit hours,

respectively). **Semester Hours:** 1to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

ECED 6913 - Practicum in Working with Parents and Families

Summer 2010 Registration **ECE 6913**

Provides in-depth, field-based experience in working with families of handicapped and at-risk young children. Settings may include schools, community agencies and hospitals. Requires minimum of 255 clock hours under supervision. Prereq: Permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ECED 6914 - Primary Practicum in ECSE

Summer 2010 Registration **ECE 6914**

Field-based experiences in kindergarten through second grade settings with typically developing children, children with special needs and special education teams. Requires a minimum of 85, 170, 255 or 340 clock hours under supervision (for 1, 2, 3, or 4 credit hours, respectively). Prereq: ECED 6010. **Semester Hours:** 1to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

ECED 6950 - Master's Thesis

Summer 2010 Registration **ECE 6950**

Prereq: RSEM 5100, RSEM 5200 and credits in the Early Childhood Education program. **Semester Hours:** 4to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 1010 - Economics of Social Issues

Summer 2010 Registration **ECON 1010**

This course is designed for non-majors. Majors in economics will not receive credit toward departmental degree requirements. The focus of the course is on current issues in the economy, including poverty, social security, airline deregulation, government control of prices, economics of higher education, free trade, race and gender discrimination, unemployment, the role of government, and the national debt. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 1111 - Freshman Seminar

Summer 2010 Registration **ECON 1111**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 2012 - Principles of Economics: Macroeconomics

Summer 2010 Registration **ECON 2012**

Covers topics of inflation, unemployment, national income, growth and problems of the national economy, stabilization policy, plus others at the discretion of the instructor.

Purpose is to teach fundamental principles, to open the field of economics in the way most helpful to further a more detailed study of special problems, and to give those not intending to specialize in the subject an outline of the general principles of economics. **Semester Hours:** 3to 3 **GT Pathways Category Key:** GT-SS1

Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 2022 - Principles of Economics: Microeconomics

Summer 2010 Registration **ECON 2022**

Topics include price determination in a market system composed of households and firms: resource allocation and efficiency of various market structures, plus others at the discretion of the instructor. Note: Complementary to and normally taken following ECON 2012. ECON 2012 is not a prerequisite for ECON 2022. **Semester Hours:** 3to 3 **GT Pathways Category Key:** GT-SS1

Pathways Category Key: GT-SS1

Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 2939 - Internship/Cooperative Education

Summer 2010 Registration **ECON 2939**

Experiences involving application of specific, relevant concepts and skills in supervised employment situations. Prereq: 15 hours of 2.75 GPA. **Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 3100 - Economics of Race and Gender

Summer 2010 Registration **ECON 3100**

Overview of the determinants of wages, employment and education in the labor market. Emphasizes the investigation of the evidence and theories of differentials that appear to be associated solely with race and sex, and public policies associated with discrimination and poverty. Prereq: ECON 2022. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 3300 - Economics of Crime and Punishment

Summer 2010 Registration **ECON 3300**

Presents the economic approach to crime. Teaches economic reasoning in the analysis of the determinants of criminal activity, provides an in-depth analysis of the importance of socioeconomic factors in determining crime. Investigates the relative importance of labor market conditions, deterrence, and other factors in the level of criminal activity.

Also covers topics to reduce crime such as, the death penalty, issues around victimless crime and public choices. Prereq: ECON 2022. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 3366 - Managerial Economics

Summer 2010 Registration **ECON 3366**

Presents the basic core of economic theory and its use for sound managerial decision making. Emphasis on the practical applications of the concepts learned in economics to the resolution of everyday problems. Prereq: ECON 2012 and 2022. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 3400 - Economics of Sex and Drugs

Summer 2010 Registration **ECON 3400**

Examines the political and policy issues surrounding controversial topics in human behavior. Economic models and reasoning are applied to examine issues such as juvenile substance use and abuse, and teen pregnancy. Prereq: ECON 2022. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 3801 - Introduction to Mathematical Economics

Summer 2010 Registration **ECON 3801**

Introduces the use of mathematics in micro- and macro-economic analysis. Emphasis on model-building techniques, solution methods, and economic interpretations. Prereq: MATH 1070, 1080 (or equivalent), ECON 2012 and 2022. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 3811 - Statistics with Computer Applications

Summer 2010 Registration **ECON 3811**

Introduces statistical methods and their application to quantitative problems in economics and social sciences. Note: Recitation is required. Prereq: College algebra, ECON 2012 and 2022. **Semester Hours:** 4to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 3939 - Internship/Cooperative Education

Summer 2010 Registration **ECON 3939**

Designed experiences involving application of specific, relevant concepts and skills in supervised employment situations. Prereq: Junior standing and 2.75 GPA. **Semester**

Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 4001 - Topics in Economics

Summer 2010 Registration **ECON 4001**

Studies special topics in economics to be selected by the instructor. Note: May be repeated for credit when topics vary. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 4050 - Special Economic Problems

Summer 2010 Registration **ECON 4050**

Provides students the opportunity to critically evaluate some practical and theoretical problems under supervision, and to present results of their thinking to fellow students and instructors for critical evaluation. Prereq: ECON 2012 and ECON 2022. Note: ECON 4050 for majors in economics, others by permission of instructor. Cross-listed with ECON 5050. **Semester Hours:** 1to 8

Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 4071 - Intermediate Microeconomic Theory

Summer 2010 Registration **ECON 4071**

Production, price and distribution theory. Study of value and distribution theories under conditions of varying market structures, with special references to the contribution of modern theorists. Prereq: ECON 2012, 2022 and 3801. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 4081 - Intermediate Macroeconomic Theory

Summer 2010 Registration **ECON 4081**

National income and employment theory. Primary emphasis placed on determination of employment and prices. Problems of unemployment and inflation analyzed and appropriate policies considered. Prereq: ECON 2012, 2022 and 3801. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 4091 - History of Economic Thought

Summer 2010 Registration **ECON 4091**

Traces the development of economic thought from ancient times to the 20th century. Considers the context in which these ideas were developed and their relationship to modern economic thought and contemporary economic problems. Prereq: ECON 2012

and ECON 2022. Cross-listed with ECON 5090. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 4101 - Applied Statistics Using SAS and SPSS I

Summer 2010 Registration **ECON 4101**

Teaches the practical statistical tools social scientists use to analyze real-world problems. Split into four modules, each taught by a different instructor. The first module introduces SAS and SPSS; modules 2-4 are problem-based and cover topics such as ANOVA, multivariate regression, and cluster analysis. Prereq: Any statistics course. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 4102 - Applied Statistics Using SAS and SPSS II

Summer 2010 Registration **ECON 4102**

(Continuation of ECON 4101.) Students use the skills they learned in the previous semester to analyze a social issue of their choosing and present their findings. Note: In addition to lectures, weekly one-on-one meetings between faculty and students are required. Prereq: ECON 4101. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 4110 - Money and Banking

Summer 2010 Registration **ECON 4110**

Surveys major monetary and fiscal institutions such as commercial banks, the federal reserve system, savings institutions, and the structure of debt. The relationships between households, firms and financial intermediaries are explored, and the tools available to macroeconomic policy makers are described and evaluated. Prereq: ECON 4081. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 4150 - Economic Forecasting

Summer 2010 Registration **ECON 4150**

Teaches forecasting techniques used in business and government to project trends and short-term fluctuations. Actual data are employed in instruction and labs. State-of-the-art spreadsheet and algorithms are introduced as part of the course work. Prereq: Undergraduate statistics or permission of instructor. Cross-listed with ECON 5150. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 4210 - Public Finance

Summer 2010 Registration **ECON 4210**

Surveys topics dealing with the economics of government activity, including the provision of public goods; the economics of the political process; welfare programs; pollution externalities; benefit-cost analysis; the U.S. tax structure; and the effects of taxes on economic behavior, economic performance and the distribution of income. Prereq: ECON 2022.

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 4230 - Law and Economics

Summer 2010 Registration **ECON 4230**

Applies economic theory to legal decision making. Topics include property law, tort law, contract law, the common law, crime and punishment, comparisons to traditional forms of legal decision making and the economic approach to politics. Prereq: ECON 2022.

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 4240 - Economic Policy Analysis

Summer 2010 Registration **ECON 4240**

Deals with the application of economic analysis to the government policy-making process. Topics include public goods provision, externalities, cost-benefit analysis, judicial decision making, the economic analysis of the political process, government regulation of business, and tax incidence. Prereq: ECON 2012, 2022 and 3801.

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 4310 - Managerial Economics

Summer 2010 Registration **ECON 4310**

The course adapts standard theory to more realistically discuss enterprise structure, firm and managerial behavioral incentives, and strategic behavior. Once a foundation is laid, successful and unsuccessful strategies and case studies are presented. Cross-listed with ECON 5310.

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 4410 - International Trade

Summer 2010 Registration **ECON 4410**

Trade theory identifies who wins and loses from trade and why there are usually overall gains. Explores issues in immigration, globalization, income inequality, tariffs, dumping, the WTO, the environment, wages, and growth strategies among others. Prereq: ECON 2022. Cross-listed with ECON 5410.

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 4420 - International Finance

Summer 2010 Registration **ECON 4420**

The international adjustment process, including the foreign exchange market, balance of payments disequilibria, price and income adjustment, fiscal and monetary policy, and the international monetary system. Prereq: ECON 2012. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 4430 - Economic Growth

Summer 2010 Registration **ECON 4430**

Explores causes of rapid growth or decline over long periods for different regions of the world. Inequality, sustainability, culture, climate, technology and resources all play significant roles. Data and examples are used to determine the important influences. Prereq: ECON 2022 and ECON 3811. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 4530 - Economics of Natural Resources

Summer 2010 Registration **ECON 4530**

Examines economic models of renewable resource management and models of exhaustible resource depletion. Analyzes decisions made by private firms and governments affecting the methods and rate of resource development. Examines the effects of resource development on economic growth and environmental quality and the effects of economic development on resource scarcity. Prereq: ECON 2022. Cross-listed with ECON 5530. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 4540 - Environmental Economics

Summer 2010 Registration **ECON 4540**

Economic approach to environmental problems: relationship between ownership structures, externalities and environmental damage; poverty, population pressure, and environmental degradation; valuation of environmental amenities; sustainability of economic activity; cost-benefit analysis applied to the environment; evaluation of alternative instruments for environmental control. Prereq: ECON 2022. Cross-listed with ECON 5540. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 4610 - Labor Economics

Summer 2010 Registration **ECON 4610**

Studies problems associated with the determination of wages, hours, and working conditions in the American economy. Strong emphasis placed on current research in

such areas as welfare reform, minimum wage, return to schooling, immigration, labor market discrimination, and trade unions. Prereq: ECON 2012, 2022 and any statistics course. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 4640 - Sports Economics

Summer 2010 Registration **ECON 4640**

Applies economic analysis to sports. Explores topics such as competition, on-field performance, players' compensation, profits in professional sports, anti-trust and labor law, the impact of sports on local communities and the links between athletics and education. Prereq: ECON 2022. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 4716 - Comparative Economic Systems

Summer 2010 Registration **ECON 4716**

Critical examination of capitalism, socialism, communism and alternative systems. Focuses on the comparative study of various countries and the implementation and management of their economic systems. Prereq: ECON 2022. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 4740 - Industrial Organization

Summer 2010 Registration **ECON 4740**

Examines the determinants of, and linkages between, market structure, firm conduct, and industrial performance. Topics include: determinants of the market size; impact of different market structures on prices and outputs; strategic behavior of firms to prevent entry or induce exit of rival firms; collusion; price discrimination; advertising; competition, monopoly, and innovation; implications for economic efficiency and public policy. Prereq: ECON 4071. Cross-listed with ECON 5740. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 4770 - Economic Development--Theory and Problems

Summer 2010 Registration **ECON 4770**

Introduces theory and practice of economic development. Topics include development and growth models, economic planning, income distribution, human and capital resources, foreign investment and the multinationals, technology transfer, trade and development. Discussions of current issues regarding world debt, economic stabilization, the new protectionism, empirical studies, and examples of development in various countries. Prereq: ECON 2012 or ECON 2022. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 4811 - Introduction to Econometrics

Summer 2010 Registration **ECON 4811**

Introduces econometric methods and their applications to quantitative economic problems. Simple and multiple regression models and problems encountered in their applications are developed in lectures and applied computer projects. Prereq: ECON 3811 or equivalent. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 4840 - Independent Study: ECON

Summer 2010 Registration **ECON 4840**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 4850 - Honors Independent Study: ECON

Summer 2010 Registration **ECON 4850**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 5050 - Special Economic Problems

Summer 2010 Registration **ECON 5050**

Provides students the opportunity to critically evaluate some practical and theoretical problems under supervision, and to present results of their thinking to fellow students and instructors for critical evaluation. Prereq: Permission of instructor. Cross-listed with ECON 4050. **Semester Hours:** 1to 8

Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 5051 - Data Analysis and Research Methodology

Summer 2010 Registration **ECON 5051**

Consists of a series of lectures on the nature of conducting research, and discussions of the ways professional economists approach research problems. A review of spreadsheet applications and statistical packages are conducted. Prereq: ECON 4071 and 4811 or permission of instructor. **Semester Hours:** 1.5to 1.5

Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 5052 - Data Analysis and Research Methodology II

Summer 2010 Registration **ECON 5052**

Develops student skills in data analysis and applications to economic issues and policy evaluation. Hands-on demonstration and student participation in empirical strategies

using statistical packages in the social sciences (i.e. SAS). Emphasis on programming, research strategies and interpretation of results. Prereq: ECON 5051 or permission of instructor. **Semester Hours:** 1.5 to 1.5

Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 5073 - Microeconomic Theory

Summer 2010 Registration **ECON 5073**

Fundamental features of partial equilibrium theory of the firm, consumer and market. General equilibrium and welfare economic topics are examined. Features of the models that have empirical applications are accented. Prereq: ECON 5803. **Semester Hours:** 3 to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 5083 - Macroeconomic Theory

Summer 2010 Registration **ECON 5083**

Examines the major macroeconomic models within a common framework. Differences in the foundations, structure, and policy implications of the competing models are analyzed. Prereq: ECON 5803 or permission of the instructor. **Semester Hours:** 3 to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 5090 - History of Economic Thought

Summer 2010 Registration **ECON 5090**

Traces the development of economic thought from ancient times to the 20th century. Considers the context in which these ideas were developed and their relationship to modern economic thought and contemporary economic problems. Prereq: ECON 2012 and ECON 2022. Cross-listed with ECON 4091. **Semester Hours:** 3 to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 5150 - Economic Forecasting

Summer 2010 Registration **ECON 5150**

Teaches forecasting techniques used in business and government to project trends and short-term fluctuations. Actual data are employed in instruction and labs. State-of-the-art spreadsheet and algorithms are introduced as part of the course work. Prereq: ECON 3811. Cross-listed with ECON 4150. **Semester Hours:** 3 to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 5310 - Managerial Economics

Summer 2010 Registration **ECON 5310**

The course adapts standard theory to more realistically discuss enterprise structure, firm

and managerial behavioral incentives, and strategic behavior. Once a foundation is laid, successful and unsuccessful strategies and case studies are presented. Cross-listed with ECON 4310. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 5320 - Financial Economics

Summer 2010 Registration **ECON 5320**

Studies the financial decision making process of individuals and business entities, and the workings of financial institutions. Topics include the essentials of optimal portfolio, financial management, financial innovations, and the globalization of financial markets. Emphasis is on the application of basic theories to economic agents' behavior and the case studies. Prereq: ECON 5073 or permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 5410 - International Trade

Summer 2010 Registration **ECON 5410**

Trade theory identifies who wins and loses from trade and why there are usually overall gains. Explores issues in immigration, globalization, income inequality, tariffs, dumping, the WTO, the environment, wages and growth strategies among others. Prereq: ECON 2022. Cross-listed with ECON 4410. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 5530 - Economics of Natural Resources

Summer 2010 Registration **ECON 5530**

Examines economic models of renewable resource management and models of exhaustible resource depletion. Analyzes decisions made by private firms and governments affecting the methods and rate of resource development. Examines the effects of resource development on economic growth and environmental quality and the effects of economic development on resource scarcity. Prereq: ECON 5073. Cross-listed with ECON 4530. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 5540 - Environmental Economics

Summer 2010 Registration **ECON 5540**

Economic approach to environmental problems: relationship between ownership structures, externalities and environmental damage; poverty, population pressure, and environmental degradation; valuation of environmental amenities; sustainability of economic activity; cost-benefit analysis applied to the environment; evaluation of alternative instruments for environmental control. Prereq: ECON 5073. Cross-listed with

ECON 4540.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 5660 - Health Economics

Summer 2010 Registration **ECON 5660**

Introduces students to analytical skills and economic methods, and demonstrates how these methods can be applied to issues in health policy and management. Topics include: demand for health and medical care; health care costs, health reform, medical technology; market for health insurance; physicians, hospitals, and managed care; pharmaceuticals; regulations in the U.S. health care sector; demand for addictive substances; infant and maternal health; international comparisons of health care systems. Prereq: Permission of instructor.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 5740 - Industrial Organization

Summer 2010 Registration **ECON 5740**

Examines the determinants of, and linkages between, market structure, firm conduct, and industrial performance. Topics include: determinants of the market size; impact of different market structures on prices and outputs; strategic behavior of firms to prevent entry or induce exit of rival firms; collusion; price discrimination; advertising; competition, monopoly, and innovation; implications for economic efficiency and public policy. Prereq: Permission of instructor. Cross-listed with ECON 4740.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 5800 - Special Topics

Summer 2010 Registration **ECON 5800**

Current economics topics to be determined by the instructor. Prereq: ECON 3801 or MATH 1401.**Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 5803 - Mathematical Economics

Summer 2010 Registration **ECON 5803**

Introduces the use of mathematics in advanced micro- and macro-economic analysis. Emphasis on model-building techniques, solution methods, and economic interpretations. Prereq: ECON 4071 and 4081.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 5813 - Econometrics I

Summer 2010 Registration **ECON 5813**

Theory and application of statistical techniques used to analyze economic problems. Topics include simple and multiple regression models, simultaneous equation models, and the problems encountered in their application. Students formulate models, obtain data, estimate models, interpret results and, forecast. Prereq: ECON 4811 or equivalent. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 5823 - Econometrics II

Summer 2010 Registration **ECON 5823**

Second course in the econometrics sequence, covering intermediate topics in cross-section and time series analysis. Topics include limited dependent variables, autoregressive and distributed lag models, longitudinal data analysis and unit roots, co-integration and other time-series topics. Prereq: ECON 5083 and 5813. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 5840 - Independent Study

Summer 2010 Registration **ECON 5840**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 5939 - Internship/Cooperative Education

Summer 2010 Registration **ECON 5939**

Semester Hours: 1to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 5950 - Master's Thesis

Summer 2010 Registration **ECON 5950**

Semester Hours: 1to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 6010 - Advanced Microeconomic Theory

Summer 2010 Registration **ECON 6010**

Recent and contemporary literature on fundamentals of economic theory. Consideration of value theory with particular emphasis on methodology, theory of demand, theory of the firm, and theory of distribution. Prereq: ECON 5073. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 6020 - Advanced Macroeconomic Theory

Summer 2010 Registration **ECON 6020**

Considers general equilibrium and aggregative analysis in economic theory, with particular emphasis given to the theory of employment, consumption and investment.

Prereq: ECON 5083. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 6053 - Seminar In Applied Economics

Summer 2010 Registration **ECON 6053**

Familiarizes students with applied research in economics. Students read, discuss, and critique articles in economic journals. Emphasis is placed on research design and methods employed in these articles to prepare students for development of their own research projects in subsequent courses. Topics vary with instructor, and may include international economics, labor economics, monetary theory, public or finance and development economics. Prereq: ECON 5813, 5073, 5083 at the instructor's discretion. **Semester Hours:** 1.5to 1.5

Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 6054 - Seminar In Applied Economics II

Summer 2010 Registration **ECON 6054**

Familiarizes students with state-of-the-art applied economic research. Students read, discuss, and critique articles published in economic journals. Note: Topics vary with the instructor. Prereq: ECON 5813, 5073, 5083 at the instructor's discretion. **Semester Hours:** 1.5to 1.5

Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 6060 - Special Topics

Summer 2010 Registration **ECON 6060**

Special topics in advanced microeconomics. Consideration of value theory based upon methodology, theory of demand, and theory of distribution. Prereq: ECON 3801. **Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 6073 - Research Seminar

Summer 2010 Registration **ECON 6073**

Focuses on training students to do rigorous research in economics. Topics include the analysis of large data sets, further development of econometric skills, and writing a research paper. Note: Students attend lectures and also meet regularly with the instructor in the process of doing a sophisticated research project. Prereq: ECON 5823

and 6053. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 6110 - Money and Central Banking

Summer 2010 Registration **ECON 6110**

Monetary and financial institutions, with focus on relationships among domestic monetary policy, interactional credit and balance of payments. Prereq: ECON 5083. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 6210 - Public Finance

Summer 2010 Registration **ECON 6210**

Advanced economic theory applied to the problems of public and private sector decision making. Applied topics in taxation, education, voting theory, welfare economics, externalities and public goods. Prereq: ECON 5073. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 6410 - International Trade

Summer 2010 Registration **ECON 6410**

Contemporary and classical literature on theories of international trade. Topics include the determination of the pattern and terms of trade, the relationship between growth and trade, and commercial policy. Prereq: ECON 5073. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 6420 - International Finance

Summer 2010 Registration **ECON 6420**

Topics in international finance, including exchange rate determination, the adjustment process, international financial markets and the international monetary system. Prereq: ECON 5073. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 6610 - Labor Economics

Summer 2010 Registration **ECON 6610**

Advanced study of the labor market, including: history, nature, and function of labor organizations; the process of wage determination; and the formation of public policy. Prereq: ECON 5073 and 5813. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 6770 - Economic Growth and Development

Summer 2010 Registration **ECON 6770**

Considers the role of planning in economic development, with particular reference to investigation of planning problems, especially in less developed countries. Prereq: ECON 5073 and 5803. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 6801 - Advanced Mathematical Economics

Summer 2010 Registration **ECON 6801**

Addresses economic dynamics, formal mathematical modeling in economics, and optimization in economic theory. Prereq: ECON 5803 or permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 6810 - Econometrics and Forecasting

Summer 2010 Registration **ECON 6810**

Covers advanced topics in cross-sectional and time-series analysis. Emphasizes important theoretical and empirical issues encountered in applied work in economics and business. Topics include problems of structural change and model misspecification, instrumental variables, simultaneous equations models, distributed lags, maximum likelihood estimation, qualitative and limited dependent variables, Arima models, vector-auto regressions, issues on exogeneity and causality. Through the use of econometric software programs and actual data, students learn to execute estimation and forecasting projects soundly. Prereq: ECON 5813 and 5823. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 6840 - Independent Study

Summer 2010 Registration **ECON 6840**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ECON 6950 - Master's Thesis

Summer 2010 Registration **ECON 6950**

Semester Hours: 1to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

EDLI 7600 - Doctoral Laboratory

Summer 2010 Registration **EDLI 7600**

Laboratories are organized by professors to engage students in on-going research programs. They provide opportunities for students to extend and apply knowledge and skills developed in course work. The laboratories enable students to complete portfolio requirements and work on doctoral dissertations. Prereq: Admission to PhD program.

Semester Hours: 1to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

EDLI 7601 - Doctoral Research Lab: Administrative Leadership and Policy Studies Lab

Summer 2010 Registration **EDLI 7601**

The ALPS lab focuses on research on administrative and organizational leadership, adult and professional education, leadership in higher education, and educational policy and policy making at all levels. Prereq: Permission of instructor.

Semester Hours: 1to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

EDLI 7602 - Doctoral Research Lab: Postsecondary Teaching and Learning

Summer 2010 Registration **EDLI 7602**

A doctoral lab exploring theoretical and practical questions about teaching and learning in post-secondary settings. Provides hands-on experiences in the design and development of learner-centered, web-based faculty development workshops along with research opportunities emerging from the workshops. Prereq: Admission to the doctoral program.

Semester Hours: 1to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

EDLI 7603 - Doctoral Research Lab: Technology- Enhanced Learning

Summer 2010 Registration **EDLI 7603**

The TEL Lab is comprised of professionals who share an interest in the effective design of learning resources and use of technologies in K12 and adult-learning settings. TEL supports inquiry and provides leadership to practitioner communities. Example projects include technology integration in K12 schools; instructional-design support for higher education faculty; and tools to promote interaction in online learning environments. TEL Lab members meet monthly as an entire group, and weekly as sub-groups on specific projects. For more information, check the web site at: <http://www.cudenver.edu/ilt/TEL>

Prereq: Permission of instructor.

Semester Hours: 1to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

EDLI 7604 - Doctoral Research Lab: Learning and Activity

Summer 2010 Registration **EDLI 7604**

The LOLA doctoral lab focuses on learning, change, and activity. The lab provides an

environment in which participants work to develop a conceptual framework for conducting multi-level action research; develop tools for change efforts in a variety of contexts; develop skills in scholarly writings and collegial critique; conduct projects and disseminate findings; and become proficient with data management techniques. Prereq: Permission of instructor required. **Semester Hours:** 1to 6
Registration is changing. Visit our website for details ucdenver.edu/registration.

EDLI 7605 - Doctoral Research Lab: Urban School Lab

Summer 2010 Registration **EDLI 7605**

The USDL is focused on systemic change and problems of practice within urban schools. It is in the intersection of systems change and practice issues that we stake out the territory for our lab: practice informed and supported by systems approaches to improvement and renewal; systems change informed and led by the practitioners who daily work in schools to teach and mentor their students. Through the dynamic interplay of the particular and the context, we hope to unveil the life choices and opportunities for each and every student, knowing that these opportunities and choices are so often complicated by lack of resources, limited expectations of success, and depersonalized classrooms. Knowing the critical role that teachers and other practitioners play in creating opportunities for learning to occur, the work of the USDL explores the issues and challenges that face educators on a daily basis. Prereq: Admittance to the doctoral program or permission of instructor. **Semester Hours:** 1to 6
Registration is changing. Visit our website for details ucdenver.edu/registration.

EDLI 7607 - Doctoral Lab for Diversity and Equity

Summer 2010 Registration **EDLI 7607**

The lab is a research community in which participants use critical theory to examine the educational outcomes and experiences of marginalized groups. Critical theory helps to explore marginalization, particularly as it relates to schools and to imagine a new society. Prereq: Doctoral students who meet the requirements for doctorate in Educational Leadership and Innovation. **Semester Hours:** 1to 6
Registration is changing. Visit our website for details ucdenver.edu/registration.

EDLI 7608 - Doctoral Research Lab: Inquiry or Professional Development

Summer 2010 Registration **EDLI 7608**

This lab reviews organizational issues in the development and management of authentic content inquiring. Special interest is teacher professional attitudes, collegial teacher-team development and school partnership links that result from such projects. Prereq: Admittance to doctoral program or permission of instructor. **Semester Hours:** 1to 6
Registration is changing. Visit our website for details ucdenver.edu/registration.

EDLI 7611 - Doctoral Research Lab: Leadership Capacity Lab

Summer 2010 Registration **EDLI 7611**

This lab will investigate what constitutes best practice (knowledge, dispositions, skills, training) for impacting the leadership capacity of school leaders as they work to promote: (a) successful student outcomes, (b) inclusive practices, (c) recruitment and retention of high-quality educators, (d) effective learning communities, and (e) social justice and equality for all. Prereq: Admission to EDLI program. **Semester Hours:** 1to 6
Registration is changing. Visit our website for details ucdenver.edu/registration.

EDLI 7612 - Doctoral Research Lab: Literacy and Responsive Teaching

Summer 2010 Registration **EDLI 7612**

The purpose of this doctoral research lab is to explore area of literacy (reading and writing) and responsive teaching, particularly in diverse school settings with the understanding that diversity of culture, language, gender orientation, abilities and economics is the growing norm in our schools. Topics of interest to the lab are literacy development, language acquisition, assessment, culturally responsive teaching practices, professional development and school reform. Prereq: Acceptance into the doctoral program. **Semester Hours:** 1to 6
Registration is changing. Visit our website for details ucdenver.edu/registration.

EDLI 8994 - Doctoral Dissertation PhD

Summer 2010 Registration **EDLI 8994**

Semester Hours: 1to 10

Registration is changing. Visit our website for details ucdenver.edu/registration.

EDUC 5000 - Special Topics: Administrative Leadership and Policy Studies

Summer 2010 Registration **EDUC 5000**

Specific topics vary. Focus is on faculty-developed options to standard course offerings to facilitate program development and distance-learning activities. **Semester Hours:** 0.5to 10

Registration is changing. Visit our website for details ucdenver.edu/registration.

EDUC 5001 - Special Topic: Admn Leadership and Policy Studies

Summer 2010 Registration **EDUC 5001**

Semester Hours: 1to 10

Registration is changing. Visit our website for details ucdenver.edu/registration.

EDUC 5002 - Special Topic: Admin Leadership and Policy Studies

Summer 2010 Registration **EDUC 5002**

Semester Hours: 1to 10

Registration is changing. Visit our website for details ucdenver.edu/registration.

EDUC 5003 - Special Topic: Admn Leadership and Policy Studies

Summer 2010 Registration **EDUC 5003**

Semester Hours: 1to 10

Registration is changing. Visit our website for details ucdenver.edu/registration.

EDUC 5004 - Special Topic: Admn Leadership and Policy Studies

Summer 2010 Registration **EDUC 5004**

Semester Hours: 1to 10

Registration is changing. Visit our website for details ucdenver.edu/registration.

EDUC 5005 - Special Topic: Admn Leadership and Policy Studies

Summer 2010 Registration **EDUC 5005**

Semester Hours: 1to 10

Registration is changing. Visit our website for details ucdenver.edu/registration.

EDUC 5006 - Special Topic: Admn Leadership and Policy Studies

Summer 2010 Registration **EDUC 5006**

Semester Hours: 1to 10

Registration is changing. Visit our website for details ucdenver.edu/registration.

EDUC 5007 - Special Topic: Admn Ldrshp/Plcy Studies

Summer 2010 Registration **EDUC 5007**

Semester Hours: 1to 10

Registration is changing. Visit our website for details ucdenver.edu/registration.

EDUC 5008 - Special Topic: Admn Ldrshp/Plcy Studies

Summer 2010 Registration **EDUC 5008**

Semester Hours: 1to 10

Registration is changing. Visit our website for details ucdenver.edu/registration.

EDUC 5009 - Special Topic: Admn Ldrshp/Plcy Studies

Summer 2010 Registration **EDUC 5009**

Semester Hours: 1to 10

Registration is changing. Visit our website for details ucdenver.edu/registration.

EDUC 5010 - Paraeducator Supervision Academy

Summer 2010 Registration **EDUC 5010**

Provides the paraeducator with knowledge and skills to work effectively in teams. Paraeducators refine their knowledge of the characteristics of paraprofessionals in education, the distinction between professional and paraprofessional roles and responsibilities, liability and ethical issues. **Semester Hours:** 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

EDUC 5015 - Developmental Intervention Supervisor Academy (DISA)

Summer 2010 Registration **EDUC 5015**

Developmental Intervention Supervisor Academy provides early intervention professionals with the knowledge and skills to work effectively in teams and to utilize and supervise Developmental Intervention Assistants (DI Assistant is the title used in Colorado for paraprofessionals in early intervention services). **Semester Hours:** 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

EDUC 5020 - Trainers of Paraeducator Academy

Summer 2010 Registration **EDUC 5020**

Provides the professional educator with the skills to provide effective presentations to paraprofessionals in schools. **Semester Hours:** 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

EDUC 5025 - Developmental Intervention Trainers Academy (DITA)

Summer 2010 Registration **EDUC 5025**

Developmental Intervention Trainer Academy (DITA) is offered to early interventional professionals who have completed EDUC 5015 (DISA). DITA provides the participants skills to become effective trainers who deliver training to Developmental Intervention Assistants (i.e. paraprofessionals in early intervention services in Colorado). Prereq: EDUC 5015. **Semester Hours:** 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

EDUC 5030 - Top Cadre of Trainers (TOPCAT) Seminar

Summer 2010 Registration **EDUC 5030**

Provides CO-TOP Trainers (school professionals who have been through the PSA: EDUC 5010 and TOPA: EDUC 5020) ongoing support in their roles as supervisors and

trainers of paraeducators. Through this seminar trainers receive updated information about CO-TOP Academies, find collegial support from other trainers, exchange ideas, gain presenting and adult teaching ideas, and receive feedback on their teaching of paraeducator academies. This seminar also addresses the questions and needs of the individual CO-TOP trainer with regard to CO-TOP paraeducator training materials and processes. Prereq: EDUC 5010 and 5020. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

EDUC 5040 - Mentoring Novice and Pre-Service Teachers

Summer 2010 Registration **EDUC 5040**

Designed to help participants develop or enhance the skills necessary to successfully work with paraeducators who are completing teacher education programs. Concentrates on supervision and conference skills, adult learning theory, and communication skills. **Semester Hours:** 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

EDUC 5050 - Computer Application for Educational Management

Summer 2010 Registration **EDUC 5050**

Studies the theoretical and applied knowledge of central and school-based administrative educational applications of modern computer technology. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

EDUC 5070 - Elementary School Curriculum

Summer 2010 Registration **EDUC 5070**

An integrating course dealing with the history, development, problems, and practices of the curriculum of the elementary school. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

EDUC 5090 - Senior High School Curriculum

Summer 2010 Registration **EDUC 5090**

This course is concerned with the history, development, principles, problems, practices, and trends of the curriculum of the senior high school. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

EDUC 5100 - Curriculum and Program Development and Evaluation

Summer 2010 Registration **EDUC 5100**

Fundamentals of curriculum and program development, including theoretical foundations of U.S. curriculum, practical criteria to guide decision making, specific models and

processes for curriculum or program development and appraisal, emerging issues, problems and trends. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

EDUC 5400 - Special Education Seminar for Principals

Summer 2010 Registration **EDUC 5400**

This course is designed for principals and prospective principals to investigate the new leadership responsibilities that are emerging in the delivery of special education at the building level. The course reflects the emerging role of the principal in leading special education services at the school level with a two-part emphasis. Effective leadership involves (a) an ability to lead school-wide conversations about problems and issues that arise in special education in ways that strengthen the culture of the school and its commitment to all students' learning; and (b) an ability to garner resources for the school's programs. The course is not intended as an introduction to special education law or the details of special education administration, but a basic familiarity with these issues will be assumed. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

EDUC 5700 - Administrative Leadership in Educational Organizations

Summer 2010 Registration **EDUC 5700**

Introduces students to key concepts, theories, and research in providing leadership to educational organizations. Special emphasis is placed on the topics of organizational behavior, leadership, culture change and power, as they relate to the administrative role. Prereq: Permission of instructor. **Semester Hours:** 1to 6
Registration is changing. Visit our website for details ucdenver.edu/registration.

EDUC 5710 - Administering the Environment of Public Schools

Summer 2010 Registration **EDUC 5710**

A seminar course which focuses on problems and issues in developing an effective school environment. Emphasis is placed upon inter-relationship of law, finance, strategic planning, culture, political governance, and school or community relations. Prereq: Permission of instructor. **Semester Hours:** 1to 6
Registration is changing. Visit our website for details ucdenver.edu/registration.

EDUC 5720 - Supervision of the Curricular and Instructional Program of the School

Summer 2010 Registration **EDUC 5720**

This seminar addresses the supervisory issues involved in administering curricular and instructional programs in schools. Special emphasis is placed upon teacher appraisal, assessment techniques, curriculum design, and instructional effectiveness. Prereq:

Permission of instructor. **Semester Hours:** 1to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

EDUC 5730 - Administering the School Improvement Process

Summer 2010 Registration **EDUC 5730**

A seminar course focusing on problems and issues in developing effective schools. This course builds on concepts from organizational behavior and leadership and orients students toward planning, executing, and assessing school improvement programs.

Emphasis is placed on working through teachers to improve school capacity. Prereq:

Permission of instructor. **Semester Hours:** 1to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

EDUC 5751 - Principal/Administrator Licensing I

Summer 2010 Registration **EDUC 5751**

This program section (1 of 4) combines foundational learning activities in leadership, curriculum and supervision, school improvement, and the school environment via distance learning. Field applications are related to those foundations, and students develop distance-learning plans for various problems of practice along with their field activities. Assessment is by portfolio. Prereq: Admission to the program. **Semester Hours:** 5to 9

Registration is changing. Visit our website for details ucdenver.edu/registration.

EDUC 5752 - Principal Administrator Licensing II

Summer 2010 Registration **EDUC 5752**

This program section (2 of 4) combines advanced learning activities in leadership, curriculum and supervision, school improvement, and the school environment via distance-learning technology that build on the foundational activities in EDUC 5751 with field applications related to those activities. Students develop distance-learning plans for various problems of practice along with field activities. Assessment is by portfolio.

Prereq: Successful completion of EDUC 5751. **Semester Hours:** 5to 9

Registration is changing. Visit our website for details ucdenver.edu/registration.

EDUC 5753 - Principal/Administrator Licensing III

Summer 2010 Registration **EDUC 5753**

This program section (3 of 4) combines foundational learning activities in leadership, curriculum and supervision, school improvement, and the school environment via distance learning that build on foundational activities in EDUC 5752. Field applications are related to those foundations, and students develop distance-learning plans for various problems of practice along with their field activities. Assessment is by portfolio.

Prereq: Successful completion of EDUC 5752. **Semester Hours:** 5to 9
Registration is changing. Visit our website for details ucdenver.edu/registration.

EDUC 5754 - Principal or Administrator Licensing IV

Summer 2010 Registration **EDUC 5754**

This program section (4 of 4) combines foundational learning activities in leadership, curriculum and supervision, school improvement, and the school environment via distance learning that build on foundational activities in EDUC 5753. Students complete their distance-learning activities for various problems of practice along with their field activities. Assessment is by portfolio. Prereq: Successful completion of EDUC 5753. **Semester Hours:** 5to 9

Registration is changing. Visit our website for details ucdenver.edu/registration.

EDUC 5830 - Governance and Administration of Education

Summer 2010 Registration **EDUC 5830**

Development of governance structures and of administration as a field of study in education. Influence of governance and views of administration on educational organizations' goals, functions, and personnel. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

EDUC 5831 - School Law

Summer 2010 Registration **EDUC 5831**

Recent developments, including administrative implications of significant court decisions for school operations. For superintendents, principals, school board members, prospective administrators, and teachers. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

EDUC 5832 - Group Development and Training

Summer 2010 Registration **EDUC 5832**

Organizational theory and practice for school leadership personnel with emphasis on group and organization development, group problem identification and solutions, conflict management skills and processes, role behaviors and goal setting. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

EDUC 5833 - School Business Management

Summer 2010 Registration **EDUC 5833**

Emphasizes school-site level management. Includes instruction in planning, budgeting,

evaluation and management. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

EDUC 5834 - Seminar in School Administration

Summer 2010 Registration **EDUC 5834**

Knowledge and insight about organizational behavior drawing upon education and related social science concepts. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

EDUC 5835 - Supervision of Instruction

Summer 2010 Registration **EDUC 5835**

Studies instructional supervision concepts with practical application. Effective instruction, supervision, and program evaluation in relation to school-wide improvement. Leadership skills in staff development, curriculum development, group development, direct observation and action research. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

EDUC 5836 - Workshop: Educational Administration, Curriculum and Supervision

Summer 2010 Registration **EDUC 5836**

Semester Hours: 1to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

EDUC 5840 - Independent Study: EDUC

Summer 2010 Registration **EDUC 5840**

Master's. **Semester Hours:** 1to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

EDUC 5930 - Clinical Practice in Administrative Leadership

Summer 2010 Registration **EDUC 5930**

Prereq: Admission to the program. **Semester Hours:** 1to 5

Registration is changing. Visit our website for details ucdenver.edu/registration.

EDUC 5931 - Internship in Curriculum

Summer 2010 Registration **EDUC 5931**

Semester Hours: 1to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

EDUC 5950 - Master's Thesis

Summer 2010 Registration **EDUC 5950**

Semester Hours: 1to 8

Registration is changing. Visit our website for details ucdenver.edu/registration.

EDUC 6000 - Special Topics: Administrative Leadership and Policy Studies

Summer 2010 Registration **EDUC 6000**

Specific topics vary; focus is on faculty-developed options to standard course offerings to facilitate program development and distance-learning activities. **Semester Hours:** 1to 10

Registration is changing. Visit our website for details ucdenver.edu/registration.

EDUC 6001 - Special Topic: Admin Leadership and Policy Studies

Summer 2010 Registration **EDUC 6001**

Semester Hours: 1to 10

Registration is changing. Visit our website for details ucdenver.edu/registration.

EDUC 6002 - Admn Ldrshp/Plcy Studies

Summer 2010 Registration **EDUC 6002**

Semester Hours: 1to 10

Registration is changing. Visit our website for details ucdenver.edu/registration.

EDUC 6003 - Admn Ldrshp/Plcy Studies

Summer 2010 Registration **EDUC 6003**

Semester Hours: 1to 10

Registration is changing. Visit our website for details ucdenver.edu/registration.

EDUC 6004 - Admn Ldrshp/Plcy Studies

Summer 2010 Registration **EDUC 6004**

Semester Hours: 1to 10

Registration is changing. Visit our website for details ucdenver.edu/registration.

EDUC 6005 - Admn Ldrshp/Plcy Studies

Summer 2010 Registration **EDUC 6005**

Semester Hours: 1to 10

Registration is changing. Visit our website for details ucdenver.edu/registration.

EDUC 6006 - Admn Ldrshp/Plcy Studies

Summer 2010 Registration **EDUC 6006**

Semester Hours: 1to 10

Registration is changing. Visit our website for details ucdenver.edu/registration.

EDUC 6007 - Admn Ldrshp/Plcy Studies

Summer 2010 Registration **EDUC 6007**

Semester Hours: 1to 10

Registration is changing. Visit our website for details ucdenver.edu/registration.

EDUC 6008 - Admn Ldrshp/Plcy Studies

Summer 2010 Registration **EDUC 6008**

Semester Hours: 1to 10

Registration is changing. Visit our website for details ucdenver.edu/registration.

EDUC 6009 - Admn Ldrshp/Plcy Studies

Summer 2010 Registration **EDUC 6009**

Semester Hours: 1to 10

Registration is changing. Visit our website for details ucdenver.edu/registration.

EDUC 6010 - Admn Ldrshp/Plcy Studies

Summer 2010 Registration **EDUC 6010**

Semester Hours: 1to 10

Registration is changing. Visit our website for details ucdenver.edu/registration.

EDUC 6101 - Initial Portfolio Analysis for Administrator Licensure

Summer 2010 Registration **EDUC 6101**

Students work with faculty members to develop a portfolio related to the professional standards of practice for educational administrators. Faculty members review the portfolio and provide an initial analysis for licensure. Prereq: M.A. or certification in educational administration. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

EDUC 6102 - Initial Portfolio Analysis for Principal Licensure

Summer 2010 Registration **EDUC 6102**

Students work with faculty members to develop a portfolio related to the professional standards of practice for principals. Faculty members review the portfolio and provide an initial analysis and recommendation for licensure. Prereq: M.A. or certification in

educational administration. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

EDUC 6103 - Portfolio Product Development for Administrative Licensure

Summer 2010 Registration **EDUC 6103**

Students work with the professor to develop the products needed to ensure compliance with the new state standards for administrative licensure. Prereq: M.A. or certification in educational administration. **Semester Hours:** 1to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

EDUC 6104 - Portfolio Product Development for Principal Licensure

Summer 2010 Registration **EDUC 6104**

Students work with the professor to develop the products needed to ensure compliance with the new state standards for principal licensure. Prereq: M.A. or certification in educational administration. **Semester Hours:** 1to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

EDUC 6105 - Portfolio Evaluation for Administrative Licensure

Summer 2010 Registration **EDUC 6105**

Students work with the professor to conduct a detailed evaluation of portfolios to ensure that they meet the state standards for administrator licensure. The professor assembles a team of faculty and practicing professionals for the evaluation process. Prereq: M.A. or certification in educational administration. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

EDUC 6106 - Portfolio Evaluation for Principal Licensure

Summer 2010 Registration **EDUC 6106**

Students work with the professor to conduct a detailed evaluation of portfolios to ensure that they meet the state standards for principal licensure. The professor assembles a team of faculty and practicing professionals for the evaluation process. Prereq: M.A. or certification in educational administration. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

EDUC 6840 - Independent Study

Summer 2010 Registration **EDUC 6840**

Semester Hours: 1to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

EDUC 6930 - Clinical Practice for Administrative Leadership

Summer 2010 Registration **EDUC 6930**

Semester Hours: 1to 7

Registration is changing. Visit our website for details ucdenver.edu/registration.

EDUC 6951 - Master's Thesis

Summer 2010 Registration **EDUC 6951**

Semester Hours: 4to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

EDUC 7000 - Special Topics in Administration, Supervision, and Curriculum Developme

Summer 2010 Registration **EDUC 7000**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

EDUC 7120 - Curriculum of Middle Level School

Summer 2010 Registration **EDUC 7120**

Deals with the history, development, principles, problems, practices, and trends of the curriculum of the middle level school. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

EDUC 7140 - Student Activities Curriculum

Summer 2010 Registration **EDUC 7140**

Principles, problems, and procedures for improvement of extra class activities, student councils, and home rooms in the secondary school. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

EDUC 7150 - Doctoral Seminar in Curricular Theories

Summer 2010 Registration **EDUC 7150**

An intensive study of current theories of public school curriculum related to trends in actual practices in elementary and secondary schools. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

EDUC 7160 - Processes and Materials in Curriculum Appraisal

Summer 2010 Registration **EDUC 7160**

Designed to provide curriculum workers with skills in the process of assessment of

curriculum programs and skill in the appraisal of curriculum materials. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

EDUC 7340 - Doctoral Seminar: Problems and Trends in Education

Summer 2010 Registration **EDUC 7340**

A broad overview of current problems in schools and school systems and consideration of practices and policies in U.S. schools for solution of such problems. Evaluates procedures for solving educational problems. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

EDUC 7350 - Elementary Principalship

Summer 2010 Registration **EDUC 7350**

Two-week in-depth examination of the elementary school principalship. Required for Type D administrative certification, elementary school. Prereq: Permission of instructor. **Semester Hours:** 3to 3 **When Offered:** SUMMER

Registration is changing. Visit our website for details ucdenver.edu/registration.

EDUC 7360 - Administration and Supervision of Elementary School

Summer 2010 Registration **EDUC 7360**

For administrators and teachers. Purposes, practices, and trends in administration and educational leadership. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

EDUC 7370 - Administration and Supervision of Senior High School

Summer 2010 Registration **EDUC 7370**

Current administrative principles and practices essential to effective organization and management, with emphasis on the educational leadership of the principal. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

EDUC 7380 - Doctoral Seminar: Theory of Educational Administration

Summer 2010 Registration **EDUC 7380**

Studies organizational models, theories, and communication patterns; leadership roles and behavior; and organizational change. Attention to recent research in administrative theory. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

EDUC 7400 - Doctoral Seminar in School Finance

Summer 2010 Registration **EDUC 7400**

For advanced graduate students. Problems of educational finance; theory, practice and control; equalization funds; federal-state-local relations in finance; budgeting; salary schedules; retirement; and school bonds. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

EDUC 7410 - Educational Facilities Planning

Summer 2010 Registration **EDUC 7410**

Determination of school plant needs; relation of educational and architectural services; criteria of adequate school plants, site development, building operation and management; financial problems. **Semester Hours:** 3to 3 **When Offered:** FASPRSUM

Registration is changing. Visit our website for details ucdenver.edu/registration.

EDUC 7420 - Personnel Development and Training

Summer 2010 Registration **EDUC 7420**

Management of human resources in educational organizations. Deals with shared roles between site development, building operation and management; financial problems. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

EDUC 7430 - School and Community Relations

Summer 2010 Registration **EDUC 7430**

Examines interactions of schools and their communities, citizen role or involvement in governance of education, internal and external communication concepts and practices, politics of education, community power and pressure groups, organizational culture and climate. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

EDUC 7490 - Doctoral Seminar

Summer 2010 Registration **EDUC 7490**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

EDUC 7560 - Administration and Supervision in the Junior High School and Middle School

Summer 2010 Registration **EDUC 7560**

Purposes, practices, and trends in administration of the middle level school. Current

administrative principles and practices essential to effective organization and management. Emphasis is on leadership of the principal at the middle level school.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

EDUC 7630 - Doctoral Seminar: Junior and/or Senior High School Education

Summer 2010 Registration **EDUC 7630**

For advanced students. Problems, theories, and trends in secondary education. Includes field work and individual projects.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

EDUC 7700 - Doctoral Pro Seminar

Summer 2010 Registration **EDUC 7700**

This seminar integrates multiple doctoral labs, assists students to focus on dissertation topics, and facilitates inclusion of regional or national researches in students' PhD experiences. Prereq: Admission to the PhD program.**Semester Hours:** 1to 1
Registration is changing. Visit our website for details ucdenver.edu/registration.

EDUC 7800 - Doctoral Research Seminar: Education Administration, Curriculum-Supervision

Summer 2010 Registration **EDUC 7800**

This seminar focuses on doctoral research study in these areas of educational research.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

EDUC 7810 - Doctoral Seminar in School Law

Summer 2010 Registration **EDUC 7810**

An in-depth examination of the American legal process as it pertains to administration, planning, and delivery of educational programs. Involves self-selected research followed by individual or group presentations.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

EDUC 7820 - Doctoral Seminar in Curriculum

Summer 2010 Registration **EDUC 7820**

Advanced seminar relating to theory and practice in curriculum building. Includes both elementary and secondary levels.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

EDUC 7823 - Doctoral Seminar in Educational Supervision

Summer 2010 Registration **EDUC 7823**

Advanced exploration of current instructional supervision concepts with exercises linking theory with professionals to solve instructional problems. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

EDUC 7825 - Doctoral Seminar in Educational Leadership

Summer 2010 Registration **EDUC 7825**

Seminar dealing with processes and patterns of educational leadership in the schools. Various theories of leadership are considered in relation to students' leadership behaviors. May be taken more than one semester for credit with advisor's approval. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

EDUC 7840 - Independent Study: EDUC

Summer 2010 Registration **EDUC 7840**

Doctoral. **Semester Hours:** 1to 4
Registration is changing. Visit our website for details ucdenver.edu/registration.

EDUC 7911 - Practicum in Education Administration, Supervision and Curriculum

Summer 2010 Registration **EDUC 7911**

Semester Hours: 1to 4
Registration is changing. Visit our website for details ucdenver.edu/registration.

EDUC 7921 - Readings in Education Administration, Curriculum and Supervision

Summer 2010 Registration **EDUC 7921**

Semester Hours: 1to 4
Registration is changing. Visit our website for details ucdenver.edu/registration.

EDUC 7931 - Internship in Educational Administration and Supervision

Summer 2010 Registration **EDUC 7931**

Prereq: Permission of instructor. **Semester Hours:** 1to 6
Registration is changing. Visit our website for details ucdenver.edu/registration.

EDUC 7932 - Internship in Curriculum

Summer 2010 Registration **EDUC 7932**

Permission of instructor required. **Semester Hours:** 1to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

EDUC 8997 - Doctoral Dissertation Ed D

Summer 2010 Registration **EDUC 8997**

Semester Hours: 1to 10

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 1201 - Introduction to Electrical Engineering

Summer 2010 Registration **E E 1201**

Introduces the field of electrical engineering and the computer -- its primary tool. ELEC faculty members explain the various specialties within the field by demonstration. Word processors, spreadsheets, and engineering software are introduced. Note: This course is not available to students who have taken ELEC 2142. ENGR 1000 cannot be substituted for ELEC 1201. Prereq: High School Trigonometry. **Semester Hours:** 1to 1
Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 1510 - Logic Design

Summer 2010 Registration **E E 1510**

The design of combinatorial and sequential switching circuits. Topics include Boolean algebra, Boolean function minimization technique, combinatorial circuit analysis and synthesis, synchronous sequential circuit analysis and synthesis, algorithmic state machine design, asynchronous sequential circuit analysis and synthesis. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 1520 - Embedded Systems Engineering I

Summer 2010 Registration **E E 1520**

Programming concepts are introduced from a hardware design standpoint. Assembly language and the "C" language are used to interface and manipulate hardware.

Microcontroller programming for electrical engineering applications is studied. Prereq: ELEC 1510. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 2132 - Circuit Analysis I

Summer 2010 Registration **E E 2132**

Introduces circuit analysis: basic principles, operational amplifier circuits, first-order and second-order circuits, steady-state sinusoidal analysis with phasor mathematics. Prereq:

MATH 2411 and PHYS 2311. Cross-listed with CSCI 2132. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 2142 - Circuit Analysis II

Summer 2010 Registration E E 2142

Sequential course after ELEC 2132. Topics include: Solution of circuits using Laplace transforms, frequency domain analysis, additional steady-state solutions, Bode plots, active filters, pulses, impulses, and computer-aided analysis. Prereq: ELEC 2132, MATH 2421, PHYS 2331. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 2520 - Embedded Systems Engineering 2

Summer 2010 Registration E E 2520

A second semester computer engineering course covering basic computer architecture including CPU's, memory, peripherals, and operating systems including development tools, Kernel selection, file systems, and storage device manipulation, boot loaders, USB, networking, device drivers, and real-time operating system usage. Prereq: ELEC 1520. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 2531 - Logic Laboratory

Summer 2010 Registration E E 2531

Experiments in digital logic utilizing both computer simulation and actual analysis using integrated circuits. Initially, combinational logic circuits are studied, including circuits such as binary adders and multipliers, followed by sequential circuits, including counters. Meters and oscilloscopes are introduced. Use of computer-aided design tools facilitating design, simulation, and implementation of digital systems using field-programmable logic devices are an integral part of the entire course. Prereq/Coreq: ELEC 1510. Cross-listed with CSCI 2531. **Semester Hours:** 1to 1
Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 2552 - Sophomore Circuits Laboratory

Summer 2010 Registration E E 2552

Conduct experiments in circuit measurement using oscilloscopes, power supplies, and function generators. Verify basic circuitry, basic circuit theorems such as Ohm's Law, Kirchhoff's Law, and Thevenin's theorem and Norton's theorem. Learn by experiments: impedance functions, transfer functions, resonance, Fourier series and analog filters. Prereq/coreq: ELEC 2142. **Semester Hours:** 1to 1
Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 3030 - Electric Circuits and Systems

Summer 2010 Registration **E E 3030**

This basic electrical engineering course is for non-majors (does not apply to BSEE degree). Students study circuit analysis, transformers, electric motors, and simple electronic circuits (diodes and transistors). Prereq: MATH 2421 and PHYS 2331. Cross-listed with MECH 3030. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 3133 - Electromagnetic Fields

Summer 2010 Registration **E E 3133**

Basic material is covered, including: vector analysis in generalized coordinates, Maxwell's equations postulated for free space and extended to material regions and boundary conditions, uniform plane waves for free space and for materials, and static and quasi-static electric and magnetic fields. Prereq: ELEC 2132, MATH 3195, 2421 and PHYS 2331. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 3164 - Energy Conversion

Summer 2010 Registration **E E 3164**

Theory of transformers. Energy conversion concepts. Basic rotating energy converters, including direct current, synchronous and induction machines and applications. Prereq: ELEC 2142. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 3215 - Electronics I

Summer 2010 Registration **E E 3215**

The learning objective is fundamental semiconductor theory as applied to electronic circuits. Topics include: semiconductor theory, P-N junctions and diode applications, power supply design, transistor (BJT) theory and applications, low-frequency amplifiers, FET and MOSFET devices. Prereq: ELEC 2132, PHYS 2331 and CHEM 1130. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 3225 - Electronics II

Summer 2010 Registration **E E 3225**

BJT and FET transistor models at high frequencies, multi-stage amplifiers, frequency response of amplifiers. Feedback, operational amplifiers, oscillators, power amplifiers, and introduction to power electronics. Prereq: ELEC 2142 and 3215. **Semester Hours:**

3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 3316 - Linear Systems Theory

Summer 2010 Registration **E E 3316**

Introduces the fundamentals of signals and systems analysis. Topics include: time domain analysis of continuous and discrete time systems, frequency domain (Laplace and z-transform) analysis, applications to filters and feedback systems, Fourier transform for both continuous and discrete time signals, sampling and signal reconstruction, applications to communication systems and state space representation. Learning experience is enhanced by using MATLAB-based examples and experiments.

Prereq: ELEC 2142. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 3651 - Digital Hardware Design

Summer 2010 Registration **E E 3651**

The specification and design of large digital hardware systems. Applications include using a hardware description language and simple digital control circuits. Prereq: ELEC 2531 and ELEC 2520. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 3715 - Electronics Laboratory

Summer 2010 Registration **E E 3715**

Design and experimental verification of the operation of filter circuits, power supply circuits, transistor amplifier circuits and FET circuits. Prereq: ELEC 2552. Prereq/Coreq: ELEC 3215 **Semester Hours:** 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 3724 - Energy Conversion Laboratory

Summer 2010 Registration **E E 3724**

Basic electro-mechanical energy conversion concepts as applied to the synchronous machine, induction machine, and DC machine; the transformer; applications. Prereq: ELEC 2142. Prereq or Coreq: ELEC 3164. **Semester Hours:** 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 3735 - Junior Laboratory

Summer 2010 Registration **E E 3735**

Design and measure: several nonlinear op-amp circuits, a multi-stage amplifier, and a complementary-symmetry output stage. Oral presentations on experiments to be given.

Prereq: ELEC 3715. Prereq/Coreq: ELEC 3225. **Semester Hours:** 1to 1
Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 3817 - Engineering Probability and Statistics

Summer 2010 Registration E E 3817

Topics include: definition of probability, conditional probability, independence, combined experiments and Bernoulli trials, random variables, joint distribution and density functions, correlations, sample mean and variance. Also, introduction to random processes, auto and cross correlation functions, spectral density of random signals, responses of a linear system to random inputs. Prereq: MATH 3195 and 2421. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 3939 - Cooperative Education

Summer 2010 Registration E E 3939

Students gain engineering design experience involving application of specific technical concepts and skills in a supervised industrial environment. (Must have approval from ELEC faculty.) Prereq: ELEC 2142. **Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 4025 - Device Electronics

Summer 2010 Registration E E 4025

A course relating performance and limitations of solid state devices to their structures and technology. For both advanced circuit and device engineers. Semiconductor physics and technology, pn-junction and MOS devices used in modern integrated circuits. Prereq: ELEC 3225 and senior standing. Cross-listed with ELEC 5025. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 4133 - Advanced Electromagnetic Fields

Summer 2010 Registration E E 4133

Topics include: Poynting's power theorem, reflection and transmission of uniform plane waves in layered media, two-conductor transmission lines, rectangular wave guides, Smith Chart elements of radiation and antenna theory. Prereq: ELEC 3133. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 4136 - Control Systems Analysis

Summer 2010 Registration **E E 4136**

Introduces students to the fundamentals of analysis and design of feedback systems. Topics include: mathematical models of linear continuous-time systems applied to modeling physical systems in the time and frequency domain, control system characteristics, Routh's stability and transient response analysis, Nyquist stability and polar plots, analysis and design of linear control systems by root locus and frequency response, methods, compensator implementation, finite-precision numerical effects, round-off errors, and computer-based design applications. Prereq: ELEC 3316; Prereq/Coreq: ELEC 3817. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 4174 - Power Electronic Systems

Summer 2010 Registration **E E 4174**

Topics to be covered include: power electronics fundamentals and applications in power systems; uncontrolled, semi-controlled and fully controlled power semiconductors; converters design and control. Prereq: ELEC 3164. Cross-listed with ELEC 5174. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 4184 - Power Systems Analysis

Summer 2010 Registration **E E 4184**

Topics to be covered include: complex power; per-unit quantities; modeling of generators, transformers and transmission lines; power flow problem; economic dispatch; faults and sequence networks; and an introduction to power system protection and dynamics. Prereq: ELEC 3164. Cross-listed with ELEC 5184. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 4225 - Advanced Electronics

Summer 2010 Registration **E E 4225**

Switching state models of discrete components and integrated circuits, including logic gates, comparators, and operational amplifiers. Input, output, and transfer characteristics. Non-ideal properties. Analog-digital and digital-analog conversion. Mos-integrated circuits. Prereq: ELEC 3215, 3225, 3735. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 4247 - Communication Theory

Summer 2010 Registration **E E 4247**

Introduces the principles of analog and digital communication systems. Series expansion and Fourier Series and transforms. The sampling theorem. Stochastic principles and

noise. Linear systems and Fourier analysis. Design of transmitters and receivers: modulation and demodulation schemes. Some information theoretic concepts: source coding, channel coding, channel capacity and performance measures. Prereq: ELEC 3316 and 3817. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 4248 - Digital Communication Systems

Summer 2010 Registration **E E 4248**

Introduces digital communication systems covering elements of information theory; mathematical representation of signals and systems; modulation and demodulation for the additive Gaussian noise channel; performance analysis of various transmission formats; synchronization; coded waveforms; decoding algorithms; and other related topics. Prereq: ELEC 3316, 3817; recommended ELEC 4247. Cross-listed with ELEC 5248. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 4249 - Space Communications Systems

Summer 2010 Registration **E E 4249**

Presents the art of space communications system design around the framework of the link budget and the essential analysis tool of the radio system designer. The budget is examined from theoretical and practical viewpoints. Pointers and motivation for further study in each of the related engineering disciplines are provided. Topics to be examined include satellite orbits, propagation, antennas, noise, modulation, coding and hardware or software. Prereq: Permission of instructor. Cross-listed with ELEC 5249. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 4276 - Digital Control Systems

Summer 2010 Registration **E E 4276**

Topics to be covered include: discrete-time systems and the z-transform, characteristics of open-loop and closed-loop discrete-time systems, time-response characteristics and stability analysis, design of digital and hybrid control systems using z-transform, root locus, frequency domain, and state variable compensation techniques, compensator on, implementation, and computer-based design applications. Prereq: ELEC 3316; Prereq or Coreq: ELEC 3817. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 4309 - Senior Design Project I

Summer 2010 Registration **E E 4309**

Design methodology and tools, project planning and team building, ethics in engineering

and research, career planning and portfolio building. Project designs are completed and presented to the class. Prereq: Students must complete their Senior/30 hour check prior to enrollment. Prereq/Coreq: all required ELEC 3000-level classes and labs. ELEC 4309 and ELEC 4319 must be completed in subsequent academic semesters. **Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 4319 - Senior Design Project II

Summer 2010 Registration **E E 4319**

Project designs completed in ELEC 4309 are constructed and tested. Oral and written presentations of the completed project performance are required. Prereq: ELEC 4309. All required ELEC 3000-level classes and labs. Students must complete their Graduation Agreement prior to enrollment. ELEC 4309 and ELEC 4319 must be completed in subsequent academic semesters. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 4373 - Optical Engineering

Summer 2010 Registration **E E 4373**

This course introduces some of the most important concepts in optical engineering and prepares students a solid foundation to apply them to applications in the industry and academic research. Prereq: ELEC 4133 Advanced Electromagnetic Fields. Cross-listed with ELEC 5373. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 4406 - Control Systems Laboratory

Summer 2010 Registration **E E 4406**

This lab includes system identification, design of velocity control systems, design of PID controllers and control systems using state variable feedback. Prereq: ELEC 3225, 3316, 3735 and 3817. **Semester Hours:** 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 4423 - Microwave Laboratory

Summer 2010 Registration **E E 4423**

Microwave design and matching of coaxial and waveguide devices, transmission lines and systems. Devices include attenuators, directional couplers, antennas, ferrites, detectors, mixers, oscillators and amplifiers. Systems are represented by modern X-band transceivers and multi-band satellite systems. Project in microwave computer-aided design of microwave transistor amplifiers. Prereq: ELEC 3225, 3735 and 3133. **Semester Hours:** 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 4435 - Advanced Electronics Laboratory

Summer 2010 Registration E E 4435

Projects related to digital logic, analog and digital switches, A/D and D/A converters, and design of signal filters. Prereq: ELEC 3225 and 3735; Prereq or Coreq: ELEC 4225. **Semester Hours:** 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 4444 - Power Systems Laboratory

Summer 2010 Registration E E 4444

This lab introduces the student to modern computational tools used in power system analysis. Algorithms to solve the "power flow problem," the "economic dispatch problem," and the "optimal power flow problem" are discussed and implemented in the Matlab-Simulink mathematical analysis software package. Prereq: ELEC 4184. **Semester Hours:** 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 4466 - Adaptive Control System Design

Summer 2010 Registration E E 4466

Basic concepts in adaptive feedback control. Overview of application areas. Stability of non-linear systems and hyperstability approach to the design of adaptive controllers. Passivity concept and Liapunov stability. Design of model reference adaptive systems, self-tuning regulators, stochastic adaptive, and dual control systems. Computer-based design applications. Emphasis is placed on design projects. Prereq: ELEC 4136 or 4276. Cross-listed with ELEC 5466. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 4467 - Communications Laboratory

Summer 2010 Registration E E 4467

Analysis and design in three main areas: traditional analog communications at low and medium frequencies, digital communications, and microwave communications systems. Extensive use of spectrum analysis from low frequencies up to microwave range. Projects include noise, AM, FM, PM, PLL, sampling, quantizing, encoding, TDM, FSK, QPSK, 16QAM, receivers, and satellite communications systems. Prereq: ELEC 3735; Prereq or Coreq: ELEC 4247 or ELEC 4248. **Semester Hours:** 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 4501 - Microprocessor Based Design

Summer 2010 Registration E E 4501

Covers advanced treatment of embedded system design using microprocessors. Analog

input circuitry is interfaced to a microprocessor, and a PC board layout is created to develop a complete system design. Software/Operating System is implemented for real time I/O. Prereq: ELEC 3225, ELEC 3133 and ELEC 3735. Coreq: ELEC 3651. Cross-listed with ELEC 5501. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 4511 - Hardware-Software Interface

Summer 2010 Registration **E E 4511**

Computer engineering methods in hardware and software design applied to problems drawn from the mini- and micro-computer systems field. Hardware and software techniques for the design of combined hardware or software are developed. Interface and real-time programming techniques are considered. Graduate level requires additional projects and homework. Prereq: ELEC 3651 and ELEC 3735. Cross-listed with ELEC 5511. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 4521 - Microprocessor Laboratory

Summer 2010 Registration **E E 4521**

Provides support for the projects assigned in ELEC 4501 - a complete embedded system is designed, built and tested. Coreq: ELEC 4501. **Semester Hours:** 1to 1
Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 4555 - Vlsi Circuit Simulation

Summer 2010 Registration **E E 4555**

Computer methods for large integrated circuits. Theory and practice of VLSI circuit simulation. Nodal formulations of networks. Computer generation of sensitivities. Modeling active devices. DC solution of nonlinear networks. Prereq: ELEC 3225. Cross-listed with ELEC 5555. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 4561 - Hardware-Software Lab

Summer 2010 Registration **E E 4561**

Projects related to the software interface of a processor to external devices. Topics include A/D converters, serial and parallel interfaces. Coreq: ELEC 4511. **Semester Hours:** 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 4637 - Digital Signal Processing

Summer 2010 Registration **E E 4637**

Discrete-time signals and systems in the time and frequency domain. Digital filter structures, design of FIR filters by windowing, optimum approximations of FIR filters. Design of digital IIR filters from continuous time domain. Computer-aided design of digital filters. The discrete Fourier transform and DSP algorithm implementation. Analysis of finite word length effects. Application of digital signal processing. Prereq: ELEC 3316 and 3817. Cross-listed with ELEC 5637. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 4644 - Introduction to Biomedical Imaging

Summer 2010 Registration **E E 4644**

An important component of the recent expansion in biomedical engineering is the area of biomedical imaging. This ELEC 4644/5644 course is an introduction to biomedical imaging systems, not only covering the fundamentals of imaging physics but also the applications of four primary biomedical imaging modalities: X-Ray Computed Tomography (CT), Magnetic Resonance Imaging (MRI), Nuclear Medicine (i.e. PET, SPECT), and Ultrasound Imaging. Prereq: ELEC 3316 and ELEC 4637. Cross-listed with ELEC 5644. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 4678 - Quantum Electronics

Summer 2010 Registration **E E 4678**

The course teaches students to understand the basic concepts of quantum mechanics and to learn the mathematical tools needed and to be familiar with some of the technical knowledge that applies quantum mechanics to various advanced problems in engineering. Prereq: PHYS 2331 and MATH 3195. Cross-listed with ELEC 5678. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 4688 - Introduction to Nondestructive Testing

Summer 2010 Registration **E E 4688**

A basic, broad understanding of the principles of nondestructive testing and evaluation is provided. The main objective of this course is to attract students to NDT fields and eventually help address the increasing needs of NDT engineers and technicians. Interaction and collaboration with local NDT industries will also be emphasized. As an introductory course, a broad interdisciplinary knowledge of NDT will be covered in the following sub-areas: Visual, Penetrant, Magnetic Particle, Eddy Current, Microwave, Ultrasonic, and Radiography. Prereq: ELEC 1201 and ELEC 3316. Cross-listed with ELEC 5688. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 4755 - Renewable Energy Systems

Summer 2010 Registration **E E 4755**

This course considers electrical generation using renewable energy sources of a variety of types. While examining many developing technologies, it concentrates on the design and application of photovoltaic and wind electrical generation. It examines current methods of classification of wind and solar sites, and discussed aspects which must be considered when choosing sites for wind or solar installations. It examines photovoltaic and thermal solar technologies, inverter technologies, and their integration into the power grid. Also considered are micro-hydro and fuel cell technologies. Renewable system economics and legislative effects are also discussed. Cross-listed with ELEC 5755. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 4800 - Special Topics: 4800-4839

Summer 2010 Registration **E E 4800**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 4840 - Independent Study: ELEC

Summer 2010 Registration **E E 4840**

An opportunity for independent creative work. Prereq: Permission of instructor. **Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 5005 - VLSI Device Modeling

Summer 2010 Registration **E E 5005**

Explores digital integrated circuit design including MOS processing steps, physical operation, building blocks of digital circuits, advanced nMOS, pMOS and CMOS circuit design, silicon VLSI technology and circuit and chip level. Spice and lay-out Editor are used. The physical relationship between circuit design and actual silicon layout and structure and technology are emphasized. Prereq: Graduate standing or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 5025 - Device Electronics

Summer 2010 Registration **E E 5025**

A course relating performance and limitations of solid state devices to their structures and technology. For both advanced circuit and device engineers. Semiconductor physics and technology, pn-junction and MOS devices used in modern integrated circuits.

Prereq: ELEC 3225 and senior standing. Cross-listed with ELEC 4025. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 5133 - Electromagnetic Radiation and Antenna

Summer 2010 Registration E E 5133

Solution of inhomogeneous wave equation. Radiation fields of elementary dipole, linear wire antenna, uniform and non-uniform linear arrays. Array synthesis. Farzone field patterns, directivity and beam width. Diffraction fields of aperture sources, horn antenna, conic surface reflector sources, lens antenna. Ray tracing methods. Transient-receive link. Selected Topics. Prereq: ELEC 4133, graduate standing and permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 5174 - Power Electronic Systems

Summer 2010 Registration E E 5174

Topics to be covered include: power electronics fundamentals and applications in power systems; uncontrolled, semi-controlled and fully controlled power semiconductors; converters design and control. Prereq: ELEC 3164 and graduate standing or permission of instructor. Cross-listed with ELEC 4174. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 5184 - Power Systems Analysis

Summer 2010 Registration E E 5184

Topics to be covered include: complex power; per-unit quantities; modeling of generators, transformers and transmission lines; power flow problem; economic dispatch; faults and sequence networks; and an introduction to power system protection and dynamics. Prereq: ELEC 3164 and graduate standing or permission of instructor. Cross-listed with ELEC 4184. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 5194 - Power Systems Operation and Control

Summer 2010 Registration E E 5194

This course introduces the student to various operational strategies the power industry uses today to operate the power system. Topics to be covered include: economic dispatch, unit commitment, optimal power flow (linear and nonlinear), transmission congestion, control areas, state estimation, and an introduction to power markets. Prereq: ELEC 4184 or ELEC 5184 or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 5210 - Optimization Methods in Engineering

Summer 2010 Registration E E 5210

Unconstrained optimization, gradient methods, conjugate direction methods, data fitting and function estimation. Applications in control, system identification and radar systems. Optimization over a convex set, LMS algorithms in adaptive systems, convergence properties. Nonlinear programming, Lagrange multipliers, projection algorithms, games and minimax theorem, application to H infinity control, communication and signal processing. Prereq: MATH 3191 and 3200/3195. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 5220 - Methods of Engineering Analysis

Summer 2010 Registration E E 5220

Real sequences and infinite series, convergence of the parameter estimates in self-tuning control. Uniform convergence and application to adaptive FIR filters. Improper integrals, application in filtering, prediction and communication. Analytic functions, Hardy spaces, maximum modulus theorem. Argument principle and Nyquist stability criteria. Calculus of residues, LQG problem. Conformal mappings, Nevelinna-Pick problem. Prereq: MATH 3191 and 3200/3195, graduate standing. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 5230 - Advanced Linear Systems

Summer 2010 Registration E E 5230

Mathematical description of both continuous and discrete-time systems; vector, normed and inner-product spaces; state-space, impulse response and transfer function descriptions; state-transition response matrices; eigen values and eigen functions; controllability; canonical form; state feedback; observers; realization theory. Prereq: MATH 3191, MATH 3200/3195 and permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 5236 - Computer-Controlled Systems

Summer 2010 Registration E E 5236

Analysis and design of discrete-time systems, as occurs when a digital computer is used to control physical systems. Topics include difference equations, Z-transform, sampled-data system modeling, sampling, discrete equivalents, stability, and discrete control design by root locus, direct design, frequency-response, and state space. Prereq: ELEC 4136 and Graduate standing or permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 5248 - Digital Communication Systems

Summer 2010 Registration **E E 5248**

Introduces digital communication systems covering elements of information theory; mathematical representation of signals and systems; modulation and demodulation for the additive Gaussian noise channel; Performance analysis of various transmission formats; synchronization; coded waveforms; decoding algorithms; and other related topics. Prereq: ELEC 3316, 3817; recommended ELEC 4247. Cross-listed with ELEC 4248. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 5249 - Space Communications Systems

Summer 2010 Registration **E E 5249**

Presents the art of space communications system design around the framework of the link budget and the essential analysis tool of the radio system designer. The budget is examined from theoretical and practical viewpoints. Pointers and motivation for further study in each of the related engineering disciplines are provided. Topics to be examined include satellite orbits, propagation, antennas, noise, modulation, coding and hardware or software. Prereq: permission of instructor and graduate standing. Cross-listed with ELEC 4249. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 5250 - Information Theory

Summer 2010 Registration **E E 5250**

Introduces information theory and its application in computer science, communication theory, coding and applied mathematics. Entropy, mutual information, data compression and storage, channel capacity, rate distortion, hypothesis testing. Error detecting and correcting codes, block codes and sequential codes. Prereq: ELEC 3817 or CSCI 4535 or MATH 3800. Cross-listed with CSCI 5217. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 5252 - Computer Communication Networks

Summer 2010 Registration **E E 5252**

Comprehensive study of issues arising in modern computer-communication networks, both wire-line and wireless, carrying traffics with heterogeneous characteristics. A conceptual and analytical approach to the design of network protocols in harmony with the appropriate modeling of the traffic and network environments. Issues covered include routing, transmission, performance monitoring, as well as and network management in ATM multi-media networks. Prereq: Graduate standing or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 5294 - Advanced Power Electronic Systems

Summer 2010 Registration E E 5294

Topics to be covered include: three-phase diode/thyristor bridge rectifiers; three-phase voltage source converters; matrix converters; FACTS devices; Custom Power devices; converter's design, control and modulation strategies. Prereq: ELEC 4174 or ELEC 5174. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 5373 - Optical Engineering

Summer 2010 Registration E E 5373

This course introduces some of the most important concepts in optical engineering and prepares students a solid foundation to apply them to applications in the industry and academic research. Prereq: ELEC 4133 Advanced Electromagnetic Fields. Cross-listed with ELEC 4373. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 5436 - Nonlinear Control Systems I

Summer 2010 Registration E E 5436

Analysis and synthesis of nonlinear feedback control systems. Linearization's and stability in the small, equivalent linearization and the describing function. The dual input describing function. Stability in the large and the second method of Lyapunov. Stability of time-varying systems. Popov's method and extensions. Prereq: ELEC 4136 or 4276. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 5446 - Introduction to Modern Control Theory

Summer 2010 Registration E E 5446

State space representation of dynamic systems. Canonical forms. Frequency domain analysis. Controllability and observability. Design by state space methods: pole-placement, linear observers, separation principle, robustness. Linear, quadratic optimum control. Prereq: ELEC 4136 or 4276. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 5455 - Numerical Analysis of Semiconductor Devices

Summer 2010 Registration E E 5455

Numerical analysis of Pn junctions, Bipolar transistors, GAAS MESFETS, and MOSFETS. Numerical solution of discrete-form equations. Finite-difference method for semiconductor devices. Two-dimensional models: DC, transient, and small signal numerical analysis. Prereq: ELEC 5025. Prereq/Coreq: ELEC 4025. **Semester Hours:**

3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 5456 - Sampled Data and Digital Control Systems

Summer 2010 Registration **E E 5456**

Elements of sampling theory. Overview of design approaches via transform methods. Analysis and design in state space. Optimal control systems. Emphasis placed on computer-aided design projects. Prereq: ELEC 4276. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 5466 - Adaptive Control System Design

Summer 2010 Registration **E E 5466**

Basic concepts in adaptive feedback control. Overview of application areas. Stability of non-linear systems and hyper stability approach to the design of adaptive controllers. Passivity concept and Liapunov stability. Design of model reference adaptive systems, self-tuning regulators, stochastic adaptive, and dual control systems. Computer-based design applications. Emphasis is placed on design projects. Prereq: ELEC 4136 or 4276. Cross-listed with ELEC 4466. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 5476 - Optimal Control Systems

Summer 2010 Registration **E E 5476**

Liapunov stability and quadratic optimal control problems. The minimum principle and the Pontryagin maximum principle. Variational calculus and Hamilton-Jacoby-Bellman equation. The separation principle of LQG control. Combined optimal state estimation and control. Differential and difference Riccati equations. Tracking and disturbance rejection. Computer-aided design applications. Prereq: ELEC 4136 or 4276. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 5486 - Modeling and System Identification

Summer 2010 Registration **E E 5486**

Linear time-invariant and time-varying models. Nonlinear state space models. Non-parametric methods. Parameter estimation methods. Convergence and consistency. Computational methods in estimation. Recursive estimation methods. Experiment design and choice of identification criterion. Model structure selection and model validation. Prereq: ELEC 3817 or MATH 3800, and ELEC 4136 or 4276. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 5496 - Robust Control

Summer 2010 Registration E E 5496

Background mathematics: function spaces and operators, and factorization theory. Stability theory: stability and stabilizability parameterization, closed-loop transfer matrices. Model-Matching Theory: solution existence, SISO Design, the Nehari problem. Performance bounds. Prereq: Graduate standing or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 5501 - Microprocessor-Based Design

Summer 2010 Registration E E 5501

Covers advanced treatment of embedded system design using microprocessors. Analog input circuitry is interfaced to a microprocessor, and a PC board layout is created to develop a complete system design. Software/Operating System is implemented for real time I/O. Prereq: Graduate standing or permission of instructor. Cross-listed with ELEC 4501. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 5511 - Hardware-Software Interface

Summer 2010 Registration E E 5511

Computer engineering methods in hardware and software design applied to problems drawn from the mini- and micro-computer systems field. Hardware and software techniques for the design of combined hardware or software are developed. Interface and real-time programming techniques are considered. Graduate level requires additional projects and homework. Prereq: Graduate standing or permission of instructor. Cross-listed with ELEC 4511. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 5521 - Design and Test of Digital Systems

Summer 2010 Registration E E 5521

Application of hardware description languages to the design, synthesis, analysis, and testing of digital and computer systems; modeling and simulation constructs; modern hardware description languages, including VHDL, logic and behavioral synthesis; rapid-prototyping; FPGA and standard-cel ASIC design; design for testability; and electronic design automation. Prereq: ELEC 3651 or graduate standing. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 5522 - VLSI Systems

Summer 2010 Registration **E E 5522**

Examines the design of very large-scale integrated (VLSI) systems from the logic to physical levels, including MOS transistor design, CMOS fabrication and design rules, device and wafer processing, inverter and complex gate design, mask level layout, VLSI system components and architectures, algorithms for VLSI computer-aided design, and testability. Prereq: ELEC 3215 and 3651 or graduate standing. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 5551 - Pattern Recognition

Summer 2010 Registration **E E 5551**

Pattern recognition techniques from image processing and artificial intelligence are explored. Topics include neural networks, morphological processing, wavelets, fractals, and basic image understanding. Prereq: ELEC 3316 and 3651. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 5555 - VLSI Circuit Simulation

Summer 2010 Registration **E E 5555**

Computer methods for large integrated circuits. Theory and practice of VLSI circuit simulation. Nodal formulations of networks. Computer generation of sensitivities. Modeling active devices. DC solution of nonlinear networks. Prereq: Graduate standing or permission of instructor. Cross-listed with ELEC 4555. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 5593 - Advanced Computer Architecture

Summer 2010 Registration **E E 5593**

Important concepts in the structural design of computer systems are covered. Topics include memory hierarchy, super pipelining and super scalar techniques, dynamic execution, vector computers and multiprocessors. Prereq: Graduate standing or permission of instructor. Cross-listed with CSCI 5593. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 5617 - Random Processes for Engineers

Summer 2010 Registration **E E 5617**

Probability, sequences of random variables, specification of stochastic processes, stationarity, correlation functions and spectral densities, linear mean-square estimation, central limit theorems, law of large numbers, non-stationary random processes, stochastic differential equations and Karhunen-Loeve expansion, Kalman filtering. Prereq: ELEC 3316 and ELEC 3817 and permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 5627 - Stochastic Point Processes

Summer 2010 Registration E E 5627

Presents modeling physical phenomena characterized by highly localized events distributed randomly in a continuum. Applications include optical communications, queuing theory, decision theory, nuclear medicine and electron microscopy. Topics include Poisson counting processes and its generalizations; stochastic differential equations used in filtering; martingales and Brownian motion. Prereq: ELEC 3817 or ELEC 5617. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 5637 - Digital Signal Processing

Summer 2010 Registration E E 5637

Discrete-time signals and systems in the time and frequency domain. Digital filter structures, design of FIR filters by windowing, optimum approximations of FIR filters. Design of digital IIR filters from continuous time domain. Computer-aided design of digital filters. The discrete Fourier transform and DSP algorithm implementation. Analysis of finite word length effects. Application of digital signal processing. Prereq: ELEC 3316 and 3817. Cross-listed with ELEC 4637. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 5638 - Digital Image Processing

Summer 2010 Registration E E 5638

Basics of two-dimensional (2-D) systems theory, including 2-D Fourier transform, Z-transform, and difference equations. Design of 2-D filters for image processing applications. Image transforms, including the 2-D Fft, cosine, Hadamard and K1. Image enhancement and restoration techniques. Method of image coding and compression. Prereq: ELEC 5637. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 5644 - Introduction to Biomedical Imaging

Summer 2010 Registration E E 5644

An important component of the recent expansion in biomedical engineering is the area of biomedical imaging. This ELEC 4644/5644 course is an introduction to biomedical imaging systems, not only covering the fundamentals of imaging physics but also the applications of four primary biomedical imaging modalities: X-Ray Computed Tomography (CT), Magnetic Resonance Imaging (MRI), Nuclear Medicine (i.e. PET, SPECT), and Ultrasound Imaging. Prereq: Graduate standing, or permission of instructor. Cross-listed with ELEC 4644. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 5647 - Adaptive Signal Processing

Summer 2010 Registration E E 5647

Optimal filtering and identification of signal processing models. Martingales and analysis of recursive estimation algorithms. LMS and RLS adaptive filters. Stability, convergence and robustness of adaptive algorithms. Adaptive noise cancellation, time delay estimation and blind equalization. Adaptive differential pulse code modulation, adaptive prediction, adaptive Kalman Filters. Applications and implementation of adaptive algorithms. Prereq: ELEC 5637. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 5648 - Blind Signal Processing

Summer 2010 Registration E E 5648

Introduction to gradient optimization methods. Introduction to adaptive filtering. Principal component analysis and whitening. Robust and adaptive PCA. Blind SOS parameter estimation and deconvolution. Fundamentals of independent component analysis. Blind equalization of SIMO and MIMO systems. ICA by maximization of nongaussianity. ICA by MLE and minimization of mutual information. Applications and practical considerations. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 5657 - Detection and Estimation Theory

Summer 2010 Registration E E 5657

Introduces detection and extraction methods used in signal processing, including decision theory; detection of known and random signals; optimum receiver design; estimation theory; Wiener filtering; Kalman-Bucy filtering; and applications to communication systems. Prereq: ELEC 5617. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 5667 - Wavelet Theory and Applications

Summer 2010 Registration E E 5667

Topics include: fundamentals of signal decomposition; theory of filter banks; multi-resolution analysis and fast wavelet transforms; applications image and video image and video compression; and denoising and feature detection. Prereq: Graduate standing or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 5678 - Quantum Electronics

Summer 2010 Registration E E 5678

The course teaches students to understand the basic concepts of quantum mechanics

and to learn the mathematical tools needed and to be familiar with some of the technical knowledge that applies quantum mechanics to various advanced problems in engineering. Prereq: PHYS 2331 and MATH 3195. Cross-listed with ELEC

4678.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 5687 - Optical Communication Systems

Summer 2010 Registration E E 5687

System aspects of optical communication system design. Basic principles of sources, channels, detectors, counting statistics, amplifiers, and coding with regard to the performance limitations they place on the communication system. Prereq: ELEC

4247.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 5688 - Introduction to Nondestructive Testing

Summer 2010 Registration E E 5688

A basic, broad understanding of the principles of nondestructive testing and evaluation is provided. The main objective of this course is to attract students to NDT fields and eventually help address the increasing needs of NDT engineers and technicians.

Interaction and collaboration with local NDT industries will also be emphasized. As an introductory course, a broad interdisciplinary knowledge of NDT will be covered in the following sub-areas: Visual, Penetrant, Magnetic Particle, Eddy Current, Microwave, Ultrasonic, and Radiography. Prereq: Graduate standing, or permission of instructor.

Cross-listed with ELEC 4688.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 5697 - Optical and Spatial Information Processing

Summer 2010 Registration E E 5697

Processing of two- and three-dimensional spatial information. The scalar diffraction theory necessary to describe the information-bearing wave-front. Wave-front recording, modulations, and reconstruction. Holography, Fourier transform properties of lenses, two-dimensional convolution and correlation, pattern recognition, and optical information processing. Prereq: ELEC 3316.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 5714 - Energy Systems Analysis

Summer 2010 Registration E E 5714

Transmission line constants, including details of GMD methods, skin effect. Analysis of balanced and unbalanced line using distributed parameters, energy flow from circle diagram approach, traveling-wave phenomena, corona, power cables and fundamentals

of DC transmission. Prereq: ELEC 4184.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 5755 - Renewable Energy Systems

Summer 2010 Registration E E 5755

This course considers electrical generation using renewable energy sources of a variety of types. While examining many developing technologies, it concentrates on the design and application of photovoltaic and wind electrical generation. It examines current methods of classification of wind and solar sites, and discussed aspects which must be considered when choosing sites for wind or solar installations. It examines photovoltaic and thermal solar technologies, inverter technologies, and their integration into the power grid. Also considered are micro-hydro and fuel cell technologies. Renewable system economics and legislative effects are also discussed. Cross-listed with ELEC 4755.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 5764 - Power Distribution Systems

Summer 2010 Registration E E 5764

Use of per-unit methods to find transient voltage behavior of industrial power systems resulting from motor starting, spot welders and similar stimuli. System and device responses due to series and shunt capacitors and problems of subharmonics and over-excitation on induction motors. Design of power distribution systems. Prereq: ELEC 4184.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 5774 - Power Systems Dynamics and Protection

Summer 2010 Registration E E 5774

Topics to be covered include: power system dynamic fundamentals, various stability problems, such as angle, frequency and voltage stability; protection of power systems apparatus and protective relays coordination. Prereq: ELEC 4184/5184 or graduate standing.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 5800 - Special Topics: 5800-5839

Summer 2010 Registration E E 5800

Intermediate courses of variable title and variable credit, usually offered once by guest lecturers. See current departmental notices for details.**Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 5840 - Independent Study: ELEC

Summer 2010 Registration E E 5840

Offers the opportunity for independent, creative work. Prereq: Permission of instructor. **Semester Hours:** 1to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 5980 - Statistical Quality Control

Summer 2010 Registration E E 5980

Introduces statistical methods of quality control. Statistical process control, process capability, statistical design of experiments and total quality management. Prereq: Graduate standing or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 6800 - Special Topics

Summer 2010 Registration E E 6800

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 6950 - Master's Thesis

Summer 2010 Registration E E 6950

Semester Hours: 1to 8

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 6960 - Master's Report

Summer 2010 Registration E E 6960

Semester Hours: 1to 8

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 7800 - Special Topics

Summer 2010 Registration E E 7800

Courses of variable title and variable credit, usually offered once by guest lecturers. See current departmental notices for details. **Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 7801 - Special Topics

Summer 2010 Registration E E 7801

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 7802 - Special Topics

Summer 2010 Registration E E 7802

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 7803 - Special Topics

Summer 2010 Registration E E 7803

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 7804 - Special Topics

Summer 2010 Registration E E 7804

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 7805 - Special Topics

Summer 2010 Registration E E 7805

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 7806 - Special Topics

Summer 2010 Registration E E 7806

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 7807 - Special Topics

Summer 2010 Registration E E 7807

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 7808 - Special Topics

Summer 2010 Registration **E E 7808**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 7809 - Special Topics

Summer 2010 Registration **E E 7809**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 7840 - Independent Study: ELEC

Summer 2010 Registration **E E 7840**

Offers the opportunity for independent, creative work. Prereq: Permission of instructor. **Semester Hours:** 1to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELEC 8990 - Doctoral Dissertation

Summer 2010 Registration **E E 8990**

Semester Hours: 1to 10

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELED 4800 - Curriculum Workshop

Summer 2010 Registration **ELED 4800**

Semester Hours: 1to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELED 5060 - Improvement of Instruction

Summer 2010 Registration **ELED 5060**

Designed to assist the educator in the systematic improvement of instruction. Emphasis is on the emergent knowledge related to successful classroom practices, techniques of assessment, analysis, and action related to the improvement of professional skills.

Cross-listed with SECE 5060. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELED 5140 - Elementary Curriculum: Integrating Language Arts with Literature

Summer 2010 Registration **ELED 5140**

Integrating the language arts (reading, writing, listening, speaking) with children's literature. Selection of materials and development and presentation of ways to use children's literature in teaching the language arts. Required for post-baccalaureate pre-

service teacher. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELED 5150 - Elementary Curriculum: Teaching Mathematics, Science and Social Studies

Summer 2010 Registration **ELED 5150**

Emphasis is on the role of the classroom teacher in development, implementation, and evaluation of contemporary interdisciplinary curricula. The course demonstrates the relationship between educational theory and classroom pedagogy, and is required for the post-baccalaureate pre-service teacher. **Semester Hours:** 6to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELED 5160 - Expressive Arts

Summer 2010 Registration **ELED 5160**

Familiarizes participants with drama, music, dance, movement, (P E, dance and health) and visual arts. Provides a rationale for the arts in the elementary curriculum and ways in which arts can be integrated into classroom activities. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELED 5170 - Community and Interpersonal Relations

Summer 2010 Registration **ELED 5170**

Provides an opportunity for students to develop communication and interpersonal skills that enable them to facilitate positive student self-concept and interaction among professional educators, the community, and social groups. Exposes the student to the urban environment and issues in child abuse. Cross-listed with SECE 5170. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELED 5200 - Classroom Management

Summer 2010 Registration **ELED 5200**

Instructional management, physical management, and behavior management are studied as interactive components in the establishment and maintenance of an effective learning environment. Cross-listed with SECE 5200. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELED 5320 - Advanced Language Arts in Elementary School

Summer 2010 Registration **ELED 5320**

Current thought, as determined by research and practice in the various areas of the language arts; listening, speaking, reading and writing. Issues, trends, and innovative

practices for the practicing teacher. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ELED 5340 - Multicultural Science Education

Summer 2010 Registration **ELED 5340**

This course examines literature in science education related to multicultural issues, topics will be framed by an understanding of equity in diverse, urban classrooms and how it informs curriculum and instruction. Cross-listed with ENVS 5340. **Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELED 5350 - Science in Elementary School

Summer 2010 Registration **ELED 5350**

Emphasis on experimental programs and implementation of the newer programs.

Supervision and curriculum development considered. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELED 5400 - Contemporary Mathematics for Elementary Schools

Summer 2010 Registration **ELED 5400**

Surveys contemporary content and methodology with emphasis on interrelations among topics and techniques for providing active learning. Cross-listed with MATH

3040. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELED 5401 - Assessment in Mathematics Education

Summer 2010 Registration **ELED 5401**

Curriculum-based assessment covering nature of assessment and its relation to evaluation and grading; teacher-made assessments; validity and authentic assessment; techniques for assessing learning of mathematical concepts, procedures, and problem solving. Emphasis on assessment practices of mathematics teachers. **Semester Hours:**

3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELED 5410 - Teaching Numbers and Arithmetic

Summer 2010 Registration **ELED 5410**

Teaching methodologies related to arithmetic and its applications. Covers mathematical attitudes, problem solving, math manipulatives, numeration, number concepts, number theory, algorithms, fractions, decimals, calculators and integration of arithmetic with

other curriculum areas. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELED 5411 - Mathematics Education and Gender

Summer 2010 Registration **ELED 5411**

Investigates gender-inclusive curriculum and teaching methods, equity and assessment, mathematical life histories, women in mathematics history, women's individual development and voice, single-sex programs and gender differences. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELED 5415 - Math Science Connections: Indoors

Summer 2010 Registration **ELED 5415**

(Primarily for pre-secondary teachers.) Explores science concepts through activities appropriate for middle-grade students. Topics include how the nature of science and mathematics informs pedagogy, national and state standards, gravity, density, electricity, simple machines, magnetism, probability, geometry, algebra and elementary chemistry. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELED 5416 - Math-Science Connections: Outdoor

Summer 2010 Registration **ELED 5416**

(Primarily for pre-secondary teachers.) Explores science concepts through outdoor activities appropriate for middle-grade students. Topics include how the nature of science and mathematics informs pedagogy, national and state standards, earth science and paleontology, orienteering and map usage, water analysis, astronomy and entomology. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELED 5417 - Structure of Rational Numbers

Summer 2010 Registration **ELED 5417**

Emphasizes the use of multiple solution strategies to examine the structure of rational numbers. The assigned problems allow elementary and secondary teachers to investigate the mathematical notions of equivalence, properties, unitization, partitioning, ratios and proportionality. Prereq: Teaching license or permission of instructor. Cross-listed with SECE 5417. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELED 5418 - Mathematical Modeling

Summer 2010 Registration **ELED 5418**

Elementary and secondary teachers explore settings where mathematics is utilized in everyday activities. Teachers create mathematical models to describe events or situations in the world and use a variety of modeling strategies to solve problems.

Prereq: Teacher licensure or permission of instructor. Cross-listed with SECE

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELED 5419 - Exploring the Structure of Geometry Using Technology

Summer 2010 Registration **ELED 5419**

Develops elementary and secondary teachers' conceptual understanding of geometric properties and theorems through investigations on dynamic computer software. The software enhances and extends teachers' ability to solve complex problems by manipulating abstract ideas on the computer.

Prereq: Teaching license or permission of instructor. Cross-listed with SECE 5419.

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELED 5430 - Topics in Mathematics Education

Summer 2010 Registration **ELED 5430**

An in-depth study of topics such as mathematics and learning, geometry, testing, arithmetic, mathematics labs, calculators and computers. (May be repeated as topics vary.)

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELED 5440 - Problem Solving and Geometry in the Elementary School

Summer 2010 Registration **ELED 5440**

Covers problem solving, spatial visualization, informal geometry, and computer software with emphasis on incorporating these topics into the elementary curriculum.

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELED 5450 - Social Studies in Elementary School

Summer 2010 Registration **ELED 5450**

Review and analysis of current innovations and concept formation in the social studies. Involves student development and implementation of materials for trial in classroom instruction.

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELED 5464 - Teaching About Ethnicity, Race and Prejudice

Summer 2010 Registration **ELED 5464**

Designed to introduce the nature of racial and ethnic groups, prejudice, discrimination, and ethno violence. It also includes the teaching about these and related topics and deals with resolving problems of intergroup relations in schools and institutional settings.

Cross-listed with SECE 5464. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELED 5470 - Introduction to Middle School

Summer 2010 Registration **ELED 5470**

Covers history and philosophy of the middle school, organization plans, team teaching, integrating content areas, characteristics of the early adolescent, and classroom management. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELED 5480 - Museum Studies in Paleontology

Summer 2010 Registration **ELED 5480**

A practical laboratory-based course covering aspects of museum studies related to paleontological collections. Students learn how to stabilize and prepare bones removed from fossil quarries; learn molding and casting techniques for bones and fossils; assist with the cataloging and curation of the collection; and participate in designing museum displays. Prereq: At least one science class. Cross-listed with GEOL 3415, SECE 5480. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELED 5490 - Middle School Curriculum

Summer 2010 Registration **ELED 5490**

Explores the unique curriculum requirements of transient youth. Topics include team teaching, interdisciplinary curricula, flexible scheduling, basic skills development, guidance functions, fine arts, practical arts, industrial arts, career education, teaching strategies and management techniques. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELED 5510 - Teacher Leadership: Theory to Reality

Summer 2010 Registration **ELED 5510**

Working with colleagues in schools to make a difference as a team member and a change agent requires knowledge and skills that are "more than teachers, yet different from administrators" (Danielson, 2006). This course will provide teachers with skill building related to what it takes for teachers to improve schools. Cross-listed with SECE 5510. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELED 5520 - Teacher Leadership: Essential Knowledge

Summer 2010 Registration **ELED 5520**

Teacher leaders need expertise about what constitutes a quality curriculum and how best to guide others to develop lessons with assessments that reflect essential standards. They use culturally responsive and differentiated teaching strategies to assure that learning occurs. Cross-listed with SECE 5520. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ELED 5530 - Teacher Leadership: Vital Skills

Summer 2010 Registration **ELED 5530**

Teacher leaders need skills in collaboration, facilitation and coaching in order to work with colleagues in ways that will optimally impact student learning. This course will provide theory and practice in models of adult learning, professional development and communication. Cross-listed with SECE 5530. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ELED 5660 - Energy Education

Summer 2010 Registration **ELED 5660**

Explores current energy problems. Students examine such topics as fuels from plants, fuels from wastes, fossil fuels, nuclear energy, wind energy, geothermal energy, solar energy, and energy conservation. Includes demonstration of available education resources for grades K-12. The purpose of the course is to make technical aspects of energy accessible to the lay person. Cross-listed with SECE 5660. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ELED 5775 - Knowledge of Teaching

Summer 2010 Registration **ELED 5775**

Designed for experienced teachers. This course assists them to update their knowledge of research on teaching and extend their use of research findings in their classroom teaching. Prereq: Teaching certificate. **Semester Hours:** 1to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ELED 5780 - Storytelling

Summer 2010 Registration **ELED 5780**

Explores the history, function, philosophy and techniques of storytelling. Includes collecting, selecting, preparing, developing and delivering stories. Research and

resources are emphasized. **Semester Hours:** 1to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELED 5800 - Curriculum Workshop for Elementary Teachers

Summer 2010 Registration **ELED 5800**

Opportunity to work on projects and problems in the school in which the student is employed: conferences, study groups, discussion, and work in curriculum construction.

Topics and credit hours vary. Prereq: 18 semester hours in education and teaching experience or permission of instructor. **Semester Hours:** 0.5to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELED 5840 - Independent Study

Summer 2010 Registration **ELED 5840**

Semester Hours: 1to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELED 5910 - Advanced Practicum: Elementary

Summer 2010 Registration **ELED 5910**

This course is not to be used as an independent study, it is to be used by students approved in advance by the director of teacher education. Prereq: Permission of instructor. Fulfills the student teaching requirement for students seeking a second endorsement. Cross-listed with SECE 5910. **Semester Hours:** 1to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELED 5920 - Readings in Elementary Education

Summer 2010 Registration **ELED 5920**

Semester Hours: 1to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELED 5930 - Internship in Elementary Education

Summer 2010 Registration **ELED 5930**

Semester Hours: 1to 8

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELED 6100 - Seminar: Elementary Education

Summer 2010 Registration **ELED 6100**

Students work on individual topics and report orally and in writing. **Semester Hours:** 3to

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELED 6110 - Curriculum Development and School Improvement

Summer 2010 Registration **ELED 6110**

Places curriculum development in the historical, social, and political context of educational change, considering underlying concepts and assumptions, and examining the implications of implementation theory and practice for school restructuring and professional development. Prereq: Graduate student status. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ELED 6120 - International Perspectives on the Curriculum

Summer 2010 Registration **ELED 6120**

Considers schooling patterns in the U.S., the U.K., Japan, Australia and several European countries. Examines different approaches to curriculum issues in relation to social, historical and economic factors. Prereq: FNDS 5500 or permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ELED 6600 - Special Topics: Laboratory in Educational Leadership and Innovation

Summer 2010 Registration **ELED 6600**

Laboratories are organized by professors to engage students in on-going research programs. They provide opportunities for students to extend and apply knowledge and skills developed in course work. The laboratories enable students to complete portfolio requirements and work on doctoral dissertations. Prereq: Admission to M.A. or PhD programs; permission of instructor. Cross-listed with ELED 7600. **Semester Hours:** 1to 6
Registration is changing. Visit our website for details ucdenver.edu/registration.

ELED 6950 - Master's Thesis

Summer 2010 Registration **ELED 6950**

Semester Hours: 4to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

ELED 7600 - Special Topics: Laboratory in Educational Leadership and Innovation

Summer 2010 Registration **ELED 7600**

Laboratories are organized by professors to engage students in on-going research programs. They provide opportunities for students to extend and apply knowledge and skills developed in course work. The laboratories enable students to complete portfolio requirements and work on doctoral dissertations. Prereq: Admission to M.A. or PhD

programs; permission of instructor. Cross-listed with ELED 6600. **Semester Hours:** 1to 6
Registration is changing. Visit our website for details ucdenver.edu/registration.

ELED 7840 - Independent Study: ELED

Summer 2010 Registration **ELED 7840**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 1010 - Writing Workshop

Summer 2010 Registration **ENGL 1010**

Focuses on the abilities and skills needed to write effective expository prose.

Emphasizes frequent writing, both in and out of class, with special attention to writing short essays well. Writers learn to write confidently at the sentence and paragraph levels, and to develop their grammatical and mechanical skills. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 1020 - Core Composition I

Summer 2010 Registration **ENGL 1020**

Provides opportunities to write for different purposes and audiences, with an emphasis on learning how to respond to various rhetorical situations; improving critical thinking, reading, and writing abilities; understanding various writing processes; and gaining a deeper knowledge of language conventions. **Semester Hours:** 3to 3 **GT Pathways**

Category Key: GT-C01

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 1050 - Vocabulary for Professionals

Summer 2010 Registration **ENGL 1050**

Studies English words derived from Latin and Greek by analyzing their component parts (prefixes, stems, and suffixes). Cross-listed with LATN 1050. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 1111 - Freshman Seminar

Summer 2010 Registration **ENGL 1111**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 1200 - Introduction to Fiction

Summer 2010 Registration **ENGL 1200**

Introduces class members to the works of famous authors as well as to major themes, elements, and techniques of fiction in both short stories and novels. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 1400 - Introduction to Literary Studies

Summer 2010 Registration **ENGL 1400**

Helps students develop a sense of literary techniques and issues so they can bring an improved critical sensibility to their reading and writing. Note: Designed for students who plan to major in English or who are seriously interested in literature. Prereq or Coreq: ENGL 1020. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 1601 - Telling Tales: Narrative Art in Literature and Film

Summer 2010 Registration **ENGL 1601**

Asks students to explore how stories determine who we are. Everything people do fits into a narrative pattern, evident everywhere from TV news to memory to daily schedules. We tell ourselves stories about ourselves and others--how do these stories shape who we are as cultural beings? Prereq or Coreq: ENGL 1020. **Semester Hours:** 3to 3 **GT Pathways Category Key:** GT-AH2

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 2030 - Core Composition II

Summer 2010 Registration **ENGL 2030**

Focuses on academic and other types of research-based writing and builds on the work completed in ENGL 1020. Focuses on critical thinking, reading and writing as well as working with primary and secondary source material to produce a variety of research-based essays. Emphasis on using both print-based and electronic-based information. Prereq: ENGL 1020. **Semester Hours:** 3to 3 **GT Pathways Category Key:** GT-C02

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 2070 - Grammar, Rhetoric and Style

Summer 2010 Registration **ENGL 2070**

Teaches the basics of English grammar in order to develop a rhetorical and stylistic confidence in reading and writing, using an approach that is more descriptive than prescriptive. Teaches students how to evaluate the grammatical choices of established writers and how to develop flexibility in the grammatical choices they make in their own writing. Prereq: ENGL 1020 or equivalent. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 2154 - Introduction to Creative Writing

Summer 2010 Registration **ENGL 2154**

Reading, discussing, writing short fiction and poetry in a workshop setting. Prereq: ENGL 1020. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 2250 - Introduction to Film

Summer 2010 Registration **ENGL 2250**

Introduces students to the critical study of cinema as an art form and a cultural phenomenon. Topics include cinematography, editing, mise-en-scene and sound; the connections between cinema and related art forms; film genres; the social dimensions of film production and reception; and films by such key filmmakers as Alfred Hitchcock, Maya Deren and Spike Lee. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 2300 - Topics in Literature and Film

Summer 2010 Registration **ENGL 2300**

Courses supplement the regular program of the department, offering such topics as: literary perceptions of motherhood, Asian-American literature, literary classics of science, and contemporary women writers. Note: Can be taken more than once if topics vary. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 2310 - Topics in Literature and Film

Summer 2010 Registration **ENGL 2310**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 2320 - Topics in Literature and Film

Summer 2010 Registration **ENGL 2320**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 2330 - Topics in Literature and Film

Summer 2010 Registration **ENGL 2330**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 2340 - Topics in Literature and Film

Summer 2010 Registration **ENGL 2340**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 2390 - Writing the Short Script

Summer 2010 Registration **ENGL 2390**

Examines narrative screenwriting elements--premise, theme, conflict, protagonist/antagonist, setting/situation, dialogue, plot structure, imagery--required to create a strong narrative short film. Prereq: ENGL 1020.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 2415 - Introduction to Movie Writing

Summer 2010 Registration **ENGL 2415**

Examines structural and dramatic elements required to write a feature-length screenplay. Students conceptualize, plan, write and then re-write to complete the first ten pages of their own feature-length screenplay.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 2510 - Greek and Roman Mythology

Summer 2010 Registration **ENGL 2510**

Surveys influential literature from Greece and Rome. Among the Greek works are Homer's epics, Sophocles's tragedies, Plato's and Aristotle's philosophical writings. Among the Roman works are the writings of Vergil, Ovid, the elegists and historians. a brief look at Augustine's writings concludes the course.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 2520 - The Bible as Literature

Summer 2010 Registration **ENGL 2520**

Introduces students to biblical literature. Selections from the various genres of writing in Hebrew (history, wisdom, prophecy, literature) are read and discussed, as well as representative sections from the New Testament, including the gospels and the writings of Paul. Cross-listed with RLST 2700.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 2600 - Great Works in British and American Literature

Summer 2010 Registration **ENGL 2600**

Traces the traditions of British and American literature from medieval times to the

present, by examining a variety of texts, studying the impact of different time periods, and cultural movements on the evolving literary tradition. **Semester Hours:** 3to 3**GT Pathways Category Key:** GT-AH2
Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 2840 - Independent Study: ENGL

Summer 2010 Registration **ENGL 2840**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 3001 - Critical Writing

Summer 2010 Registration **ENGL 3001**

Introduces literary theory, which provides extensive practice in writing about literature.

Note: Required for literature majors, and should be taken in the sophomore or junior year. Prereq: ENGL 1400 and two literature courses. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 3020 - Poetry Workshop

Summer 2010 Registration **ENGL 3020**

Practical workshop for developing poetic craft, focusing on writing process and specialized topics. Prereq: ENGL 2154 for English majors and minors only; all others must obtain permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 3050 - Fiction Workshop

Summer 2010 Registration **ENGL 3050**

Practical workshop for developing narrative craft, focusing on writing process and specialized topics. Prereq: ENGL 2154 for English majors and minors only; all others must obtain permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 3070 - Film History I

Summer 2010 Registration **ENGL 3070**

Examines the history of cinema from its 19th-century origins until the early sound era. Explores important developments and influences in American and international cinema, including the origins of Hollywood narrative, avant-garde cinema, German Expressionism, and Soviet Cinema. Prereq: Must have 30 semester hours or permission of the instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 3075 - Film Genres

Summer 2010 Registration **ENGL 3075**

An intensive study of films of one or more significant genres, such as comedy, film noir, science fiction. Prereq: Must have 30 semester hours or permission of the instructor.

Note: May be taken more than once when genres vary. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 3080 - Film History II

Summer 2010 Registration **ENGL 3080**

Examines world cinema from 1938 to the present, with examples from major movements and directors--such as Film Noir, Italian Neo-Realism, the French New Wave, Jean Renoir, Agnes Varda, John Ford, Alfred Hitchcock and Werner Herzog. Prereq: Must have 30 semester hours or permission of the instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 3084 - Advanced Composition

Summer 2010 Registration **ENGL 3084**

Focuses on the rhetorical examination and production of visual and textual documents in such areas as politics, education, art, culture and advertising. Equal focus on developing individual student writing skills at advanced levels. Prereq: ENGL 2030. **Semester Hours:** 3to 3

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 3085 - Film Directors

Summer 2010 Registration **ENGL 3085**

An intensive study of the films of one or more major directors, such as Chaplin, Keaton, Hitchcock, Welles, Coen Brothers. Prereq: Must have 30 semester hours or permission of the instructor. Note: May be taken more than once when directors vary. **Semester Hours:** 3to 3

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 3154 - Technical Writing

Summer 2010 Registration **ENGL 3154**

Introduces the study and writing of technical documents. Emphasizes the processes, style, structure, and forms of technical writing. Attention is paid to audience analysis, organization, clarity and precision. Prereq: ENGL 1020. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 3160 - Language Theory

Summer 2010 Registration **ENGL 3160**

Provides a basic introduction to linguistics and language theory for undergraduates, including phonetics, grammar, semantics, pragmatics, sociolinguistics, cognitive processing, and language acquisition. Includes practical applications of the theories and methodologies presented. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 3170 - Business Writing

Summer 2010 Registration **ENGL 3170**

Focuses on the strategies and techniques of business writing, with emphasis on reader, message and form. Prereq: ENGL 1020. ENGL 2030 highly recommended. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 3200 - From Literature to Film

Summer 2010 Registration **ENGL 3200**

Explores the relationship between literature and cinema; the process of adapting and transforming a novel into a feature-length film; and the historical, cultural, and commercial influences that shaped the creation of each novel and film studied. Prereq: Must have 30 semester hours or permission of the instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 3300 - Topics in Film

Summer 2010 Registration **ENGL 3300**

Courses supplement the department's regular course offerings. Recent topics have included women and film, movies as history and film comedy. Prereq: Must have 30 semester hours or permission of the instructor. Note: Open to both majors and non-majors. Can be taken more than once when topics vary. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 3310 - Topics in Film

Summer 2010 Registration **ENGL 3310**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 3320 - Topics in Film

Summer 2010 Registration **ENGL 3320**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 3330 - Topics in Literature

Summer 2010 Registration **ENGL 3330**

Courses supplement the department's regular course offerings. Recent topics have included Tolkien and international short stories. Prereq: Must have 30 semester hours or permission of the instructor. Note: Open to both majors and non-majors. Can be taken more than once when topics vary. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 3340 - Topics in Literature

Summer 2010 Registration **ENGL 3340**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 3350 - Topics in Literature

Summer 2010 Registration **ENGL 3350**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 3405 - Topics in Writing

Summer 2010 Registration **ENGL 3405**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 3415 - Screenwriting Workshop

Summer 2010 Registration **ENGL 3415**

Continues and expands ENGL 2415. By the end of ENGL 3415, students have completed the first two acts of their screenplay. Note: May be repeated a second time in a different semester to complete entire screenplay. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 3416 - Magazine Writing

Summer 2010 Registration **ENGL 3416**

An intensive, practical course in writing non-fiction with an emphasis on journalistic approaches for daily, weekly, and monthly publications. Prereq: ENGL 1020. **Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 3417 - Writing for the Mass Media

Summer 2010 Registration **ENGL 3417**

Students will examine public relations writing techniques and journalistic style, public relations theory and ethics, and practical client work. Prereq: ENGL 1020.

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 3450 - Twentieth Century Women Writers

Summer 2010 Registration **ENGL 3450**

Examines how women write about a specific theme, such as home, work, family, the "Other," as well as how women's writing may differ from men's. Theme and genre vary.

Prereq: Must have 30 semester hours or permission of the instructor. Cross-listed with WGST 3450.

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 3480 - Modern Drama

Summer 2010 Registration **ENGL 3480**

How does drama change from the pioneering realism of Ibsen and Chekhov to the absurdism of Ionesco and Pinter and beyond? The course covers plays in English and translation from the late nineteenth to the twenty-first century, with attention to performance as well as literary texts.

Prereq: Must have 30 hours or the permission of the instructor.

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 3520 - Religious Narratives

Summer 2010 Registration **ENGL 3520**

Investigates the language and structure of religious discourse in Western literature.

Welcomes interdisciplinary and comparative perspectives with a focus on cultural constructions of the sacred. Prereq: Must have 30 semester hours or permission of the instructor. Cross-listed with RLST 3720.

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 3530 - The Hero's Journey

Summer 2010 Registration **ENGL 3530**

The myth of the hero's journey serves as a metaphor for the vicissitudes life puts each of us through. The hero or her represents the ego-self who undertakes the journey--a

grand adventure into the realm of the unknown--to seek the treasure. He or she is greatly transformed by the process, ultimately into the great self, who wins the boon to share with all humanity. Versions of the story are found all over the world, such as in the sagas of Gilgamesh, Odysseus, Psyche, King Arthur, Dorothy of Oz, and Luke Skywalker from a galaxy far, far, away. Prereq: Must have 30 semester hours or permission of the instructor. Cross listed with RLST 4340. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 3661 - Shakespeare

Summer 2010 Registration **ENGL 3661**

Introduces some of Shakespeare's major plays and poems, which usually includes Richard II, Romeo and Juliet, Measure for Measure, Othello, King Lear, Anthony and Cleopatra and The Tempest. Prereq: Must have 30 semester hours or permission of the instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 3700 - American Literature to the Civil War

Summer 2010 Registration **ENGL 3700**

Surveys American literature from the colonial era to the Civil War. Prereq: ENGL 1020. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 3750 - American Literature from the Civil War

Summer 2010 Registration **ENGL 3750**

Surveys American literature from the Civil War to the contemporary era. Prereq: ENGL 1020. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 3795 - Race and Ethnicity in American Literature

Summer 2010 Registration **ENGL 3795**

Focuses alternately on one of several ethnic American literary traditions (e.g. African American, Chicano) and their historical, geographical, social and economic communities. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 3798 - International Perspectives in Literature and Film

Summer 2010 Registration **ENGL 3798**

Fosters an understanding of peoples outside of the U.S. through the study and appreciation of non-western literature. Investigates how historical, cultural, and

ideological forces constitute race, ethnicity, nationalism, and alienation in a single country or across regions. All texts in English translation. Literatures may vary by semester. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 3840 - Independent Study: ENGL

Summer 2010 Registration **ENGL 3840**

Prereq: Must have 30 semester hours or permission of the instructor. **Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 3939 - Internship/Cooperative Education

Summer 2010 Registration **ENGL 3939**

Employment situations designed and supervised by members of the faculty; concepts and skills developed in the classroom are used in business and public service contexts. Prereq: Junior standing and 2.75 grade-point average. Before enrolling, students should contact the Career Center. Note: Up to six hours may be counted toward the major. **Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 3995 - Travel Study

Summer 2010 Registration **ENGL 3995**

An intensive course focusing on cinematic, literary, or rhetorical topics enriched through travel. Subtitles reflect specific area of concentration. Students may repeat course with different topics. Registration is through the Office of International Affairs. **Semester Hours:** 3to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 4000 - Studies of Major Authors

Summer 2010 Registration **ENGL 4000**

An intensive study of works of one major British or American author. Examples: Dickens, Woolf or James. Prereq: Must have 30 semester hours or permission of the instructor. Cross-listed with ENGL 5000. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 4025 - Advanced Poetry Workshop

Summer 2010 Registration **ENGL 4025**

Focuses on the development of poetic craft. Prereq: ENGL 2154 and 3020 for English majors and minors only; all others must obtain permission of instructor. **Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 4055 - Advanced Fiction Workshop

Summer 2010 Registration **ENGL 4055**

Focuses on the development of narrative craft. Prereq: ENGL 2154 and 3050 for English majors and minors only; all others must obtain permission of instructor.

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 4080 - History of the English Language

Summer 2010 Registration **ENGL 4080**

Examines how English has changed since A.D. 800 through examples of writing from different periods, with attention to the way various groups have enriched our vocabulary and altered our syntax. Prereq: ENGL 2070 or one year of a college foreign language.

Cross-listed with ENGL 5080.

Semester Hours: 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 4160 - Poetics

Summer 2010 Registration **ENGL 4160**

"Mechanics" of poetry in English, including meter, rhythm, rhyme, line, and other systems of measurement and logic. Emphasis is on historical development of poetic art in English. Prereq: ENGL 1400 or permission of instructor. Cross-listed with ENGL 5160.

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 4166 - History of American Poetry

Summer 2010 Registration **ENGL 4166**

Examines major American poets and poetic trends from the colonial period to the present, with attention to cultural contexts and to development of distinctively American practices. Prereq: Must have 30 semester hours or permission of the instructor. Cross-listed with ENGL 5166.

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 4180 - Argumentation and Logic

Summer 2010 Registration **ENGL 4180**

Explores the history of logic and its role in argumentation, studies various types of logical structures, and analyzes current uses of argumentation, with attention to writing arguments on current public issues. Prereq: ENGL 1020, 2030 and 2070.

Semester Hours:

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 4190 - Special Topics in Rhetoric and Writing

Summer 2010 Registration **ENGL 4190**

Focuses on particular issues in rhetoric and writing as they pertain to reading and writing, including language and gender, language and culture, and language of political action. Prereq: Must have 30 semester hours or permission of the instructor. Cross-listed with ENGL 5190. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 4200 - History of the English Novel I

Summer 2010 Registration **ENGL 4200**

Rise and development of the English novel from its beginnings in the 18th century through the mid-19th century, including such writers as Defoe, Fielding, Austen and Shelley. Prereq: Must have 30 semester hours or permission of the instructor. Cross-listed with ENGL 5200. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 4210 - History of the English Novel II

Summer 2010 Registration **ENGL 4210**

Overview of the English novel from mid-19th century to World War II, emphasizing the important developments which the form underwent in the hands of notable novelists, including Charles Dickens, the Brontes, George Eliot, Henry James, Joseph Conrad, D.H. Lawrence and Virginia Woolf. Prereq: Must have 30 semester hours or permission of the instructor. Cross-listed with ENGL 5210. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 4220 - African-American Literature

Summer 2010 Registration **ENGL 4220**

Surveys African-American literature with special emphasis on post-Civil War writing. Prereq: Must have 30 semester hours or permission of the instructor. Cross-listed with ENGL 5220, ETST 4220. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 4230 - The American Novel

Summer 2010 Registration **ENGL 4230**

Surveys major developments in the American novel from the 18th century to the 21st century. Prereq: Must have 30 semester hours or permission of the instructor. Cross-

listed with ENGL 5230. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 4235 - Faulkner

Summer 2010 Registration **ENGL 4235**

Studies the works of Faulkner's high period with special attention to southern themes and Faulkner's experimentation with narrative form. Prereq: Must have 30 semester hours or permission of the instructor. Cross-listed with ENGL 5235. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 4236 - The American Short Story

Summer 2010 Registration **ENGL 4236**

Traces the development of the short story in the United States, from its beginnings in colonial tales to its contemporary renaissance as a dominant literary form. Prereq: Must have 30 semester hours or permission of the instructor. Cross-listed with ENGL 5236. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 4240 - Topics in Contemporary American Literature

Summer 2010 Registration **ENGL 4240**

Seminar focusing on a segment of contemporary American literature. Prereq: Must have 30 semester hours or permission of the instructor. Cross-listed with ENGL 5240. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 4250 - Twentieth Century Fiction

Summer 2010 Registration **ENGL 4250**

Deals with novels originating in a variety of countries in an effort to see the similarities and differences that varying nationalities bring to the genre. Prereq: Must have 30 semester hours or permission of the instructor. Cross-listed with ENGL 5250. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 4280 - Proposal and Grant Writing

Summer 2010 Registration **ENGL 4280**

Focuses on research, design, composition, and editing original proposals. Includes idea development, identification of funding sources, and the creation of persuasive

documents. Prereq: ENGL 1020. Cross-listed with ENGL 5280. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 4300 - History of British Drama

Summer 2010 Registration **ENGL 4300**

Intended as a survey of British drama from the miracle plays of the medieval period, through the Renaissance and Restoration, to the "kitchen sink" realists of the 1960s. Prereq: Must have 30 semester hours or permission of the instructor. Cross-listed with ENGL 5300. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 4306 - Survey of Feminist Thought

Summer 2010 Registration **ENGL 4306**

Examines changes and continuities in feminist thought from the 18th century to the present, using historical and literary materials. Explores the ways that women's characteristics, experiences, and capabilities have been understood and challenged. Cross-listed with ENGL 5306, HIST 4306, 5306, WGST 4306, 5306. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 4320 - History of Poetry in English

Summer 2010 Registration **ENGL 4320**

Studies the major schools and eras of English prosody, including the poetry of Great Britain and the United States, from the medieval period to the present. Prereq: Must have 30 semester hours or permission of the instructor. Cross-listed with ENGL 5320. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 4350 - History of American Drama

Summer 2010 Registration **ENGL 4350**

Studies American drama from its foundations in the 18th century through movements including realism, expressionism, symbolism, agit-prop, black nationalism, feminism, and performance art. Drama read as both text and performance, as sometimes supporting the status quo and as sometimes subverting it. Prereq: Must have 30 semester hours or permission of the instructor. Cross-listed with ENGL 5350. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 4400 - Old English I

Summer 2010 Registration **ENGL 4400**

Instruction in the Old English language. Prereq: Must have 30 semester hours or permission of the instructor. One year of college foreign language or ENGL 2070 recommended. Cross-listed with ENGL 5400. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 4410 - Old English II: Beowulf

Summer 2010 Registration **ENGL 4410**

Continuing training in the reading of Old English and intensive reading of Beowulf.

Prereq: ENGL 4400 or 5400. Cross-listed with ENGL 5410. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 4420 - Film Theory and Criticism

Summer 2010 Registration **ENGL 4420**

(1) Familiarizes students with some of the central concepts and debates in film theory and criticism, both classic and contemporary, (2) enables students to develop advanced analytic and interpretive skills, and (3) guides students toward discovering and articulating original critical and theoretical perspectives. Prereq: ENGL 2250 and 3070, 3080 or permission of instructor. Cross-listed with ENGL 5420. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 4460 - Contemporary World Literature

Summer 2010 Registration **ENGL 4460**

Surveys literature written by world writers since World War II. Prereq: Must have 30 semester hours or permission of the instructor. Note: Texts read in English. Cross-listed with ENGL 5460. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 4500 - Medieval Literature

Summer 2010 Registration **ENGL 4500**

Introduces representative writers from the Norman Conquest to about 1550. Emphasis on a variety of genres, including religious poetry, Arthurian romance, dream vision and drama. Prereq: Must have 30 semester hours or permission of the instructor. Cross-listed with ENGL 5500. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 4510 - Whores and Saints: Medieval Women

Summer 2010 Registration **ENGL 4510**

Studies how women are presented in texts, as well as works by women. Investigates the

roles open to women and societal attitudes toward women, who were considered seductresses, saints, scholars and warriors in the middle ages. Prereq: Nine hours of literature courses or instructor permission. Cross-listed with ENGL 5510, RLST 4730 and RLST 5730, WGST 4510. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 4520 - English Renaissance

Summer 2010 Registration **ENGL 4520**

Introduces some of the important writers in this major period of English literature (1500-1660). Special attention to the works of Sidney, Milton, Spenser, Shakespeare, Donne, Herbert and Johnson. Prereq: Must have 30 semester hours or permission of the instructor. Cross-listed with ENGL 5520. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 4530 - Milton

Summer 2010 Registration **ENGL 4530**

Extensive reading in John Milton's poetry (Lycidas, Paradise Lost, Paradise Regained, Samson Agonistes) as well as his political, social and theological writings. Prereq: Must have 30 semester hours or permission of the instructor. Cross-listed with ENGL 5530. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 4540 - Restoration and the 18th Century

Summer 2010 Registration **ENGL 4540**

Introduces some of the important writers of the "Age of Reason." Emphasis on such figures as Bunyan, Burke, Dryden, Johnson, Pope and Swift. Prereq: Must have 30 semester hours or permission of the instructor. Cross-listed with ENGL 5540. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 4560 - English Romanticism

Summer 2010 Registration **ENGL 4560**

Studies major works of the chief English writers of the first part of the 19th century, with emphasis on such representative figures as Wollstonecraft, Godwin, Blake, Wordsworth, Coleridge, Hazlitt, Byron, Keats and Shelley. Prereq: Must have 30 semester hours or permission of the instructor. Cross-listed with ENGL 5560. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 4580 - The Victorian Age

Summer 2010 Registration **ENGL 4580**

Examines the main currents of Victorian thought in prose and poetry from about 1830 to the end of the century, including such writers as Browning, Carlyle, Mill, Newman, Ruskin, Swinburne and Tennyson. Prereq: Must have 30 semester hours or permission of the instructor. Cross-listed with ENGL 5580. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 4600 - Modernism

Summer 2010 Registration **ENGL 4600**

Modernist literature from the beginning of the 20th century through World War II, including such writers as Eliot, Joyce, Forester, Ford, Yeats, Woolf and Barnes. Examines the social-political influences as well as the aesthetic and stylistic elements which define modernist writing. Prereq: Must have 30 semester hours or permission of the instructor. Cross-listed with ENGL 5600. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 4601 - Principles and Practices of Second Language Acquisition

Summer 2010 Registration **ENGL 4601**

Overview of basic principles and practices in the learning and teaching of English as a second language. Prereq: Must have 30 semester hours or permission of the instructor. Cross-listed with ENGL 5601. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 4651 - Second Language Writing

Summer 2010 Registration **ENGL 4651**

Topics include the similarities between first and second language writing, the processes of composition and revision, teacher response to student writing, student processing of feedback, writing assessment, and the reading or writing connection. Cross-listed with ENGL 5651. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 4701 - Multimedia in the Community

Summer 2010 Registration **ENGL 4701**

Produce dossier-quality multimedia shorts by researching and writing digital compositions for selected community organizations. Topics for research range across numerous social issues and involve all disciplines. Prereq: ENGL 2030, 3154, and 3170 or permission of instructor. Cross-listed with ENGL 5701. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 4720 - Honors in Literature

Summer 2010 Registration **ENGL 4720**

Designed for students taking departmental honors in English. Prereq: Students must have written permission from the honors advisor. **Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 4730 - Chaucer's Canterbury Tales

Summer 2010 Registration **ENGL 4730**

An intensive study of Chaucer's Canterbury Tales, as an introduction to the historical, ideological, and literary genres of the period. Learn to read Middle English by studying Chaucer's text. Prereq: Must have 30 semester hours or permission of the instructor.

Cross-listed with ENGL 5730. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 4731 - Chaucer's Early Poetry

Summer 2010 Registration **ENGL 4731**

Examines Chaucer's dream visions and Troilus and Criseyde through sources and historical and ideological factors influencing the texts. Learn to read Middle English by reading Chaucer's texts. Prereq: Must have 30 semester hours or permission of the instructor. Cross-listed with ENGL 5731. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 4735 - Philosophy and Literature

Summer 2010 Registration **ENGL 4735**

Considers the philosophical dimensions of literature. Prereq: Must have 30 semester hours or permission of the instructor. Cross-listed with ENGL 5735, PHIL 4730, 5730. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 4740 - Honors in Writing

Summer 2010 Registration **ENGL 4740**

Designed for students taking departmental honors in English writing. Prereq: Student must have written permission from honors director and faculty advisor. **Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 4770 - Topics in English: Film and Literature

Summer 2010 Registration **ENGL 4770**

May look at specific genres, aesthetic approaches to literature, ideological or socio-political agendas, or other special topics in literature and/or film. Prereq: Must have 30 semester hours or permission of the instructor. Cross-listed with ENGL 5770.

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 4800 - Special Topics in Creative Writing

Summer 2010 Registration **ENGL 4800**

Writing-intensive courses combining reading, directed writing, peer- and instructor-led workshops in a topic to be determined by instructor. Topics may include projects in a specialized genre, such as science fiction or noir writing, or in a field of professional endeavor related to creative writing, such as the editing and production of a literary journal. Prereq: ENGL 2154; permission of instructor may be required.

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 4840 - Independent Study: ENGL

Summer 2010 Registration **ENGL 4840**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 4920 - Directed Readings

Summer 2010 Registration **ENGL 4920**

Explores an area of English literature not covered in regular course work. Note: May be taken as a precursor to honors essay, in which case student should consult with the honors advisor. Prereq: Senior status.

Semester Hours: 3to 6
Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 4990 - Senior Writing Project in Creative Writing or Film Studies

Summer 2010 Registration **ENGL 4990**

Individual writing project consisting of a creative manuscript or critical study. Manuscript must be 30 pages of high quality text. Note: Available only to students in the creative writing and film tracks. Prereq: Senior standing.

Semester Hours: 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 4991 - Senior Seminar in Writing

Summer 2010 Registration **ENGL 4991**

Students focus on rhetorical studies through extensive reading, writing, discussion, and

reflection upon their own literacy practices. Students produce individual and collaborative writing projects for a final portfolio. Prereq: ENGL 3084 and senior standing. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 4995 - Senior Writing Project

Summer 2010 Registration **ENGL 4995**

Individual writing project in any genre and any discipline upon approval of faculty advisor. Manuscript must be 30 pages of high quality text. Prereq: Senior standing. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 4999 - Literary Studies Senior Seminar

Summer 2010 Registration **ENGL 4999**

Allows students to pursue, learn, and apply advanced methodologies such as bibliographical, archival/historical, or cultural and ideological, and apply them to a single author, genre, or period of text. Students engage in research under the tutelage of their instructor. Note: Senior capstone course for literature majors in the literary studies track. Prereq: Senior standing and ENGL 3001 previously completed or concurrent. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 5000 - Studies of Major Authors

Summer 2010 Registration **ENGL 5000**

An intensive study of works of one major British or American author. Examples: Dickens, Woolf or James. Cross-listed with ENGL 4000. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 5001 - Special Topics

Summer 2010 Registration **ENGL 5001**

This variable credit course offers intensive study of the teaching of writing in a collaborative action-oriented approach. **Semester Hours:** 1to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 5080 - History of the English Language

Summer 2010 Registration **ENGL 5080**

Examines how English has changed since A.D. 800 through examples of writing from different periods, with attention to the way various groups have enriched our vocabulary and altered our syntax. Prereq: ENGL 2070 or one year of a college foreign language.

Cross-listed with ENGL 4080. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 5093 - Teaching of Writing

Summer 2010 Registration **ENGL 5093**

Deals with the analysis of rhetorical theory with an emphasis on practical applications in the classroom, with attention to alternative pedagogies in teaching. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 5100 - Literary Research and Writing

Summer 2010 Registration **ENGL 5100**

Designed to prepare students for graduate scholarship and writing in literature; should be taken soon after entering the program. Introduction to the research methodologies of literary scholarship as well as the practical strategies and the formal and stylistic standards for writing graduate-level analytical-interpretive essays. Prereq: Must be enrolled or accepted into the Ma in English, Literature Option program. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 5110 - Denver Writing Project

Summer 2010 Registration **ENGL 5110**

An intensive extended workshop in the development of one's personal and professional writing and in the teaching of writing. Open to those who are members of the Denver Writing Project. **Semester Hours:** 3to 9

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 5120 - Denver Writing Project Advanced Institute

Summer 2010 Registration **ENGL 5120**

Advanced institutes provide intensive examination of an issue related to the teaching of writing. The specific issues are of two kinds--repeatable ones such as "Alumni Institute" and "Writing Retreat" and variable, such as "Action Research" and "Writing Across the Curriculum." **Semester Hours:** 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 5150 - Research Methods

Summer 2010 Registration **ENGL 5150**

Designed to prepare students for graduate scholarship in language, literacy, and the teaching of writing; should be taken soon after entering the program. Introduction to the

research methods and stylistic standards for graduate-level writing. Prereq: graduate student standing **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 5160 - Poetics

Summer 2010 Registration **ENGL 5160**

"Mechanics" of poetry in English, including meter, rhythm, rhyme, line, and other systems of measurement and logic. Emphasis is on historical development of poetic art in English. Prereq: ENGL 1400 or permission of instructor. Cross-listed with ENGL 4160. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 5166 - History of American Poetry

Summer 2010 Registration **ENGL 5166**

Examines major American poets and poetic trends from the colonial period to the present, with attention to cultural contexts and to development of distinctively American practices. Cross-listed with ENGL 4166. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 5171 - Language Theory

Summer 2010 Registration **ENGL 5171**

Introduces linguistic theory to the beginning graduate student. Builds upon the material included in the undergraduate class, by adding materials pertaining to the teaching of writing and graduate language studies. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 5190 - Special Topics in Rhetoric and Writing

Summer 2010 Registration **ENGL 5190**

Focuses on particular issues in rhetoric and writing as they pertain to reading and writing, including language and gender, language and culture, and language of political action. Cross-listed with Engl 4190. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 5200 - History of the English Novel I

Summer 2010 Registration **ENGL 5200**

Rise and development of the English novel from its beginnings in the 18th century through the mid-19th century, including such writers as Defoe, Fielding, Austen and Shelley. Cross-listed with ENGL 4200. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 5210 - History of the English Novel II

Summer 2010 Registration **ENGL 5210**

Overview of the English novel from mid-19th century to World War II, emphasizing the important developments which the form underwent in the hands of notable novelists, including Charles Dickens, the Brontes, George Eliot, Henry James, Joseph Conrad, D.H. Lawrence and Virginia Woolf. Cross-listed with ENGL 4210. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 5220 - African-American Literature

Summer 2010 Registration **ENGL 5220**

Surveys African-American literature with special emphasis on post-Civil War writing. Cross-listed with ENGL 4220, ETST 4220. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 5230 - The American Novel

Summer 2010 Registration **ENGL 5230**

Surveys major developments in the American novel from the 18th century to the 21st century. Cross-listed with ENGL 4230. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 5235 - Faulkner

Summer 2010 Registration **ENGL 5235**

Studies the works of Faulkner's high period with special attention to southern themes and Faulkner's experimentation with narrative form. Cross-listed with ENGL 4235. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 5236 - The American Short Story

Summer 2010 Registration **ENGL 5236**

Traces the development of the short story in the United States, from its beginnings in colonial tales to its contemporary renaissance as a dominant literary form. Cross-listed with ENGL 4236. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 5240 - Topics In Contemporary American Literature

Summer 2010 Registration **ENGL 5240**

Seminar focusing on a segment of contemporary American literature. Cross-listed with

ENGL 4240. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 5250 - Twentieth Century Fiction

Summer 2010 Registration **ENGL 5250**

Deals with novels originating in a variety of countries in an effort to see the similarities and differences that varying nationalities bring to the genre. Cross-listed with ENGL 4250. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 5280 - Proposal and Grant Writing

Summer 2010 Registration **ENGL 5280**

Focuses on research, design, composition, and editing original proposals. Includes idea development, identification of funding sources, and the creation of persuasive documents. Prereq: ENGL 1020. Cross-listed with ENGL 4280. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 5300 - History of British Drama

Summer 2010 Registration **ENGL 5300**

Intended as a survey of British drama from the miracle plays of the medieval period, through the Renaissance and Restoration, to the "kitchen sink" realists of the 1960s. Cross-listed with ENGL 4300. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 5306 - Survey of Feminist Thought

Summer 2010 Registration **ENGL 5306**

Examines changes and continuities in feminist thought from the 18th century to the present, using historical and literary materials. Explores the ways that women's characteristics, experiences, and capabilities have been understood and challenged. Cross-listed with ENGL 4306, HIST 4306, 5306, WGST 4306, 5306. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 5320 - History of Poetry in English

Summer 2010 Registration **ENGL 5320**

Studies the major schools and eras of English prosody, including the poetry of Great Britain and the United States, from the medieval period to the present. Cross-listed with ENGL 4320. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 5350 - History of American Drama

Summer 2010 Registration **ENGL 5350**

Studies American drama from its foundations in the 18th century through movements including realism, expressionism, symbolism, agit-prop, black nationalism, feminism, and performance art. Drama read as both text and performance, as sometimes supporting the status quo and as sometimes subverting it. Cross-listed with ENGL 4350. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 5400 - Old English I

Summer 2010 Registration **ENGL 5400**

Instruction in the Old English language. One year of college foreign language or ENGL 2070 recommended. Cross-listed with ENGL 4400. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 5410 - Old English II: Beowulf

Summer 2010 Registration **ENGL 5410**

Continuing training in the reading of Old English and intensive reading of Beowulf. Prereq: ENGL 5400 or 4400. Cross-listed with ENGL 4410. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 5420 - Film Theory and Criticism

Summer 2010 Registration **ENGL 5420**

(1) Familiarizes students with some of the central concepts and debates in film theory and criticism, both classic and contemporary, (2) enables students to develop advanced analytic and interpretive skills, and (3) guides students toward discovering and articulating original critical and theoretical perspectives. Prereq: ENGL 2250 and 3070, 3080 or permission of instructor. Cross-listed with ENGL 4420. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 5460 - Contemporary World Literature

Summer 2010 Registration **ENGL 5460**

Surveys literature written by world writers since World War II. Note: Texts read in English. Cross-listed with ENGL 4460. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 5500 - Medieval Literature

Summer 2010 Registration **ENGL 5500**

Introduces representative writers from the Norman Conquest to about 1550. Emphasis on a variety of genres, including religious poetry, Arthurian romance, dream vision and drama. Cross-listed with ENGL 4500. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 5510 - Whores and Saints: Medieval Women

Summer 2010 Registration **ENGL 5510**

Studies how women are presented in texts, as well as works by women. Investigates the roles open to women and societal attitudes toward women, who were considered seductresses, saints, scholars and warriors in the middle ages. Prereq: Nine hours of literature courses or instructor permission. Cross-listed with ENGL 4510, RLST 4730 and RLST 5730, WGST 4510. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 5520 - English Renaissance

Summer 2010 Registration **ENGL 5520**

Introduces some of the important writers in this major period of English literature (1500-1660). Special attention to the works of Sidney, Milton, Spenser, Shakespeare, Donne, Herbert and Johnson. Cross-listed with ENGL 4520. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 5530 - Milton

Summer 2010 Registration **ENGL 5530**

Extensive reading in John Milton's poetry (Lycidas, Paradise Lost, Paradise Regained, Samson Agonistes) as well as his political, social and theological writings. Cross-listed with ENGL 4530. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 5540 - Restoration and the 18th Century

Summer 2010 Registration **ENGL 5540**

Introduces some of the important writers of the "Age of Reason." Emphasis on such figures as Bunyan, Burke, Dryden, Johnson, Pope and Swift. Cross-listed with ENGL 4540. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 5560 - English Romanticism

Summer 2010 Registration **ENGL 5560**

Studies major works of the chief English writers of the first part of the 19th century, with

emphasis on such representative figures as Wollstonecraft, Godwin, Blake, Wordsworth, Coleridge, Hazlitt, Byron, Keats and Shelley. Cross-listed with ENGL 4560. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 5580 - The Victorian Age

Summer 2010 Registration **ENGL 5580**

Examines the main currents of Victorian thought in prose and poetry from about 1830 to the end of the century, including such writers as Browning, Carlyle, Mill, Newman, Ruskin, Swinburne and Tennyson. Cross-listed with ENGL 4580. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 5600 - Modernism

Summer 2010 Registration **ENGL 5600**

Modernist literature from the beginning of the 20th century through World War II, including such writers as Eliot, Joyce, Forester, Ford, Yeats, Woolf and Barnes. Examines the social-political influences as well as the aesthetic and stylistic elements which define modernist writing. Cross-listed with ENGL 4600. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 5601 - Principles and Practices of Second Language Acquisition

Summer 2010 Registration **ENGL 5601**

Overview of basic principles and practices in the learning and teaching of English as a second language. Cross-listed with ENGL 4601. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 5650 - American Literature to the Civil War

Summer 2010 Registration **ENGL 5650**

Graduate survey of American literature from the Colonial period to the Civil War, with particular attention to the question of what makes this literature distinctly American. Explores a wide range of genres of American literature in an effort to assess how this tradition of letters shaped our historical past and continues to influence contemporary American culture and ideology. Prereq: Graduate standing. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 5651 - Second Language Writing

Summer 2010 Registration **ENGL 5651**

Topics include the similarities between first and second language writing, the processes of composition and revision, teacher response to student writing, student processing of

feedback, writing assessment, and the reading or writing connection. Cross-listed with ENGL 4651. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 5655 - American Literature: Civil War to the Cold War

Summer 2010 Registration **ENGL 5655**

Graduate survey of American literature from the Civil War to the Cold War considered central to the tradition of American literature. Students will consider how new ideas about gender, race, class, nationality, postcoloniality, history, and aesthetics have influenced the field of American literary studies. Prereq: Graduate standing. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 5701 - Multimedia in the Community

Summer 2010 Registration **ENGL 5701**

Produce dossier-quality multimedia shorts by researching and writing digital compositions for selected community organizations. Topics for research range across numerous social issues and involve all disciplines. Prereq: ENGL 2030, 3154, and 3170 or permission of instructor. Cross-listed with ENGL 4701. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 5730 - Chaucer's Canterbury Tales

Summer 2010 Registration **ENGL 5730**

An intensive study of Chaucer's Canterbury Tales, as an introduction to the historical, ideological, and literary genres of the period. Learn to read Middle English by studying Chaucer's text. Cross-listed with ENGL 4730. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 5731 - Chaucer's Early Poetry

Summer 2010 Registration **ENGL 5731**

Examines Chaucer's dream visions and Troilus and Criseyde through sources and historical and ideological factors influencing the texts. Learn to read Middle English by reading Chaucer's texts. Cross-listed with ENGL 4731. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 5735 - Philosophy and Literature

Summer 2010 Registration **ENGL 5735**

Considers the philosophical dimensions of literature. Cross-listed with ENGL 4735, PHIL

5730, 4730. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 5770 - Topics in English: Film and Literature

Summer 2010 Registration **ENGL 5770**

May look at specific genres, aesthetic approaches to literature, ideological or socio-political agendas, or other special topics in literature and/or film. Cross-listed with ENGL 4770. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 5840 - Independent Study: Engle

Summer 2010 Registration **ENGL 5840**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 5913 - Practicum in Language and Rhetoric

Summer 2010 Registration **ENGL 5913**

Supervised work in applied language or rhetoric and the teaching of writing. **Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 5939 - Cooperative Education

Summer 2010 Registration **ENGL 5939**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 6001 - Critical Theory in Literature and Film

Summer 2010 Registration **ENGL 6001**

Designed to enrich students' understanding of a variety of modes of theoretical discourse that have influenced modern critical practice in literary and film studies. While the course explores the evolution of criticism, it gives primary emphasis to recent developments. Prereq: ENGL 5100 or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 6002 - Rhetorical Theory

Summer 2010 Registration **ENGL 6002**

Examines the principles and applications of rhetorical theory and its relationship to

writing. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 6010 - Studies of Major Authors

Summer 2010 Registration **ENGL 6010**

Note: May be repeated when topics vary. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 6011 - Studies in Major Authors

Summer 2010 Registration **ENGL 6011**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 6012 - Studies in Major Authors

Summer 2010 Registration **ENGL 6012**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 6013 - Studies in Major Authors

Summer 2010 Registration **ENGL 6013**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 6014 - Studies in Major Authors

Summer 2010 Registration **ENGL 6014**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 6015 - Studies in Major Authors

Summer 2010 Registration **ENGL 6015**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 6016 - Studies in Major Authors

Summer 2010 Registration **ENGL 6016**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 6017 - Studies in Major Authors

Summer 2010 Registration **ENGL 6017**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 6018 - Studies in Major Authors

Summer 2010 Registration **ENGL 6018**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 6019 - Studies in Major Authors

Summer 2010 Registration **ENGL 6019**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 6090 - Studies in Major Authors

Summer 2010 Registration **ENGL 6090**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 6101 - Spec Topics in Rhetoric

Summer 2010 Registration **ENGL 6101**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 6102 - Spec Topics in Rhetoric

Summer 2010 Registration **ENGL 6102**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 6103 - Spec Topics in Rhetoric

Summer 2010 Registration **ENGL 6103**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 6104 - Spec Topics in Rhetoric

Summer 2010 Registration **ENGL 6104**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 6105 - Spec Topics in Rhetoric

Summer 2010 Registration **ENGL 6105**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 6106 - Spec Topics in Rhetoric

Summer 2010 Registration **ENGL 6106**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 6107 - Spec Topics in Rhetoric

Summer 2010 Registration **ENGL 6107**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 6108 - Spec Topics in Rhetoric

Summer 2010 Registration **ENGL 6108**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 6109 - Spec Topics in Rhetoric

Summer 2010 Registration **ENGL 6109**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 6110 - Special Topics in Literature

Summer 2010 Registration **ENGL 6110**

An intensive study of specialized topics in English and/or American literature. Note: May be repeated when topics vary.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 6111 - Special Topics in Literature

Summer 2010 Registration **ENGL 6111**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 6112 - Special Topics in Literature

Summer 2010 Registration **ENGL 6112**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 6113 - Special Topics in Literature

Summer 2010 Registration **ENGL 6113**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 6114 - Special Topics in Literature

Summer 2010 Registration **ENGL 6114**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 6115 - Special Topics in Literature

Summer 2010 Registration **ENGL 6115**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 6116 - Special Topics in Literature

Summer 2010 Registration **ENGL 6116**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 6117 - Special Topics in Literature

Summer 2010 Registration **ENGL 6117**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 6118 - Special Topics in Literature

Summer 2010 Registration **ENGL 6118**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 6119 - Special Topics in Literature

Summer 2010 Registration **ENGL 6119**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 6120 - Special Topics in Film

Summer 2010 Registration **ENGL 6120**

An intensive study of specialized topics in film. Note: May be repeated when topics vary.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 6121 - Special Topics in Film

Summer 2010 Registration **ENGL 6121**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 6122 - Special Topics in Film

Summer 2010 Registration **ENGL 6122**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 6123 - Special Topics in Film

Summer 2010 Registration **ENGL 6123**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 6124 - Special Topics in Film

Summer 2010 Registration **ENGL 6124**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 6125 - Special Topics in Film

Summer 2010 Registration **ENGL 6125**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 6126 - Special Topics in Film

Summer 2010 Registration **ENGL 6126**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 6127 - Special Topics in Film

Summer 2010 Registration **ENGL 6127**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 6128 - Special Topics in Film

Summer 2010 Registration **ENGL 6128**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 6129 - Special Topics in Film

Summer 2010 Registration **ENGL 6129**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 6210 - Teaching Second Language and Second Dialect Speakers

Summer 2010 Registration **ENGL 6210**

Covers problems for second language/dialect speakers, including: issues in listening and speaking in inter/subcultural communication; maturational constraints; and personal and social factors that affect learners' achievement of the acquisition of L2 speech. **Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 6840 - Independent Study

Summer 2010 Registration **ENGL 6840**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 6920 - Directed Readings

Summer 2010 Registration **ENGL 6920**

Offers graduate student's instruction on an individual basis. Serves as preparation for the MA (literature) comprehensive examination. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 6950 - Master's Thesis

Summer 2010 Registration **ENGL 6950**

Semester Hours: 1to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGL 6960 - Master's Project

Summer 2010 Registration **ENGL 6960**

Semester Hours: 1to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGR 1000 - Introduction to Engineering

Summer 2010 Registration **ENGR 1000**

Introduces engineering profession, engineering design and practice; and the tools used by engineers to accomplish design. The specialties within engineering are described. Students are involved in application projects and use word processors, spreadsheets and engineering software. Note: ENGR 1000 cannot be substituted for ELEC 1201.

Prereq: High school trigonometry. **Semester Hours:** 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGR 1208 - Special Topics

Summer 2010 Registration **ENGR 1208**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGR 1218 - Special Topics

Summer 2010 Registration **ENGR 1218**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGR 1228 - Special Topics

Summer 2010 Registration **ENGR 1228**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGR 1238 - Special Topics

Summer 2010 Registration **ENGR 1238**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGR 1248 - Special Topics

Summer 2010 Registration **ENGR 1248**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGR 1258 - Special Topics

Summer 2010 Registration **ENGR 1258**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGR 1268 - Special Topics

Summer 2010 Registration **ENGR 1268**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGR 1278 - Special Topics

Summer 2010 Registration **ENGR 1278**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGR 1288 - Special Topics

Summer 2010 Registration **ENGR 1288**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGR 1298 - Special Topics

Summer 2010 Registration **ENGR 1298**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGR 2208 - Special Topics

Summer 2010 Registration **ENGR 2208**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGR 2218 - Special Topics

Summer 2010 Registration **ENGR 2218**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGR 2228 - Special Topics

Summer 2010 Registration **ENGR 2228**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGR 2238 - Special Topics

Summer 2010 Registration **ENGR 2238**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGR 2248 - Special Topics

Summer 2010 Registration **ENGR 2248**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGR 2258 - Special Topics

Summer 2010 Registration **ENGR 2258**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGR 2268 - Special Topics

Summer 2010 Registration **ENGR 2268**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGR 2278 - Special Topics

Summer 2010 Registration **ENGR 2278**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGR 2288 - Special Topics

Summer 2010 Registration **ENGR 2288**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGR 2298 - Special Topics

Summer 2010 Registration **ENGR 2298**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGR 3012 - Thermodynamics

Summer 2010 Registration **ENGR 3012**

Introduces thermodynamic properties and state relationships, processes and cycles with work and heat transfer. Applications of the first and second laws to energy-related engineering systems. Prereq: MATH 1401 and PHYS 2311. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGR 3208 - Special Topics

Summer 2010 Registration **ENGR 3208**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGR 3218 - Special Topics

Summer 2010 Registration **ENGR 3218**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGR 3228 - Special Topics

Summer 2010 Registration **ENGR 3228**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGR 3238 - Special Topics

Summer 2010 Registration **ENGR 3238**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGR 3248 - Special Topics

Summer 2010 Registration **ENGR 3248**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGR 3258 - Special Topics

Summer 2010 Registration **ENGR 3258**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGR 3268 - Special Topics

Summer 2010 Registration **ENGR 3268**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGR 3278 - Special Topics

Summer 2010 Registration **ENGR 3278**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGR 3288 - Special Topics

Summer 2010 Registration **ENGR 3288**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGR 3298 - Special Topics

Summer 2010 Registration **ENGR 3298**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGR 3400 - Technology and Culture

Summer 2010 Registration **ENGR 3400**

Explores the cultural and political foundations of technology and the impact of technology upon the individual and society. Contributions to technological advances and

the impact of technology on women and diverse ethnic groups are examined in the context of specific engineering designs and case studies. Prereq: One course in social sciences, one course in humanities, one course in science. (Satisfies the multicultural diversity requirement of the UCDHSC core curriculum). **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGR 3600 - International Dimensions of Technology and Culture

Summer 2010 Registration **ENGR 3600**

This course provides students with an understanding of how science, technology and international issues interrelate in a world that has become more interconnected and interdependent. The course will focus on the technical, organizational and cultural aspects of information and other technologies with an emphasis on their impact on third world countries. Prereq: One course in social sciences, one course in humanities, one course in science. (Satisfies the international perspectives requirement of the UCDHSC core curriculum). **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGR 4208 - Special Topics

Summer 2010 Registration **ENGR 4208**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGR 4218 - Special Topics

Summer 2010 Registration **ENGR 4218**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGR 4228 - Special Topics

Summer 2010 Registration **ENGR 4228**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGR 4238 - Special Topics

Summer 2010 Registration **ENGR 4238**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGR 4248 - Special Topics

Summer 2010 Registration **ENGR 4248**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGR 4258 - Special Topics

Summer 2010 Registration **ENGR 4258**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGR 4268 - Special Topics

Summer 2010 Registration **ENGR 4268**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGR 4278 - Special Topics

Summer 2010 Registration **ENGR 4278**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGR 4288 - Special Topics

Summer 2010 Registration **ENGR 4288**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGR 4298 - Special Topics

Summer 2010 Registration **ENGR 4298**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGR 4840 - Independent Study

Summer 2010 Registration **ENGR 4840**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGR 5208 - Special Topics

Summer 2010 Registration **ENGR 5208**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGR 5301 - Sys Engr: Principles-Practice

Summer 2010 Registration **ENGR 5301**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGR 5302 - Sys Engr: Planning and Mgmt

Summer 2010 Registration **ENGR 5302**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGR 5303 - Spc Topics: Systems Engineering

Summer 2010 Registration **ENGR 5303**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENGR 5800 - Long Range Infrastructure Planning and Design: Colorado 2050

Summer 2010 Registration **ENGR 5800**

The goal of this course is to equip students to address the problems of long term future resource limitation and its influence on urban infrastructure in Colorado. **Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENTP 2550 - Introductory Accounting for Entrepreneurs and the Arts

Summer 2010 Registration **ENTP 2550**

An integration of financial and managerial accounting processes as they relate to Entrepreneurs, Arts & Media managers and similar applications. This course will cover the analysis and interpretation of financial statements, asset and liability valuation and the determination of net income. Incorporates the use of accounting information to make decisions focusing on cost behavior analysis, budgeting and product costing in entrepreneurial and arts related businesses. Prereq: MATH 1010, MATH 1110, or MATH 1070. Cross-listed with ACCT 2550. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENTP 3000 - Principles of Entrepreneurship

Summer 2010 Registration **ENTP 3000**

Focuses on the concepts, skills, know-how, practical information, attitudes and alternatives that are relevant for start-up companies. The materials are designed to enhance the student's capacity to anticipate HR, financial, marketing problems through the application of proper planning. The primary objective of the course is to teach participants the practical aspects of entrepreneurship in order to change the odds of success. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENTP 3120 - Legal Issues for Entrepreneurs

Summer 2010 Registration **ENTP 3120**

Skills in legal and factual analysis and the application of ethical theories are addressed with an emphasis on applicability for entrepreneurs. The cases are drawn from a variety of functional areas such as accounting, information systems, finance, management, marketing and production. Topics include: agency law, business organizations, securities, venture capital, employment law, real property, entrepreneurial aspects of intellectual property law, consumer law and international law. Note: For non business majors only. Does not count towards an Entrepreneurship certificate. Prereq: ENTP 3000 or equivalent. Cross-listed with BLAW 4120. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENTP 3780 - Managing Entrepreneurial Ventures

Summer 2010 Registration **ENTP 3780**

Teaches future new and small business owners the practical aspects of managing their entrepreneurial venture, to develop a comprehensive business plan and to develop the skills necessary to improve the odds of success. The course will consider strategies to leverage limited resources for maximum effect. Also covers small organization and group behavior, performance, leadership and motivation in small business settings and focuses on the owner/manager as the principle success factor in the context of a small organization. Note: For non-business majors only. Does not count towards business degree but does count towards Entrepreneurship Certificate. Prereq: MGMT 1000, ACCT 2200, and ENTP 3000. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENTP 4950 - Special Topics

Summer 2010 Registration **ENTP 4950**

A variety of topics in entrepreneurship are offered. Consult the current "Schedule Planner" for semester offerings. Prereq: Topics vary. **Semester Hours:** 0to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENTP 6000 - Fundamentals of Entrepreneurship

Summer 2010 Registration **ENTP 6000**

Focuses on the concepts, skills, know-how, attitudes, information, and alternatives that are relevant for start-up and early-stage entrepreneurs, entrepreneurial managers, and their stakeholders. Speakers, exercises, and lectures focus on the critical role of opportunity creation and recognition, and the entrepreneur as the principal success factor in new entrepreneurial formation and building. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ENTP 6020 - The Business Plan

Summer 2010 Registration **ENTP 6020**

Business plan development which incorporates all key ingredients necessary for various users. Includes the ins and outs of business plans for new ventures through environmental scans of new business opportunities, case studies, by sharing the experience of entrepreneurs and investors that have been through the process and by writing a business plan, either individually or with a team of other students. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ENTP 6040 - Growing Your Venture

Summer 2010 Registration **ENTP 6040**

Provides a series of concepts, frameworks, and heuristics that enable the entrepreneur to anticipate and deal with the challenges that accompany growth of an existing business. Cases, exercises, lectures, and speakers are used to focus on choosing opportunities, allocating resources, motivating employees, and maintaining control, while not stifling innovation. A key component of the course is how to sustain entrepreneurial thinking in mid-sized ventures as they continue to grow. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ENTP 6800 - Special Topics

Summer 2010 Registration **ENTP 6800**

A variety of topics in entrepreneurship are offered. Consult the current 'schedule Planner' for semester offerings. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ENTP 6820 - Business Consulting

Summer 2010 Registration **ENTP 6820**

Assists to understand how to successfully grow experience and current knowledge so that any future business consulting goals are realized, regardless of whether the student

is an "inside" consultant to the organization or an "Outside" consultant to many organizations. Students are expected to identify experiences, current knowledge, and future goals. The course includes "Practice" of 32 topics within 16 classes. Students learn how to identify root problems instead of treating the symptoms. Most importantly, students deliver recommendations and implement the optimum solution. **Semester**

Hours: 3 to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENTP 6822 - Legal and Ethical Issues of Entrepreneurship

Summer 2010 Registration **ENTP 6822**

This course addresses the legal issues most frequently encountered by entrepreneurs and others involved in start-ups and small, closely held or family businesses. The focus is on how to avoid legal problems and how best to cope when they arise. Topics include choice of business form, legal aspects of raising capital, taxation, intellectual property law, employment law, product liability, e-commerce and the problems of managing lawyers and litigation. Note: Cannot receive credit for both BUSN 6540 and this course. **Semester Hours:** 3 to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENTP 6824 - Entrepreneurial Financial Management

Summer 2010 Registration **ENTP 6824**

Provides a foundation for the financial management of a small business, including financial and legal aspects of setting up different forms of small business, and overview of financial reporting and cash flow analysis for small businesses, financial planning and budgeting techniques, working capital management and long-term asset decisions, practices in obtaining funds, business valuation, franchising, lease versus buy decisions, financial aspects of international trade, and different methods of obtaining capital including: trade credit, loans, private placements, angel capital and venture capital.

Students cannot receive credit if they have taken FNCE 6460. Prereq: BUSN 6550 or previous accounting course and ability to read financial statements. **Semester Hours:**

3 to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENTP 6826 - International Entrepreneurship

Summer 2010 Registration **ENTP 6826**

Provides the student with an overview of key trends and developments in international business. Familiarize the student with selected theories and concepts of international business and how it affects entrepreneurial functions, including finance, marketing, accounting, organization design and management. **Semester Hours:** 3 to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENTP 6828 - Assess and Develop Market Opportunities

Summer 2010 Registration **ENTP 6828**

Seeks to discern how entrepreneurs identify, assess and exploit market opportunities. Provides a series of guest speakers, business cases and a project, an informal survey of how entrepreneurs use both systematic and non-technical entrepreneurial ventures to illustrate this process. The ultimate objective is to provide a roadmap of the interaction between the entrepreneur and market opportunities, which facilitates the development of student skills in assessing market opportunities. Prereq: One previous graduate level class or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENTP 6830 - Launching Technology-Based Ventures

Summer 2010 Registration **ENTP 6830**

Provides an introduction to concepts and activities applicable to launching and managing technology-based ventures. Emphasis is placed on evaluating and financing new technology-based ventures. Other course topics include: identifying and specifying opportunities; creating profitable business models and strategies; marketing and managing and working in new ventures. Course readings, case studies and discussions highlight key issues and concepts. Successful entrepreneurs, professional investors and other business professionals visit the class to share their experiences and insights. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENTP 6832 - Corporate Entrepreneurship and Innovation

Summer 2010 Registration **ENTP 6832**

Includes building, running and growing an entrepreneurial organization. Addresses the principles of organizational architecture, group behavior and performance, interpersonal influence, leadership and motivation in entrepreneurial settings. It addresses strategies to leverage limited resources for maximum effect. Students develop competencies in organizational behavior in the context of an entrepreneurial firm. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENTP 6834 - Entrepreneurial Marketing

Summer 2010 Registration **ENTP 6834**

Designed to help students learn about best practices with recent lessons on Internet economy. Companies large and small face unique challenges successfully building a competitive advantage with limited marketing resources. Covers the analysis of marketing opportunities, identification of the targets, audience, and the development of a marketing strategy, brand positioning and an integrated marketing plan. Reviews product and service development processes. Provides a basis for establishing pricing and pricing

plans. Assesses Internet economy.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ENTP 6836 - Designing and Leading the Entrepreneurial Organization

Summer 2010 Registration **ENTP 6836**

Addresses the principles of organizational architecture, group behavior and performance, interpersonal influence, leadership and motivation in entrepreneurial settings. It addresses strategies to leverage limited resources for maximum effect. Students develop competencies in organizational design, human resources management, leadership and organizational behavior in the context of an entrepreneurial firm.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ENTP 6838 - Real Estate for the Entrepreneur

Summer 2010 Registration **ENTP 6838**

This course will address issues critical to the success of any new venture location including business site selection and negotiation of real estate leases and purchases. General principles of real estate development, financing and urban planning, applicable to entrepreneurs, will also be discussed. Zoning, affordable housing, ADA issues, property management, real estate investing, historic preservation and selected taxation issues are also covered.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ENTP 6840 - Independent Study: ENTP

Summer 2010 Registration **ENTP 6840**

Semester Hours: 0to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENTP 6842 - New Concept Development

Summer 2010 Registration **ENTP 6842**

Designed to help entrepreneurs address questions related to assessing the viability of new business opportunities. Using marketing theory, provides tools for understanding and evaluating the attractiveness of industries and potential receptiveness of markets. Both Individual and group projects teach students to identify potential new business opportunities and to assess the viability in various industries and markets.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ENTP 6844 - Managing New Entrepreneurial Ventures

Summer 2010 Registration **ENTP 6844**

Focuses on the decisions owner-managers make in recognizing and choosing opportunities, positioning themselves in the market place, obtaining and allocating resources, motivating employees and maintaining control while not stifling innovative actions that allow a business to control its own destiny. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ENTP 6846 - Marketing a New Business

Summer 2010 Registration **ENTP 6846**

The objective is to help entrepreneurs learn the latest techniques involved in taking a new business or service concept to market. It includes a theoretical analysis of how products diffuse, product life cycle issues, qualitative and quantitative research techniques (including exposure to an analytical software program), consumer behavior issues, strategic positioning given the nature of the product, the company and the external environment, promotion of the new concept and issues regarding the implementation of a marketing solution surrounding the new venture. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ENTP 6848 - Leadership in New Ventures

Summer 2010 Registration **ENTP 6848**

Provides the student with an overview of key leadership principles for creating strategy and managing teams in a new venture. It introduces leadership concepts critical to gaining true organizational commitment and focuses on case studies relevant to common business issues. By exploring what entrepreneurial leaders actually do and how visionary leadership is required to develop an organization that is able to execute the strategy through measurable goals and objectives. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ENTP 6852 - Introduction to Life Science Technology Transfer

Summer 2010 Registration **ENTP 6852**

This course is designed to familiarize biomedical scientists and those interested in the business of science with the basic fundamentals of biomedical technology transfer. The emphasis of the course will be on how technology transfer occurs, different technology transfer models, early stage technology finance, basics of intellectual property and the regulatory and reimbursement environment for commercializing drugs, devices, diagnostic tests and health information software. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ENTP 6854 - Design & Manage Entrepreneurial Organizations

Summer 2010 Registration **ENTP 6854**

This course is about building, running and growing an entrepreneurial organization. It is about creating an organization that will sustain high performance over a long period of time and become a premier institution in it's field. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENTP 6856 - Strategic Planning for Entrepreneurs

Summer 2010 Registration **ENTP 6856**

This course is designed to help students learn and use tools and frameworks to create, implement and update a strategic plan to shape the future and guide an entrepreneurial organization on its path to success. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENTP 6858 - Innovation in the Social Sector

Summer 2010 Registration **ENTP 6858**

This course will introduce you to the context, models, trends, opportunities and challenges in social entrepreneurship. Provide you with the framework and tools to develop an opportunity analysis for a social venture of your choice. Engage you in learning community and collaboratively develop a deeper understanding of this emerging field. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENTP 6860 - Business Planning for Social Entrepreneurs

Summer 2010 Registration **ENTP 6860**

Strategic planning is a key process both in new and existing organizations. The plan is a road map for achieving your organizational goals and is a vehicle for thinking about, discussing, researching and analyzing your strategies for sustainability. It is a living document that helps you plan for the future, measure your achievements, manage your risk and stay focused. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENTP 6862 - Strategic Web Development

Summer 2010 Registration **ENTP 6862**

This course teaches students how to create a web presence that will support the purpose of the organization and help fuel the growth of the venture. The course covers the importance of website visibility to new business operations and the basics of designing and implementing web sites. It also covers how to utilize search engines, social networks, blogs and other online tools to support and promote your business. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENTP 6930 - Bioscience Internship

Summer 2010 Registration **ENTP 6930**

The Bard Center for Entrepreneurship Bioscience Internship Program is intended to provide entrepreneurship students with outstanding real world business experience in emerging Colorado bioscience companies. Business graduate students will use their skills in the area of marketing, accounting, management, information systems and finance and apply them to current business needs of the Bioscience companies. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENVS 1042 - Introduction to Environmental Sciences

Summer 2010 Registration **ENVS 1042**

This laboratory or survey course develops a basic understanding of ecological relationships and environmental systems. Issues such as the effects of human activities on earth's environment, extinction or diversity, greenhouse effect, hazardous or toxic wastes and human population growth are discussed. **Semester Hours:** 4to 4**GT**

Pathways Category Key: GT-SC1

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENVS 1342 - Introduction to Environment and Society

Summer 2010 Registration **ENVS 1342**

Overview of perspectives on environmental issues within the context of sustainable development and taking a systems approach. The focus is on social science approaches to explore the human footprint on the earth, environmentalism, scientific uncertainty, policy creation and social change. **Semester Hours:** 3to 3**GT Pathways Category Key:** GT-SS2

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENVS 2939 - Internship/Cooperative Education

Summer 2010 Registration **ENVS 2939**

Experiences involving application of specific, relevant concepts and skills in supervised employment situations. Prereq: 15 hours of 2.75 GPA. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENVS 3082 - Energy and the Environment

Summer 2010 Registration **ENVS 3082**

For students of various backgrounds who wish to increase their understanding of the environmental and technical issues of supplying the energy demands of our society. Alternative energy sources and conservation are explored as solutions to promote a

sustainable society. Prereq: One course in college science or mathematics. Cross-listed with PHYS 3082. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ENVS 3500 - Topics in Environmental Sciences

Summer 2010 Registration **ENVS 3500**

Note: Topics may vary from one offering to the next. **Semester Hours:** 1to 6
Registration is changing. Visit our website for details ucdenver.edu/registration.

ENVS 4210 - Mining and the Environment

Summer 2010 Registration **ENVS 4210**

Mineral resources such as metals have played an important role in human civilization. However, the extraction, processing, and use of metals have left a legacy of damage to the environment and human health. These impacts and their mitigation are examined. Prereq: One course in college mathematics or science. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ENVS 4500 - Topics In Environmental Sciences

Summer 2010 Registration **ENVS 4500**

Note: Topics may vary from one offering to the next. Prereq: Varies according to the topic. **Semester Hours:** 1to 6
Registration is changing. Visit our website for details ucdenver.edu/registration.

ENVS 4840 - Independent Study: ENVS

Summer 2010 Registration **ENVS 4840**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENVS 4995 - Travel Study

Summer 2010 Registration **ENVS 4995**

Rigorous yet flexible fieldwork-based experience exploring geographical and environmental phenomena in diverse world locations. Course begins with intensive regional and methodological introductions, followed by on location field investigations in environmental analyses, cultural studies, GIS applications, tourism evaluation and/or hazards assessment. Prereq: GEOG 1202 and GEOG 1302, or permission of instructor. Cross-listed with ENVS 5995, GEOG 4995, and GEOG 5995. **Semester Hours:** 3to 9
Registration is changing. Visit our website for details ucdenver.edu/registration.

ENVS 5010 - Landscape Geochemistry

Summer 2010 Registration **ENVS 5010**

A holistic approach to studying the role chemical elements play in synthesis/decomposition cycles, and the resultant environment from interaction of the lithosphere with the hydrosphere, atmosphere, biosphere, and pedosphere during geological and ecological timeframes, together with anthropogenic activities. Prereq: Introductory college-level physical geography or environmental science course or permission of instructor. Cross-listed with GEOG 4010/GEOL 4010. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENVS 5020 - Earth Environments and Human Impacts

Summer 2010 Registration **ENVS 5020**

Basic concepts describing earth's biomes and physical environment are presented in a systems context. Global warming assessment, from both political and scientific perspectives, is then presented. Model visualization of these concepts to consider human impacts on Earth's biomes is discussed. Earth system viewpoint, having links of Earth's biomes to oceans and atmosphere, completes the course discussion. Cross-listed with GEOG 4020, GEOL 4020. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENVS 5030 - Environmental Geology

Summer 2010 Registration **ENVS 5030**

Applies geological information to interactions between people and the physical environment. Increasing awareness of its importance in our society means that this is an expanding field as companies are required to address the environmental consequences of their actions. Prereq: Entry into MSES program, senior standing in sciences or geography, or permission of instructor. Cross-listed with GEOL 4030 and 5030. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENVS 5340 - Multicultural Science Education

Summer 2010 Registration **ENVS 5340**

This course examines literature in science education related to multicultural issues. Topics will be framed by an understanding of equity in diverse, urban classrooms and how it informs curriculum and instruction. Cross-listed with ELED/SECE 5340. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENVS 5403 - Unsaturated Zone Hydrology

Summer 2010 Registration **ENVS 5403**

Focuses on water and contaminant transport through the unsaturated zone, infiltration and drainage, and heat and gas transport. Students learn to design, perform field installation, and collect data in order to model and predict contaminant movement on/off site. Prereq: Chemistry, physics, calculus or permission of instructor. Cross-listed with GEOL 4402. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENVS 5410 - Aquatic Chemistry

Summer 2010 Registration **ENVS 5410**

Course objectives are to: (1) identify and understand chemical and physical principles and processes that control the composition of natural water, (2) prepare students to critically evaluate scientific literature and experimental design related to water quality and environmental remediation, and (3) examine the validity of environmental water data. Prereq: Graduate status and general chemistry and/or CHEM 4700. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENVS 5500 - Topics in Environmental Sciences

Summer 2010 Registration **ENVS 5500**

Topics may vary from one offering to the next. **Semester Hours:** 1to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENVS 5600 - Applied Statistics for the Natural Sciences

Summer 2010 Registration **ENVS 5600**

Surveys statistical techniques including: quick review of basic statistics, tests for normality and outliers, display of data; simple and multiple regression; ANOVA and its relation to regression. Emphasis on computer or stat-pak analysis and interpretation of statistical results. Prereq: College algebra and GEOG 3080, or consent of an instructor. Cross-listed with GEOG 4770, GEOL 4770, 5770. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENVS 5620 - Health Risk Communication

Summer 2010 Registration **ENVS 5620**

Acquaints students with contemporary theory, research, and practice in health risk communication. Cross-listed with COMM 5620, 4620, HBSC 5620, 4620. **Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENVS 5730 - Air Quality Modeling and Analysis

Summer 2010 Registration **ENVS 5730**

Emphasizes the use of air dispersion modeling tools. Topics include: sources and effects of air pollution, use of the WWW, and analysis of modeling results. Note: For graduate students in environmental sciences or engineering, and for those working in the environmental field. Prereq: Graduate standing.

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENVS 5840 - Independent Study: ENVS

Summer 2010 Registration **ENVS 5840**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENVS 5939 - Cooperative Education

Summer 2010 Registration **ENVS 5939**

Semester Hours: 1to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENVS 5995 - Travel Study

Summer 2010 Registration **ENVS 5995**

Rigorous yet flexible fieldwork-based experience exploring geographical and environmental phenomena in diverse world locations. Course begins with intensive regional and methodological introductions, followed by on-location field investigations in environmental analyses, cultural studies, GIS applications, tourism evaluation and/or hazards assessment. Prereq: GEOG 1202 and GEOG 1302, or permission of instructor.

Cross-listed with ENVS 4995, GEOG 4995, and GEOG 5995.

Semester Hours: 3to 9
Registration is changing. Visit our website for details ucdenver.edu/registration.

ENVS 6000 - Environmental Sciences Seminar

Summer 2010 Registration **ENVS 6000**

Student and faculty presentations of UCDHSC research projects and other current environmental sciences topics. All environmental sciences students are encouraged to attend, but credit is given only to students who present seminars. Two semesters of this course are required to receive a M.S. in Environmental Science degree: these students must register for this seminar and give presentations the first semester they are in the M.S.E.S. program and the semester in which they defend their master's project. Prereq:

Must be an M.S. in Environmental Science student. **Semester Hours:** 1to 1
Registration is changing. Visit our website for details ucdenver.edu/registration.

ENVS 6002 - Environmental Sciences Seminar

Summer 2010 Registration **ENVS 6002**

Introduces research and professional development in the environmental sciences, focusing on current issues and trends in the field, methods of developing research and project proposals, and defense of a proposal written during the semester. Students are introduced to the environmental sciences faculty and their research programs. Prereq: Must be an MS Environmental Science student or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENVS 6200 - Risk Assessment

Summer 2010 Registration **ENVS 6200**

The process of determining the likelihood and extent of harm that may result from an activity or event. Topics covered are: hazard identification, dose-response evaluation, exposure assessment, and risk characterization. The subjects of risk management, risk perception, and risk communication are also discussed. Prereq: Graduate standing or permission of instructor. Cross-listed with CVEN 5494, HBSC 7340. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENVS 6210 - Human Health and Environmental Pollution

Summer 2010 Registration **ENVS 6210**

Examines the roles of technology and society in the etiology and control/prevention of adverse health outcomes associated with releases of toxic substances. Examples come from experience and the literature on occupational cancer and reproductive hazards, occupational and environmental regulation of hazardous wastes, air, and water pollution. Cross-listed with HBSC 7210. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENVS 6220 - Toxicology

Summer 2010 Registration **ENVS 6220**

Introduces the field of toxicology. Emphasizes the mechanisms by which chemicals produce toxic effects and the methods for assessing toxicity. Note: Designed for students in the environmental sciences and occupational health fields. Prereq: One year college chemistry and one year college biology. Cross-listed with HBSC 7360. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENVS 6230 - Environmental Epidemiology

Summer 2010 Registration **ENVS 6230**

Provides a basic understanding of the methods used to study the effects on human health of exposures to physical, chemical, or biological factors in the external environment. The course explains the use of epidemiologic methods through a problem solving approach to investigating environmental health case studies. Prereq: A basic statistics course and graduate standing or permission of instructor. Cross-listed with HBSC 7310. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENVS 6840 - Independent Study: ENVS

Summer 2010 Registration **ENVS 6840**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENVS 6950 - Master's Thesis

Summer 2010 Registration **ENVS 6950**

Semester Hours: 1to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

ENVS 6960 - Master's Report

Summer 2010 Registration **ENVS 6960**

Semester Hours: 3to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

EPSY 5000 - Psychological Foundations of Education

Summer 2010 Registration **EPSY 5000**

Surveys the results of psychological inquiry with emphasis on applications to educational practices. Major topics are motivation, behavior, learning, development, measurement, and characteristics of teachers and students. **Semester Hours:** 2to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

EPSY 5020 - Advanced Psychological Foundations of Education

Summer 2010 Registration **EPSY 5020**

Selected topics in educational psychology are examined; theoretical issues, current research and applications assume the primary emphasis. The course is intended primarily for students who have had prior professional experiences in teaching and psycho-educational settings. Topic areas addressed include research on intelligence,

development, motivation, objective analyses of behavior, and learning. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

EPSY 5050 - Children's Thinking

Summer 2010 Registration **EPSY 5050**

A review of the psychology of children's thinking emphasizing developmental changes in modes of thought. Topics include conceptual behavior, problem solving, intelligence, creativity, humor, play and others. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

EPSY 5100 - Advanced Child Growth and Development

Summer 2010 Registration **EPSY 5100**

Systematic study of the major theories of child growth and development. Focuses on current research regarding infants and children and the implication of such research for education. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

EPSY 5110 - Human Learning

Summer 2010 Registration **EPSY 5110**

a review of the research on human learning, including related topics such as information processing and motivation. Various theories of learning are examined in-depth, and their applications to teaching and practices in schools (and in other educational settings) are considered. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

EPSY 5120 - Behavior Analysis

Summer 2010 Registration **EPSY 5120**

A systematic survey of current theory in learning and behavior. The course emphasizes analysis of behavior and behavior change via reinforcement schedules. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

EPSY 5140 - Advanced Adolescent Growth and Development

Summer 2010 Registration **EPSY 5140**

Systematic study of the major theories of adolescent growth and development. Focuses on current research regarding adolescents and the implications of the research for education. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

EPSY 5160 - Behavior Disorders in Exceptional Children

Summer 2010 Registration **EPSY 5160**

An in-depth study of the psychological, social, and behavioral problems of exceptional learners. Topics include identification, etiology, educational assessment and strategies, non-educational intervention, parent involvement, programming and evaluation. Attention is given to current research and its applications. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

EPSY 5170 - Behavior Analysis and Intervention

Summer 2010 Registration **EPSY 5170**

An application-oriented course that focuses on the development of social and affective skills for children and adolescents. Students gain actual experiences in the analysis and implementation of a variety of behavioral, ecological and psycho-educational interventions. Prereq: EPSY 5160 or permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

EPSY 5180 - Psychology of Gifted, Talented and Creative Children

Summer 2010 Registration **EPSY 5180**

Examines the nature of gifted, talented, and creative children from an educational psychology perspective. Topics addressed include historical antecedents, identification, characteristics of such children, research initiatives, measurement issues, relevant programs and teaching strategies. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

EPSY 5200 - Social Psychology of Learning

Summer 2010 Registration **EPSY 5200**

An analysis of social-psychological concepts, such as self-concept, attitude development, person perception, group processes and related phenomena. Applications to education and other settings are considered. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

EPSY 5220 - Adult Learning and Education

Summer 2010 Registration **EPSY 5220**

Surveys theories and principles of adult learning and adult education with emphasis on practical applications and design of programs of instruction for adult learners. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

EPSY 5240 - Cognition and Instruction

Summer 2010 Registration **EPSY 5240**

Explores recent developments in cognition and their implications for instructional practices. Includes theory and research in cognitive psychology and resultant educational practices. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

EPSY 5260 - Child Study and Observation

Summer 2010 Registration **EPSY 5260**

Involves extensive, systematic observation of young children. Recorded observations are analyzed in terms of child development theories, children's background, setting variables, and are then presented in written and elaborated form. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

EPSY 5500 - Student Teaching

Summer 2010 Registration **EPSY 5500**

Involves an extended period (usually one school year) of apprenticeship teaching under the daily supervision of mentor/master teachers. Over time, the student discusses teaching strategies with the mentor and a university supervisor--and takes on increasing responsibility for the conduct of the classroom. Prereq: Enrollment in a teacher licensure program. **Semester Hours:** 2to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

EPSY 5800 - Workshop: School Applications of Educational Psychology

Summer 2010 Registration **EPSY 5800**

Research, development, and other scholarly activities in educational psychology are studied and reviewed. Applications are then made to school and other educational settings, with student practice and utilization of techniques emphasized. **Semester Hours:** 1to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

EPSY 5840 - Independent Study

Summer 2010 Registration **EPSY 5840**

Semester Hours: 1to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

EPSY 5920 - Readings in Educational Psychology

Summer 2010 Registration **EPSY 5920**

Semester Hours: 1to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

EPSY 6000 - Seminar in Educational Psychology

Summer 2010 Registration **EPSY 6000**

Examines classic research, major trends, and personalities in the field of educational psychology, broadly conceived. Also includes the history of the field, major divisions in educational psychology, professional organizations, and (as appropriate) the teaching of educational psychology. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

EPSY 6120 - Family Dynamics

Summer 2010 Registration **EPSY 6120**

Review and analysis of issues related to families with exceptional or at-risk young children. Topics include coping skills, family involvement, parent-child interaction, and sources of support. Special attention is given to current research and its application to early intervention. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

EPSY 6170 - Assessment of Infants Who are At-Risk

Summer 2010 Registration **EPSY 6170**

Provides classroom and field-based experience in the assessment of young children, birth to three years. Topics include selection, administration and interpretation of a variety of tests. Norm-referenced and criterion-referenced tests and observational methods are included. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

EPSY 6200 - Human Development Over the Life Span

Summer 2010 Registration **EPSY 6200**

An inquiry into the experience and meaning of human development over the full span of life. Both analytical and reflective modes of exploration are utilized to approach the study of personhood and the courses and themes of life. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

EPSY 6250 - Advanced Abnormal Psychology

Summer 2010 Registration **EPSY 6250**

The major objective of this course is to help the student develop a professional level of understanding of the major disorders commonly subsumed under the term

"psychopathology" and related treatments. Classification of disorders in the DSM IV is utilized. Cross-listed with CPCE 6250. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

EPSY 6350 - Theories of Personality Development and Change

Summer 2010 Registration **EPSY 6350**

Advanced course in personality theory intended to assist students in becoming aware of their personal theory of personality and its implications for change. Students are introduced to an array of personality theories, taught to recognize the assumptions of each and their mechanism for change, and taught the implications of each for personal growth and therapy. Cross-listed with CPCE 6350. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

EPSY 6500 - Student Teaching: Implementation and Reflection

Summer 2010 Registration **EPSY 6500**

Involves an extended period (usually one school year) of apprenticeship teaching under the daily supervision of mentor/master teachers. Over time, the student discusses teaching strategies with the mentor and a university supervisor--and takes on increasing responsibility for the conduct of the classroom. Additionally, students meet periodically with professors in seminars to relate their classroom experiences, reflect on their generality, and review pertinent (especially psychological) research. Prereq: Enrollment in a teacher licensure program. **Semester Hours:** 2to 4
Registration is changing. Visit our website for details ucdenver.edu/registration.

EPSY 6600 - Human Motivation

Summer 2010 Registration **EPSY 6600**

Reviews the research on human motivation. Various theories of human motivation are examined in-depth, and their applications are considered for both teacher and learner in educational settings, primarily (and, in other settings, secondarily). Prereq: EPSY 5020 or permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

EPSY 6840 - Independent Study: EPSY

Summer 2010 Registration **EPSY 6840**

Semester Hours: 1to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

EPSY 6910 - Practicum in Educational Psychology

Summer 2010 Registration **EPSY 6910**

Field-based experiences in settings (schools, businesses, governmental agencies, special projects) that are linked closely to the student's professional objectives. Requires a minimum of 150, 225 or 300 clock hours under supervision (two-four credit hours, respectively). Prereq: Permission of instructor. **Semester Hours:** 2to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

EPSY 6950 - Master's Thesis

Summer 2010 Registration **EPSY 6950**

Semester Hours: 4to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

EPSY 7601 - Special Topics: Laboratory in Educational Leadership and Innovation

Summer 2010 Registration **EPSY 7601**

Laboratories are organized by professors to engage students in on-going research programs. They provide opportunities for students to extend and apply knowledge and skills developed in course work. The laboratories enable students to complete portfolio requirements and work on doctoral dissertations. Prereq: admission to PhD or M.A. programs; consent of the instructor. **Semester Hours:** 1to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

EPSY 7910 - Educational Psychology Practicum

Summer 2010 Registration **EPSY 7910**

Semester Hours: 2to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

ETST 1111 - Freshman Seminar

Summer 2010 Registration **ETST 1111**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ETST 2000 - Introduction to Ethnic Studies

Summer 2010 Registration **ETST 2000**

Multi-disciplinary survey of contemporary and historical research analyses of the diverse social, economic, political, and cultural facets of African American, American Indian, Asian American, and Latino communities and cultures. **Semester Hours:** 3to 3GT

Pathways Category Key: GT-SS3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ETST 2024 - Race and Ethnic Relations

Summer 2010 Registration **ETST 2024**

Surveys race and ethnicity, facts and myths about great populations, and the social and cultural sources of bias and discrimination. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ETST 2036 - American Indian Cultural Images

Summer 2010 Registration **ETST 2036**

Analysis of images and perceptions of American Indians in American culture, as seen in politics, education, film, photography, advertising, art, literature and the media. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ETST 2105 - African American Contemporary Social Issues

Summer 2010 Registration **ETST 2105**

Exposes students to those areas of intellectual, social, cultural, economic, political, and educational concerns relevant to the African American experience. Principally an introductory survey of primary issues currently affecting the African American population. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ETST 2115 - Genocide in the 21st Century: Darfur and Beyond

Summer 2010 Registration **ETST 2115**

Introduces students not only to the first genocide of the twenty-first century, in which over 400,000 ethnic Sudanese have been forcibly wiped out and millions displaced, but also studies the root cause of genocide and some of the past genocides. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ETST 2125 - The Bi-Racial Family

Summer 2010 Registration **ETST 2125**

Covers specific issues related to the biracial/bicultural family in the U.S., including the socio-cultural factors involved. Parenting concerns and skills for professional application will be included. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ETST 2145 - The Gullah in Novel and Film

Summer 2010 Registration **ETST 2145**

Explores the history and culture of a distinct group of African Americans known as Gullah/Geechee, whose ancestors were brought to the U.S. as part of a specialized and often illegal slave trade that existed in coastal South Carolina and Georgia. **Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ETST 2155 - African American History

Summer 2010 Registration **ETST 2155**

Surveys the history of African Americans. Study interpretations, and analysis of major problems, issues, and trends affecting the African American population from pre-slavery to the present. **Semester Hours:** 3to 3 **GT Pathways Category Key:** GT-HI1

Registration is changing. Visit our website for details ucdenver.edu/registration.

ETST 2165 - Cultural Diversity Awareness in the Workplace

Summer 2010 Registration **ETST 2165**

An analytical assessment aimed at understanding the impact and effectiveness of cultural diversity awareness. Participants focus on understanding their own cultural biases, recognizing the impact of cultural values, and gain an appreciation for the value of diversity in work organizations. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ETST 2294 - Race and the Media

Summer 2010 Registration **ETST 2294**

Virtually all Americans are susceptible to the blatant and subtle socializing and conditioning effects of the modern media (film, television, the internet). Explains the variety of cultural values transmitted through the media, with particular emphasis on racial issues. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ETST 2400 - Issues in Chicano/a Education

Summer 2010 Registration **ETST 2400**

Historical overview of segregation, landmark court cases and immigration policy in the education of Chicano/as in Colorado and nationally from 1920 to the present. The intersection of these issues in the education of undocumented students is also examined. Cross-listed with TCED 2400. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ETST 2496 - American Indian Literature

Summer 2010 Registration **ETST 2496**

Introduces American Indian literature and other expressive forms, with emphasis on their aesthetic, linguistic, psychological, and historical properties, as well as the contemporary social and cultural influences upon native authors and their material. **Semester Hours:**

3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ETST 2606 - The American Indian Experience

Summer 2010 Registration **ETST 2606**

Surveys the relationships between Indian and non-Indian peoples, particularly in the context of the unique interaction between tribes and the federal government. Cross-listed with RLST 2680. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ETST 2840 - Independent Study: ETST

Summer 2010 Registration **ETST 2840**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ETST 2939 - Internship/Cooperative Education

Summer 2010 Registration **ETST 2939**

Experiences involving application of specific, relevant concepts and skills in supervised employment situations. Prereq: 15 hours of 2.75 GPA. **Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ETST 3001 - Urban Sociology

Summer 2010 Registration **ETST 3001**

The city and urban society are examined in terms of social structure, residential and institutional patternings, process of interaction, demographic processes, and patterns of growth and change. Cross-listed with SOCY 3001. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ETST 3002 - Ethnicity, Health and Social Justice

Summer 2010 Registration **ETST 3002**

Surveys core issues contributing to racial or ethnic minority differences in health status. Historical and contemporary U.S. health and social policy, including the areas of environmental health, sexual and reproductive health, children and immigrants, are examined. Cross-listed with HBSC 3002. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ETST 3010 - Conference Participation

Summer 2010 Registration **ETST 3010**

Semester Hours: 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

ETST 3108 - Chicano/a and Latino/a History

Summer 2010 Registration **ETST 3108**

An historical analysis of person's descendant from Mexico and Latin America. Areas of focus include ethnohistorical backgrounds, current interrelations, and social movements in both rural and urban groups. Other topics include: cultural patterns, identity maintenance, social reforms and problems of national incorporation. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ETST 3110 - Indigenous Studies

Summer 2010 Registration **ETST 3110**

Examines how communities in diverse world regions preserve tradition, share knowledge, and respond to influences both within and outside of their immediate environments. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ETST 3129 - Contemporary Latin American Literature

Summer 2010 Registration **ETST 3129**

The best of contemporary Latin American novels. Examines how U.S. policies in Latin America affect literary creation. Note: Taught in English. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ETST 3211 - Hip Hop Music & Culture

Summer 2010 Registration **ETST 3211**

Covers the historical trajectory of hip hop music and culture from inception, aims to restructure stereotypes and offer a deeper perspective into how hip hop defines the identities of individuals as well as the consciousness of the masses within society. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ETST 3216 - Federal Law and American Indians

Summer 2010 Registration **ETST 3216**

Examines the legal and political history of the U.S. in relation to American Indian

Nations. Focuses on specific laws and Supreme Court cases in federal Indian law, with analysis of U.S. policy. There will be some comparison with Indian policies of other countries. Cross-listed with PSCI 3214.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ETST 3224 - U.S. Middle East Culture and Religion

Summer 2010 Registration **ETST 3224**

Explores the history and development of the various major religions, cultures, and ethnic groups in the Middle East, their evolution and interaction in the U.S., and the historical impact and influence of the region, which continues to this day. Study of the region is timely and relevant due to U.S. involvement in various conflicts and peace efforts.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ETST 3230 - African American Family

Summer 2010 Registration **ETST 3230**

Exploration of the African American family social institution. Emphasis on historical roots and African influence is still enmeshed in the functioning of the family in modern society. Factors responsible for the ability of the family to meet the challenging society.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ETST 3254 - Race and Ethnicity in the Inner City

Summer 2010 Registration **ETST 3254**

This dynamic course combines aspects of urban studies and sociology. Contemporary cultural factors of the minority ghetto experience are investigated as elements in urban crisis. Emphasis is placed on possible solutions through government agencies and community organization.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ETST 3272 - Global Media

Summer 2010 Registration **ETST 3272**

Introduction to leading issues in the study of transnational media. The course will focus on the global media environment in the early 21st century, diverse countries, a variety of media, and social issues.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ETST 3274 - Power, Poverty, Culture

Summer 2010 Registration **ETST 3274**

Studies the process that has rendered certain groups poor for generations. Studies African Americans, Whites, Chicanos/as and Latinos/as, and other ethnic groups that have lived in this society in a state of poverty. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ETST 3297 - Social History of Asian Americans

Summer 2010 Registration **ETST 3297**

Introductory-level course surveys the social history of Asian American groups from the mid-19th century to the present. Examines immigration patterns, the development of communities, social and economic problems, and anti-Asian movements and activities. Cross-listed with SOCY 3297. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ETST 3307 - Selected Topics: Asian Americans

Summer 2010 Registration **ETST 3307**

Examines specific topics on Asian Americans to be selected by the instructor and the students. Detailed study of subjects relating to the Asian American experience and communities. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ETST 3350 - Colonial Latin America

Summer 2010 Registration **ETST 3350**

Surveys the creation of colonial empires by Spain and Portugal, 1492-1808. Topics include Native American responses to European incursions, women in colonial society, and slavery in Latin America. Cross-listed with HIST 3350. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ETST 3357 - Asian American Literature

Summer 2010 Registration **ETST 3357**

Readings in this course examine the experiences of men and women in different generations; how each group attempts to maintain traditional values in a foreign land, to assimilate, and to forge a new identity. Includes short stories, poetry, essays, and novels by leading Asian American writers. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ETST 3365 - Aztlan in the United States: Chicano History from 1821

Summer 2010 Registration **ETST 3365**

Explores the impact of U.S. rule on the Southwest, paying particular attention to legal,

economic, and social changes that created new political and cultural identities in the Southwest. Cross-listed with HIST 3365. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ETST 3394 - Literature of Social Protest from an Ethnic Perspective

Summer 2010 Registration **ETST 3394**

The literature of social protest of various ethnic groups is examined from a literary perspective and with reference to political and social theories. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ETST 3396 - History of the American Indian

Summer 2010 Registration **ETST 3396**

Indigenous nations in North America comprise hundreds of diverse cultures. This course examines U.S. Indian policy and how indigenous nations responded; how they creatively adapted, and resisted cultural change; and how they continue to persist culturally, socially, and politically. Cross-listed with HIST 3396. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ETST 3408 - Social Psychology of Latinos/as

Summer 2010 Registration **ETST 3408**

Exposes students to research on Latinos/as in the areas of intelligence and achievement, language and learning ability, attitudes, perception and motivation. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ETST 3567 - Asian American Women

Summer 2010 Registration **ETST 3567**

Examines processes of change in values, roles, and relations of Asian American women, using contemporary and historical readings that address problems such as generational differences, assimilation, and changing roles. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ETST 3574 - Topics in Ethnic Studies

Summer 2010 Registration **ETST 3574**

Topics vary from term to term, based upon interest and availability of instructors in specialized areas. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ETST 3616 - Selected Topics: American Indians

Summer 2010 Registration **ETST 3616**

Detailed study of subjects related to American Indian experience and communities.

Note: Specific topics to be selected by the instructor and students. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ETST 3697 - Contemporary Asian American Issues

Summer 2010 Registration **ETST 3697**

Examines several contemporary Asian American issues, including the adaptation of new immigrants and refugees, economic and educational problems, ethnic identity, intermarriage, anti-Asian discrimination and other civil rights issues, and recent political activism. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ETST 3704 - Culture, Racism and Alienation

Summer 2010 Registration **ETST 3704**

The effects of racism on the personality of participants in racist cultures. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ETST 3794 - Ethnic Diversity in American Literature

Summer 2010 Registration **ETST 3794**

Surveys the cultural perspectives of various ethnic writers and their contributions to American literature. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ETST 3838 - History of the Mexican American in Colorado

Summer 2010 Registration **ETST 3838**

Mexican Americans in Colorado from the 1800's to the present. Topics include founding of Colorado towns, labor strikes, farm worker issues, land and water rights, the Chicano Movement and political power. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ETST 3840 - Independent Study: ETST

Summer 2010 Registration **ETST 3840**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ETST 3842 - Independent Study: ETST

Summer 2010 Registration **ETST 3842**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ETST 3939 - Internship/Cooperative Education

Summer 2010 Registration **ETST 3939**

Designed experiences involving application of specific, relevant concepts and skills in supervised employment situations. Prereq: Junior standing and 2.75 GPA.**Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ETST 4000 - Research Methods in Ethnic Studies

Summer 2010 Registration **ETST 4000**

Emphasizes the acquisition of a variety of data or information collection and analytic skills, especially those applicable to historical and social inquiry in ethnic studies.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ETST 4144 - Indigenous Political Systems

Summer 2010 Registration **ETST 4144**

Surveys political theory and practice in indigenous societies in the Americas. Examines the impact of indigenous political thought on Euro-American politics, especially the U.S. Constitution, and explores the contemporary impact of indigenous people on current politics. Cross-listed with PSCI 4144.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ETST 4146 - Indigenous Politics

Summer 2010 Registration **ETST 4146**

Surveys the status of the world's native peoples and nations, and the role of law and politics in the future of indigenous peoples in the global arena. Examines questions of human rights, economic development, and international law and politics. Cross-listed with PSCI 4146, 5145.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ETST 4156 - The Arab-Israeli Peace Process

Summer 2010 Registration **ETST 4156**

Critical analysis of Arab and Israeli perspectives on the on-going peace negotiations in the Middle East. Historical background and religious-cultural aspects of current problems. Prereq: Upper division standing. Cross-listed with PSCI 4156.

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ETST 4220 - African-American Literature

Summer 2010 Registration **ETST 4220**

Surveys African-American literature with special emphasis on post-Civil War writing. Cross-listed with ENGL 4220 and 5220.

Semester Hours: 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ETST 4411 - Modern Mexico

Summer 2010 Registration **ETST 4411**

Designed to familiarize students with the critical issues of Mexican political, economic and social history. Traces the emergence of independence and the difficult consolidation of an independent nation state. Cross-listed with HIST 4411, 5411.

Semester Hours: 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ETST 4515 - The African American in Politics

Summer 2010 Registration **ETST 4515**

Examines African American politics in the U.S.; the role of African American interest groups, structure and function of African American political organizations, goals and political styles of African American politicians, trends, and the future of African American politics in the United States.

Semester Hours: 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ETST 4555 - International Women's Resistance

Summer 2010 Registration **ETST 4555**

Examines local and international struggles of women to build peace and justice by resisting systems of inequality such as colonialism, racism, patriarchy, globalization, and religious intolerance. Cross-listed with PSCI 4555, PSCI 5555 and WGST

4555.
Semester Hours: 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ETST 4558 - Chicano and Latino Politics

Summer 2010 Registration **ETST 4558**

Analysis of the social, cultural, and economic factors that affect political behavior of Latinos. Special attention is paid to the Mexican American cultural heritage and to relations between Mexican Americans and Anglo Americans. Cross-listed with PSCI 4554. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ETST 4574 - Special Topics

Summer 2010 Registration **ETST 4574**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ETST 4616 - Selected Topics: Chicanos/as and Latinos/as

Summer 2010 Registration **ETST 4616**

Examines various contemporary issues in ethnic studies regarding Chicanos/as and Latinos/as. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ETST 4726 - North American Indian Art

Summer 2010 Registration **ETST 4726**

Surveys major tribal styles of the North American continent. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ETST 4730 - Peoples and Cultures of Sub-Saharan Africa

Summer 2010 Registration **ETST 4730**

Covers various types of societies and civilizations that have existed in sub-Saharan Africa. Explores foragers, pastoralists, agricultural societies, chiefdoms, kingdoms, and empires, as these emerged and interacted with each other. Details their ideas and social orders, including the following topics: race, ethnicity, kinship, politics, economics, religion, magic, witchcraft, sorcery, marriage, age, gender, stratification, art, literature and oral traditions. Also addresses the impact of colonialism, the rise of nations, changes in the post-colonial period, warfare, and the impact of globalism on Africa today. Prereq: Upper division standing. Cross-listed with ANTH 4730 and 5730. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ETST 4768 - Chicano/Chicana Narrative and Social History

Summer 2010 Registration **ETST 4768**

Provides a general, chronological, and thematic introduction to short stories and novels written by U.S. citizens of Mexican descent. Begins with early 20th century narratives by women, continues with the corridor and Post-World War II male writers, and ends with more recent publications by contemporary women writers. Social, historical, and political backgrounds are also emphasized, along with an analysis of the literary techniques and motifs. Cross-listed with ENGL 4768. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ETST 4827 - Women and the Law

Summer 2010 Registration **ETST 4827**

Examines the role of the courts in the development of public policy toward women; how the legal system affects the economic power, family roles, safety and political participation of women. Cross-listed with PSCI 4827 and WGST 4827. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ETST 4840 - Independent Study: ETST

Summer 2010 Registration **ETST 4840**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ETST 4960 - Senior Seminar in Ethnic Studies

Summer 2010 Registration **ETST 4960**

Examines recent research in ethnic studies. Intended to be the capstone course for students minoring in ethnic studies. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FILM 1050 - Video Production/Post-Production I

Summer 2010 Registration **FILM 1050**

Students gain a knowledge of single camera video techniques and are introduced to non-linear digital editing. Course work is hands-on and collaborative, with several projects shot and edited. Learning centers on storytelling, including pacing and aesthetics. Prereq: BA TFVP majors, minors. Cross-listed with THTR 1050. **Semester Hours:** 4to 4
Registration is changing. Visit our website for details ucdenver.edu/registration.

FILM 1060 - Camera/Multi-Media Production

Summer 2010 Registration **FILM 1060**

In a lecture/lab setting, students will develop knowledge of equipment and skills in studio multi-camera production and the use of multi-media for live performances. Working together students will crew, produce and direct multi-camera studio and live productions.

Prereq: BA majors, minors or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FILM 1100 - Introduction to Theatre, Film and Television

Summer 2010 Registration **FILM 1100**

An introduction to dramatic and cinematic texts, styles and productions; students will research and analyze a play and develop it into a film script. They will present their understanding by storyboards and multi-media presentations, exams and written work.

Prereq: Majors, minors or permission of instructor. Cross-listed with THTR

1100. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FILM 1550 - Scriptwriting I

Summer 2010 Registration **FILM 1550**

Each student conceptualizes, designs and creates short dramatic scripts. These scripts are for stage and screen, with production lengths from one to ten minutes. Instruction includes story development through first draft and rewrites, incorporation of critical feedback and the merger of image and idea to convey dramatic concepts. Students compare theatrical and video performance realization. Prereq: Theater/Film major and minors or permission of instructor. Cross-listed with THTR 1550. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FILM 1611 - Acting Lab I

Summer 2010 Registration **FILM 1611**

Students will perform scenes, have required readings and write research papers introducing them to the basic performance skills required for Stage and Screen Acting. This work will provide a foundation and vocabulary for future projects, where students interact with performers. Prereq: BA TFVP majors, minors. Cross-listed with THTR

1611. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FILM 2000 - Film/Video Production II

Summer 2010 Registration **FILM 2000**

Students work in teams to create productions using three chip digital cameras and advanced techniques. Preproduction planning, working with actors and maximizing production values are stressed. Studio and exterior location shoots are included. Prereq:

FILM 1050, 2060, BA TFVP majors, minors. Concurrently. Coreq: FILM 2150. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FILM 2050 - Film/Video Prod/Post II

Summer 2010 Registration **FILM 2050**

Students create productions using three-chip digital cameras and advanced techniques. Preproduction through post-productivity working with actors, and maximizing production values are stressed. Students employ a range of cinematic techniques to tell stories, convey character state of mind, and communicate information and meaning. Note: TFVP majors and minors only, or permission of instructor. Prereq: TFVP 1050, TFVP 1100. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FILM 2060 - Film and Video Lighting and Grip

Summer 2010 Registration **FILM 2060**

Provides an understanding of lighting theory, tools, and techniques for studio and location production. Students use lighting equipment (lights, stands, nets, flags, grids, diffusion, light meters and waveform). The lighting aesthetics addressed in class will influence future work. Note: TFVP majors and minors only, or permission of instructor. Prereq: TFVP 1050, TFVP 1100. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FILM 2090 - Production Management Techniques

Summer 2010 Registration **FILM 2090**

Teaches students various aspects of planning, scheduling and managing both theatre and film productions. There will be lectures, planning exercises, demonstrations and critiques along with theatre and film attendance. Students will plan an event in their field of interest. Prereq: BA TFVP majors, minors. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FILM 2150 - Film and Video Postproduction II

Summer 2010 Registration **FILM 2150**

Students edit the projects filmed in FILM 2000. Cutting for narrative and storytelling are stressed. Importation of sound and visual effects files are covered. Students use professional non-linear digital editing software. Prereq: FILM 1050, THTR/FILM 1100, Theatre/Film majors and minors or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FILM 2500 - Introduction to Screenwriting for Film and Television

Summer 2010 Registration **FILM 2500**

Students learn the basic elements of the craft of creating a script for film or television through exercises such as idea generation, characters, and scene setting. Genre conventions, three act structure, and other foundation elements are addressed for future work. Note: ENGL 1020, ENGL 2030 or ENGL 2154 are recommended. TFVP majors and minors only, or permission of instructor. Prereq: TFVP 1550. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FILM 2640 - Introduction to Digital Effects

Summer 2010 Registration **FILM 2640**

Gain skills and awareness of motion graphics in film/video. Communicate ideas using graphic elements and learn the fundamentals of digital effects, animation, compression, and color correction. Students will be able to devise visual strategies to augment their films. Prereq: TFVP 1100. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FILM 3070 - History of Silent Film Production

Summer 2010 Registration **FILM 3070**

Examines history of cinema from its 19th century origins until the introduction of sound. Studies important trends in the silent era, including the beginnings of film comedy, early documentary, origins of Hollywood narrative, avant-garde cinema, German Expressionism and Soviet Cinema. Note: TFVP majors and minors only, or permission of instructor. Prereq: TFVP 1100. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FILM 3080 - History of Sound Film Production

Summer 2010 Registration **FILM 3080**

Students learn various film genres from early sound period, through the present. Traces the development of the various Hollywood genres- and examines representative Hollywood films and major developments of American films from the post-studio period and filmmakers in other cultures. Note: TFVP majors and minors only, or permission instructor. Prereq: TFVP 1100. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FILM 3100 - History of Film Production I

Summer 2010 Registration **FILM 3100**

Surveys international film history from a production perspective from the origins of the

medium to the development of sound. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FILM 3111 - Shooting Action and Physical Effects

Summer 2010 Registration **FILM 3111**

Examines techniques for shooting action based on the needs of the editor. A workshop for production projects. This course analyzes films, storyboard and shoot projects designed for specific outcomes such as: chase, hand combat and car chases. Prereq: Four college-level courses in film/video production and post-production. (For TFVP majors only) **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FILM 3150 - History of Film Production II

Summer 2010 Registration **FILM 3150**

Surveys international film history from a production perspective, beginning with the introduction of sound to the present. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FILM 3207 - Directing Workshop

Summer 2010 Registration **FILM 3207**

Students work on scene studies rehearsed outside and presented in class. Emphasis is on capturing performance: working with actors and cameras to reveal character, deliver narrative and illuminate subtext. Prereq: Theatre/Film majors, minors or permission of instructor, THTR 1100 or FILM 1100 and THTR 1611 or FILM 1611, 6 college-level courses in film/video production, postproduction and acting. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FILM 3222 - The Film and Video Business

Summer 2010 Registration **FILM 3222**

Covers feature film production, finance, distribution as well as an overview of broadcast, cable, industrial, commercial, internet, music video production, finance, distribution, organization and legal issues. Prereq: THTR 1100 or FILM 1100 and majors, minors or permission or instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FILM 3264 - Advanced Digital Effects

Summer 2010 Registration **FILM 3264**

Cinematography and Post Productions majors study software and create projects with advanced visual effects. With industry standard techniques in animation, applying

compositing, image acquisition and motion graphics. Students will create a variety of projects by the end of the semester. Note: Other majors by permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FILM 3270 - Film/Video Production III

Summer 2010 Registration **FILM 3270**

Involves the scripting, planning, casting, storyboarding, and production of individual student projects to be shot on film or digital video. Emphasis is on storytelling and professional techniques. Prereq: Six college-level courses in film/video production, postproduction and scriptwriting. For TFVP majors only. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FILM 3275 - Film and Video Postproduction III

Summer 2010 Registration **FILM 3275**

Students edit the individual projects shot on film or video FILM 3270, using skills from previous classes. Emphasis on outputting a professional quality narrative product with full audio and visual sweetening. Students benefit from longer format and more complex projects. Note: TFVP majors and minors only, or permission of instructor. Prereq: TFVP 1050, TFVP 1100, TFVP 2050, FILM 3270. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FILM 3300 - Advanced Lighting for Film and Video

Summer 2010 Registration **FILM 3300**

Students master film and video set lighting techniques for studio and locations. Focus is on art, technology, methodology, exposure, instruments, rigging and terminology. Prereq: Six college-level courses in film/video production and postproduction. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FILM 3350 - Editing Aesthetics

Summer 2010 Registration **FILM 3350**

Students study samples of existing films and their own work for artistic and visual merits. Students edit several short films, learn the guidelines for editing and develop the ability to identify the role of rhythm and pacing in films. Note: TFVP majors and minors only, or permission of instructor. Prereq: TFVP 1050, TFVP 1100. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FILM 3375 - Documentary Production

Summer 2010 Registration **FILM 3375**

Students will explore documentary film both in practice and theory. Projects produced in the class will focus on socially conscious stories in and around Denver. Students will also practice the technical aspects of videography and video editing. Note: TFVP majors and minors only, or permission of instructor. Prereqs: TFVP 1050, TFVP 1100, FILM 2050, and FILM 2060. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FILM 3400 - Intermediate Screenwriting

Summer 2010 Registration **FILM 3400**

Emphasis is on creating character, conflict and structure through the use of theme, motifs, subplots, and story tone. Students complete the first act and a 25-page feature film treatment or the first draft of a feature-length script. Note: TFVP majors and minors only, or permission of instructor. Prereq: TFVP 1050, FILM 2500. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FILM 3820 - Production Process

Summer 2010 Registration **FILM 3820**

Part of four course sequence; students gain theoretical and practical applications of the tools, vocabulary and experience in a variety of presentations. Students participate as crew members for both theatrical and film events. They maintain a record/portfolio of their participation. Note: Must be taken 2 times for BA degree. Prereq: Majors, minors and permission of instructor. **Semester Hours:** 2to 2

Registration is changing. Visit our website for details ucdenver.edu/registration.

FILM 3838 - Applications Seminar

Summer 2010 Registration **FILM 3838**

Reflection on the intellectual competencies, artistic capabilities and skill sets gained throughout student's academic career. Course work in this seminar includes investigation of career opportunities and trends in theatre. This course is designed to be an alternative if FILM 3939-Internship is not appropriate or available. Prereq: Senior standing. **Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FILM 3910 - BA Junior Project

Summer 2010 Registration **FILM 3910**

This course consists of structured work and independent work sessions assisting students with portfolio and career path. Students will be required to work on planning an event, either in theatre or film and produce professional portfolio for faculty review. Note: Not for BFA majors. Prereq: BA majors, minors, junior status or permission of instructor.

Cross-listed with THTR 3910. **Semester Hours:** 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

FILM 3939 - Cooperative Education

Summer 2010 Registration **FILM 3939**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FILM 4209 - Advanced Production Management

Summer 2010 Registration **FILM 4209**

Workshop or project-based class. Students serve as Production Manager or First Assistant Director on advance student or professional projects while refining their mastery of scheduling and budgeting software. Prereq: FILM 2010 or FILM 2090, Six college-level courses in film or video production and postproduction. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FILM 4270 - Film and Video Production IV

Summer 2010 Registration **FILM 4270**

Students work on final production project in a major position such as planning, casting, budgeting, and shooting a final professional quality film or video to be edited in FILM 4280 the following semester. Students use skills from previous complex projects. Note: TFVP majors and minors only, or permission of instructor. Prereq: TFVP 1050, TFVP 1100, TFVP 2050, FILM 3270, FILM 3275. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FILM 4280 - Film and Video Postproduction IV

Summer 2010 Registration **FILM 4280**

Students edit longer format and more complex individual project shot on film or video in FILM 4270, using skills from previous classes and outputting a professional quality product with full audio and visual sweetening. Students benefit from more complex projects. Note: TFVP majors and minors only, or permission of instructor. Prereq: TFVP 1050, TFVP 1100, TFVP 2050, FILM 3270, FILM 3275, FILM 4270. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FILM 4350 - Analysis of Contemporary Motion Picture Editing Techniques

Summer 2010 Registration **FILM 4350**

Focuses on analysis of editing techniques, through viewing of contemporary feature

films and episodic television exemplars. The techniques of cutting for character, story, action, comedy and genre is covered citing the work of the top editors of our time. Prereq: Junior standing. Cross-listed with FILM 5350. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FILM 4400 - Advanced Screenwriting

Summer 2010 Registration **FILM 4400**

This course focuses on creating and refining a feature length dramatic script (90-120 pages). Students will view films, read essays and articles, and analyze styles. They will apply these techniques and use this information to improve their own work. Prereq: FILM 3400 or permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FILM 4500 - Writing for Episodic Television

Summer 2010 Registration **FILM 4500**

Explores the constructive and critical process of writing prime-time dramatic television and alternative broadcast platforms. Each student is guided through a series of viewings, readings, and writing exercises culminating with the written completion of television episodes for an original series. Prereq: FILM 2500 or permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FILM 4600 - Topics in Film

Summer 2010 Registration **FILM 4600**

Specialized topics in film and video. Prereq: Permission of instructor. **Semester Hours:** 1to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FILM 4720 - Reel Prep

Summer 2010 Registration **FILM 4720**

Students will work with a faculty member to prepare a sample of the student's creative work and projects in an "Industry standard" format used to secure employment. This work is referred to as an artists "Reel". Note: It is suggested to take this course during your final semester. Prereq: FILM 4270. Prereq/Coreq: FILM 4280. **Semester Hours:** 1to 1
Registration is changing. Visit our website for details ucdenver.edu/registration.

FILM 4840 - Independent Study: FILM

Summer 2010 Registration **FILM 4840**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FILM 4910 - BA Senior Project

Summer 2010 Registration **FILM 4910**

This course consists of structured and independent sessions of advanced work assisting senior students with portfolios and careers. Students will work on planning an event, either in theatre or film and will produce a portfolio to professional standards for faculty review. Prereq: Majors, minors, FILM 3910 and permission of instructor. Cross-listed with THTR 4910. **Semester Hours:** 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

FILM 5350 - Analysis of Contemporary Motion Picture Editing Techniques

Summer 2010 Registration **FILM 5350**

Focuses on analysis of editing techniques, through viewing of contemporary feature films and episodic television exemplars. The techniques of cutting for character, story, action, comedy and genre is covered citing the work of the top editors of our time. Cross-listed with FILM 4350. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FILM 5500 - Writing for Episodic Television

Summer 2010 Registration **FILM 5500**

Explores the constructive and critical process of writing prime-time dramatic television. Each student is guided through a series of viewings, readings, and writing exercises culminating with the written completion of an episode from a current television series. Prereq: FILM 2500 or permission of instructor. Cross-listed with FILM 4500. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FILM 5600 - Topics in Film

Summer 2010 Registration **FILM 5600**

Specialized topics in film and video. Prereq: Permission of instructor. **Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FILM 5840 - Independent Study: FILM

Summer 2010 Registration **FILM 5840**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 1001 - Introduction to Art

Summer 2010 Registration **F A 1001**

The course introduces visual analysis and critical examination of art from prehistory to modern times. Through reading, vocabulary development, group discussions, tests, and research projects, students will learn how to appreciate art and critically evaluate form, content, and context. Note: This course will not satisfy any degree requirements for Visual Arts Majors. **Semester Hours:** 3to 3 **GT Pathways Category Key:** GT-AH1
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 1015 - Interdisciplinary Foundations

Summer 2010 Registration **F A 1015**

Students will work across 2-D, 3-D, and 4-D media to develop interdisciplinary skills, strategies and methodologies for investigating contemporary ideas informed by theories of visual culture. Critical concepts are integrated into creative production through projects, research assignments, critiques and presentations. Note: Students missing the first 2 classes of this course may be administratively dropped. Students will not be allowed to add course if they have missed the first 2 classes. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 1100 - Drawing I

Summer 2010 Registration **F A 1100**

This course explores the act of drawing as a process of visual thought as an initial step to artistic expression. Students will develop an understanding of the basic principles of drawing as a way of learning to see. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 1111 - Freshman Seminar

Summer 2010 Registration **F A 1111**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 1120 - Digital Photography for Non-Majors

Summer 2010 Registration **F A 1120**

Students will learn fundamentals of digital photography through creative assignments that promote a broad understanding of the photographic medium. Topics include digital

camera operation, sizing and resolution, principles of design, and interpreting photographic meaning. This course is designed for non-art majors. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 1140 - Topics in Photography

Summer 2010 Registration F A 1140

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 1150 - Introduction to Photography

Summer 2010 Registration F A 1150

Students learn traditional, film-based photographic practice. Topics such as camera functions, film processing, black and white darkroom printing, color theory and alternative darkroom techniques are explored through demonstrations, critiques, readings and discussions of historical and contemporary photography. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 1400 - Two Dimensional Design

Summer 2010 Registration F A 1400

Focuses on the concepts and visual elements of all forms of two-dimensional art. Students gain an understanding of basic design principles as they analyze and visually articulate formal concerns in viewing contemporary and historical artworks as applied to studio problems. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 1435 - Intro to Electronic Art and Design

Summer 2010 Registration F A 1435

A lecture/art-studio course for high school students that provides an introduction to the computer and its artistic and commercial possibilities. Through projects, lectures, discussions and readings, students explore techniques of production including digital photographic manipulation, sound editing, and web animation. **Semester Hours:** 2to 2

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 1500 - Three-Dimensional Design

Summer 2010 Registration F A 1500

Students explore the elements of art and the principles of design applied to three-dimensional design while developing an understanding of material properties,

techniques, processes and tools. Creative practice is accompanied by written, theoretical and verbal critical thinking skills. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 1600 - Painting Methods and Materials

Summer 2010 Registration F A 1600

This course introduces students to color theory through an exploration of various painting materials/ techniques including: complex color mixing, preparing surfaces, producing studies utilizing different painting mediums, and writings, lectures, and discussions surrounding the scientific and symbolic nature of color. Note: Students missing the first 2 classes of this course may be administratively dropped. Students will not be allowed to add course if they have missed the first 2 classes. Prereq: FINE 1100 Drawing I, 1400 Two-Dimensional Design. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 1810 - Digital Animation Foundations: Producing Animation

Summer 2010 Registration F A 1810

A lecture/lab course that explores the theory, practices and fundamentals of producing 3D animation. Students will explore the foundations of the animation process including the production pipeline, studio organizations, traditional animation techniques, foundational cinematography, storyboarding and character development. Note: Offered through Extended Studies (Continuing and Professional Education) due to separate tuition structure. Acceptance to the Digital Animation Center is competitive by interview/portfolio review with the Area Head for the program. Prereq: A basic knowledge of computer operating systems. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 1820 - Digital Animation Foundations: Introduction to Digital 3D

Summer 2010 Registration F A 1820

A lecture/lab course that explores the foundations of creating digital 3D content. Primary focus is an introduction to current 3D software. Class lectures, demonstrations and hands-on application will expose the student to the expectations for commercial high-end 3D animation production. Note: Offered through Extended Studies (Continuing and Professional Education) due to separate tuition structure. Acceptance to the Digital Animation Center is competitive by interview/portfolio review with the Area Head for the program. Prereq: A basic knowledge of computer operating systems. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 2000 - Life Drawing

Summer 2010 Registration **F A 2000**

This course introduces the student to the human figure, addressing anatomy, movement and proportion. Discussion of historic and contemporary critical methods supplement studio practice. Exploring a variety of drawing media, students expand their drawing skills and relate the principles of composition and design to figure drawing. Note: Students missing the first 2 classes of this course may be administratively dropped. Students will not be allowed to add course if they have missed the first 2 classes. Prereq: FINE 1100, 1400. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 2015 - Intermedia Foundations

Summer 2010 Registration **F A 2015**

Students will develop techniques, strategies and methodologies for investigating contemporary ideas informed by theories of visual culture while implementing critical concepts into creative production centered in digital media. Course work includes creative projects, research assignments, critiques and presentations. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 2020 - Drawing II: Spatial Thinking and Visualization

Summer 2010 Registration **F A 2020**

Building on skills learned in FINE 1100, students explore complex problems in the representation of space. Perceptual and constructed perspective is utilized to create real and invented form. The Golden Mean is studied in master artworks and translated into effective compositions. Note: Students missing the first 2 classes of this course may be administratively dropped. Students will not be allowed to add course if they have missed the first 2 classes. Prereq: FINE 1100, 1400, 2000. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 2100 - The Media of Drawing

Summer 2010 Registration **F A 2100**

This course introduces students to the notion of drawing from life through an exploration of drawing methods/materials in the creation of artist's books- including learning various binding techniques and studying movement and juxtaposition as we draw in and from these books. Note: Students missing the first 2 classes of this course may be administratively dropped. Students will not be allowed to add course if they have missed the first 2 classes. Prereq: FINE 1100 Drawing I, 1400 Two-Dimensional Design. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 2130 - Experiments in Color/Photography for Non-Majors

Summer 2010 Registration F A 2130

Explores both practical and innovative ways to manipulate color materials. Students gain technical mastery in understanding their cameras, using creative camera controls, color balancing film, and exposing color film while creating a portfolio of work that reveals experimental and innovative uses of color photographic materials. Prereq: FINE 1150.

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 2140 - Topics in Photography

Summer 2010 Registration F A 2140

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 2155 - Introduction to Digital Photography

Summer 2010 Registration F A 2155

Students learn digital image manipulation, input and output strategies, and digital camera functions through assignments that emphasize conceptual development. Presentations, readings, projects and class discussions help students gain an understanding of the role of digital imaging in contemporary photography. Prereqs: FINE 1150. Priority given to Photography Majors and Minors.

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 2200 - Painting I

Summer 2010 Registration F A 2200

This course is an introduction to the language of painting. Students will learn to develop composition in layers, working from value to color and from direct observation to abstraction while exploring the range of visual possibilities that painting offers. Note: Students missing the first 2 classes of this course may be administratively dropped. Students will not be allowed to add course if they have missed the first 2 classes.

Prereq: FINE 1015, 1100, 1400, 1600.

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 2210 - Painting II: Figure Painting

Summer 2010 Registration F A 2210

This course is an exploration of representing the human form in pictorial space. Students will gain a knowledge of figural color, proportion, scale and space; and will understand the conceptual and visual weight carried by expressive gesture and figural form. Note: Students missing the first 2 classes of this course may be administratively dropped.

Students will not be allowed to add course if they have missed the first 2 classes.
Prereq: FINE 1015, 1100, 1400, 1600, 2000, 2200, 2600. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 2405 - Introduction to Digital Design

Summer 2010 Registration F A 2405

A project-based exploration of the design potentials of vector, raster and motion based digital media. Through project critiques, discussion and demonstration students will create projects that examine technology as an art medium and a design strategy. Note: Priority seating given to Digital Design and Transmedia majors. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 2415 - Typography Studio

Summer 2010 Registration F A 2415

A studio course that teaches principles of typography and organization that is the foundation of design and artistic practice. Through drawing, editing, arranging and moving typographic forms, students will create projects that examine how typography is used to create meaning. Note: Priority seating given to Digital Design majors. Prereq: FINE 1400 or permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 2500 - Bronze Casting and Metal Sculpture

Summer 2010 Registration F A 2500

Students learn lost wax casting with ceramic shell investment and bonded sand. Modeling, foundry work, centrifugal casting and welding for cast metal is introduced, as is steel fabrication and mixed media. Individual vocabularies are explored and design skills required. Prereq: FINE 1500. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 2510 - Wood and Metal Sculpture

Summer 2010 Registration F A 2510

Wood, metal fabrication and introduction of the found object are premise for the exploration of individual visual vocabularies. Investigation and design are applied towards developing conceptual ideas while students advance skills in the metal and wood studios. Prereq: FINE 1500, FINE 2500 (Can be taken concurrently with FINE 2500). **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 2600 - History of Art I (Survey)

Summer 2010 Registration F A 2600

(This course is an approved Colorado Statewide Guaranteed Transfer Course).
Overview of various cultures of humankind from cave painting to the Renaissance. **Semester Hours:** 3to 3 **GT Pathways Category Key:** GT-AH1
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 2610 - History of Art II (Survey)

Summer 2010 Registration F A 2610

Survey of various cultures of humankind from the Renaissance to the present. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 2810 - Digital Animation Techniques: Surface Modeling

Summer 2010 Registration F A 2810

A lecture/lab course focused on the mastery of creating surface models for digital 3D content. Students will develop skills/knowledge about the processes and techniques for building complex 3D objects with an emphasis on artistic excellence through application of current 3D technologies. Note: Offered through Extended Studies (Continuing and Professional Education) due to separate tuition structure. Acceptance to the Digital Animation Center is competitive by interview/portfolio review with the Area Head for the program. Prereq: FINE 1810,1820 and acceptance into the Digital Animation Center Animation Program. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 2820 - Digital Animation Techniques: Surface Properties

Summer 2010 Registration F A 2820

A lecture/lab course focused on mastery of creating surface textures/materials for digital 3D content. Students will develop skills/knowledge about the processes and techniques for creating realistic 3D textures/materials with an emphasis on artistic excellence through application of current 3D technologies. Note: Offered through Extended Studies (Continuing and Professional Education) due to separate tuition structure. Acceptance to the Digital Animation Center is competitive by interview/portfolio review with the Area Head for the program. Prereq: FINE 1810, 1820 and acceptance into the Digital Animation Center Animation Program. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 2830 - Digital Animation Techniques: Lighting

Summer 2010 Registration F A 2830

A lecture/lab course focused on mastery of lighting the digital 3D environment. Students will develop skills/knowledge about the processes and techniques for creating realistic

3D lighting/lighting effects with an emphasis on artistic excellence through application of current 3D technologies. Note: Offered through Extended Studies (Continuing and Professional Education) due to separate tuition structure. Acceptance to the Digital Animation Center is competitive by interview/portfolio review with the Area Head for the program. Prereq: FINE 2810, 2820, and acceptance into the Digital Animation Center Animation Program. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 2850 - Digital Animation Techniques: 3D Character Creation

Summer 2010 Registration F A 2850

A lecture/lab course focused on mastery of skills for creating digital 3D characters. Students will develop skills/knowledge to shape, mold, transform/articulate, deform digital 3D shapes creating digital characters with an emphasis on artistic excellence through application of current 3D technologies. Note: Offered through Extended Studies (Continuing and Professional Education) due to separate tuition structure. Acceptance to the Digital Animation Center is competitive by interview/portfolio review with the Area Head for the program. Prereq: FINE 2810, 2820 and acceptance into the Digital Animation Center Animation Program. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 2995 - Travel Study Topics

Summer 2010 Registration F A 2995

Created for students doing travel study in a foreign country. Students register through the Office of International Education. **Semester Hours:** 1to 15
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3000 - Intermediate Drawing

Summer 2010 Registration F A 3000

In this course students develop an artistic voice through the creation of a series of work that stretch a chosen concept. Students will explore complex approaches to the picture plane and search our unique motifs, juxtapositions and frames of reference. Note: Students missing the first 2 classes of this course may be administratively dropped. Students will not be allowed to add course if they have missed the first 2 classes. Prereq: FINE 1015, 1100, 1400, 1500, 1600, 2000, 2020, 2015, 2100, 2600, 2610. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3110 - Imaging and Identity

Summer 2010 Registration F A 3110

Experiential grounding in the issues of cultural diversity within the context of artistic

process and art criticism. Focuses on a study of cultural differences through the image of self in art.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3120 - Visual Culture Studies

Summer 2010 Registration F A 3120

Introduces the challenges of exploring images from the perspective of visual culture as influenced by the study of emerging technologies, critical thought and observation.
Prereq: Must have at least two art history survey courses.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3130 - Photography, Optics and Perspectives in Italy

Summer 2010 Registration F A 3130

In this study abroad seminar course, students develop an understanding of their work within the context of the history of art and photography, particularly the artistic and scientific breakthroughs of the Renaissance, by exposing them to strategies and theories exemplified by the remarkably diverse and historically significant artwork that is available in collections in Florence, Italy. (Offered summer only.) Prereq: FINE 1150 and 2155. Students must apply to the study abroad program to enroll in this class. Coreq: FINE 3135.**Semester Hours:** 3to 3**When Offered:** SUMMER
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3135 - Historic Photographic Processes in Italy

Summer 2010 Registration F A 3135

Investigates the relationship between critical concepts and alternative photographic processes in the unique cultural and artistic setting of Florence, Italy. Students create images using historic photographic methods such as salted paper, P.O.P., albumen, photo-polymer gravure and bromoil. (Offered summer term only.) Prereq: FINE 1150 and FINE 2155.**Semester Hours:** 3to 3**When Offered:** SUMMER
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3140 - Postcolonial Art and Theory

Summer 2010 Registration F A 3140

Introduces the art, artists and culture of the postcolonial world as a cultural and historic phenomenon that is continually unfolding. Prereq: Must have at least two art history survey courses.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3150 - Feminism and Art

Summer 2010 Registration **F A 3150**

Introduces students to feminist art, artists and their topical positions. The study of feminist art and theory as a cultural and historic phenomenon are explored and debated.

Prereq: Not less than two art history survey courses. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3160 - Color and Studio Lighting

Summer 2010 Registration **F A 3160**

Students explore traditional color photography, studio lighting, concept development, critical thinking, and expressive uses of the medium. Topics include chromogenic printing, color theory, 4x5 technique and studio lighting. Students gain insight into the creative impact of color on photographic representation. FINE 1150, FINE 2155.

Photography majors must also have completed the Fine Arts Foundation Core including: FINE 1015, FINE 1100, FINE 1400, FINE 1500, FINE 2015, FINE 2600, FINE 2610.

Photography majors and minors must apply to the program to enroll in this class. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3161 - The Silver Fine Print

Summer 2010 Registration **F A 3161**

Students learn advanced black and white darkroom techniques while translating ideas into photographic form. Techniques include the zone system, split filter printing, toning, montage printing, and film/paper choices. Students gain insight into photographic artists, techniques, and movements. Prereq: FINE 1150, FINE 2155. Photography majors must also have completed the Fine Arts Foundation Core including: FINE 1015, FINE 1100, FINE 1400, FINE 1500, FINE 2015, FINE 2600, FINE 2610. Photography majors and minors must apply to the program to enroll in this class. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3162 - The Digital Fine Print

Summer 2010 Registration **F A 3162**

Students learn the fine art of digital printing as it relates to photographic practice and theory. Assignments focus on conceptual development, advanced image manipulation, workflow, and color management. Students gain insight into the role of digital imaging in contemporary photography. Prereq: FINE 1150, FINE 2155. Photography majors must also have completed the Fine Arts Foundation Core including: FINE 1015, FINE 1100, FINE 1400, FINE 1500, FINE 2015, FINE 2600, FINE 2610. Photography majors and minors must apply to the program to enroll in this class. **Semester Hours:** 3to 3

Offered: FALL

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3171 - Concepts and Processes in Photography

Summer 2010 Registration F A 3171

Students develop skills in alternative photographic techniques. Processes covered include cameraless and pinhole photography, reticulation, non-silver printing, enlarged negatives, liquid emulsions and digital/traditional cross-manipulation. Students gain insights into the relationship between ideas and experimental ways of creating images.

Prereq: FINE 1150, FINE 2155, FINE 3161. Photography majors must also have completed the Fine Arts Foundation Core including: FINE 1015, FINE 1100, FINE 1400, FINE 1500, FINE 2015, FINE 2600, FINE 2610. Photography majors and minors must apply to the program to enroll in this class.

Semester Hours: 3to 3**When Offered:** *SPRING*

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3172 - Digital Bookmaking

Summer 2010 Registration F A 3172

Students create handmade artists books using digital technologies. Projects build skills in idea development, use of text and image, digital image manipulation, digital printing, scanning and book binding. Students learn strategies for creating visual narratives through photography. Prereq: FINE 1150, FINE 2155, FINE 3162. Photography majors must also have completed the Fine Arts Foundation Core including: FINE 1015, FINE 1100, FINE 1400, FINE 1500, FINE 2015, FINE 2600, FINE 2610. Photography majors and minors must apply to the program to enroll in this class.

Semester Hours: 3to 3**When Offered:** *SPRING*

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3175 - Creative Commercial Applications

Summer 2010 Registration F A 3175

Students learn how photographers apply creative, technical and conceptual skills to commercial photographic practice. Topics covered may include editorial strategies; studio or location photography; commercial business practices; advertising photography; shooting and lighting techniques; and professional presentation. Prereq: FINE 1150, FINE 2155, FINE 3160. Photography majors must also have completed the Fine Arts Foundation Core including: FINE 1015, FINE 1100, FINE 1400, FINE 1500, FINE 2015, FINE 2600, FINE 2610. Priority given to photography majors and minors. Photography majors and minors must apply to the program to enroll in this class.

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3200 - Intermediate Painting I

Summer 2010 Registration **F A 3200**

In this course, students develop an awareness of historical and contemporary artistic practice. Students create works that stretch a chosen concept, with focus on the study of painterly "Space - deep", shallow, foreshortened, ambiguous, fragmented and in dialog with actual space. Note: Students missing the first 2 classes of this course may be administratively dropped. Students will not be allowed to add course if they have missed the first 2 classes. Prereq: FINE 1015, 1100, 1400, 1500, 1600, 2000, 2015, 2200, 2210, 2600, 2610. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3210 - Intermediate Painting II

Summer 2010 Registration **F A 3210**

In this course, students develop an awareness of historical and contemporary artistic practice. Students will create works that stretch a chosen concept, with focus on a study of narrative "Approaches - including" symbolism, metaphor, juxtaposition, allegory, drama and stilled time. Note: Students missing the first 2 classes of this course may be administratively dropped. Students will not be allowed to add course if they have missed the first 2 classes. Prereq: FINE 1015, 1100, 1400, 1500, 1600, 2000, 2015, 200, 2210, 2600, 2610, 3200. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3230 - Abstract Drawing

Summer 2010 Registration **F A 3230**

This course explores abstract drawing as a focus for creative expression through the concept, methods and techniques of abstraction. Students explore strategies in abstract composition, mark-making and expressive use of materials as they develop a complex visual vocabulary of form. Note: Students missing the first 2 classes of this course may be administratively dropped. Students will not be allowed to add course if they have missed the first 2 classes. Prereq: FINE 1015, 1100, 1400, 1500, 1600, 2015, 2600, 2610, 2000, 2020, 2100. **Semester Hours:** 3to 3 **When Offered:** *SPRING*

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3240 - Abstract Painting

Summer 2010 Registration **F A 3240**

This course introduces the practice of abstract painting as a focus for creative expression and inquiry into the concepts, methods and techniques of abstraction. Students will explore various strategies in abstract composition, expressive use of materials and color interaction. Note: Students missing the first 2 classes of this course may be administratively dropped. Students will not be allowed to add course if they have missed the first 2 classes. Prereq: FINE 1015, 1100, 1400, 1500, 1600, 2000, 2015,

2200, 2210, 2600, 2610.**Semester Hours:** 3to 3**When Offered:** FALL
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3250 - Sculpture: Contemporary Artists and Concepts

Summer 2010 Registration F A 3250

Provides the art student (sculpture majors and non- majors) with a focused opportunity to look at contemporary sculpture, installation and performance art and to examine the philosophical issues, processes and methods motivating practicing artists today. Prereq: FINE 1500, FINE 2600 and FINE 2610.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3260 - Portraiture

Summer 2010 Registration F A 3260

This is an advanced course in portraiture using both drawing and painting media. Working from observation and focusing on the anatomical structure, the artist will gain a greater comm and in portraying complex expressions of the human face. Prereq: FINE 1100, 1410, 2200 and 2000 or permission of instructor.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3300 - Painting and the Printed Image

Summer 2010 Registration F A 3300

The role of technology in the history of painting will be explored in this course. Students will produce works of art that combine photo-mechanical imagery with the hand painted mark by utilizing different types of technology as a tool in combination with painting. Note: Students missing the first 2 classes of this course may be administratively dropped. Students will not be allowed to add course if they have missed the first 2 classes. Prereq: FINE 1015, 1100, 1400, 1500, 1600, 2000, 2015, 2200, 2600, 2610.**Semester Hours:** 3to 3**When Offered:** SPRING
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3310 - Drawing and the Printed Image

Summer 2010 Registration F A 3310

Relationships between history of drawing and technology will be explored in this course. Students will produce mixed media drawings that utilize different types of technology as a tool in the creation of or as inspiration for fine art drawings. Note: Students missing the first 2 classes of this course may be administratively dropped. Students will not be allowed to add course if they have missed the first 2 classes. Prereq: FINE 1015, 1100, 1400, 1500, 1600, 2000, 2015, 2600, 2610.**Semester Hours:** 3to 3**When Offered:** FALL
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3340 - Topics in Studio Art

Summer 2010 Registration F A 3340

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3342 - Topics in Studio Art

Summer 2010 Registration F A 3342

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3343 - Topics in Studio Art

Summer 2010 Registration F A 3343

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3350 - Topics in Multimedia

Summer 2010 Registration F A 3350

Specialized topics are offered in new multimedia technologies, theories, processes and conceptual thinking. Course titles are unique and changing semester to semester.

Prereq: Multimedia majors must have completed all FINE 2000 level classes with a 2.75 GPA or have passed portfolio review. Other majors must have permission of instructor.

(Priority seating given to multimedia majors.) **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3400 - Web Design and Digital Imaging for Non-Majors

Summer 2010 Registration F A 3400

a studio course for non-design-majors that explores the design and creation of web sites for personal and professional use. Through critiques, discussion and research, students learn the basics of digital imaging and illustration as well as principles of user-interface design. Note: class may not be taken by Digital Design majors for credit toward degree. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3405 - Digital Video for Non-Majors

Summer 2010 Registration F A 3405

a studio course for non-design-majors that focuses on the basics of storytelling using digital video. Through class projects, screenings, discussions and readings, students explore the concepts of montage and strategies to develop compelling video for artistic

and commercial purposes. Note: class may not be taken by Digital Design or Transmedia majors for credit toward degree. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3414 - Motion Design I

Summer 2010 Registration F A 3414

A workshop devoted to understanding time based imagery that focuses on utilizing video and motion graphics as a creative communication tool. Students will create projects that explore topics using video, animation, time and motion using a non-linear digital editing software. Note: Priority seating given to Digital Design and Transmedia majors. Prereq: Digital Design majors: passed portfolio review, FINE 2405 and 2415. Digital Design minors: FINE 2405 and 2415. Transmedia: FINE 2405, 2510, 3505 - can be taken concurrently with 3424 and 3438, or permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3415 - Design Studio I

Summer 2010 Registration F A 3415

In a design laboratory students learn to turn ideas into visual solutions through the application of design principles. Through lectures, writings, readings, discussion and critiques of projects assigned students will build visual literacy in relation to digital design. Note: Priority seating given to digital design majors. Prereq: Digital Design majors: passed portfolio review, FINE 2405, 2415 can be taken concurrently with 3414 and 3424. Digital Design minors: FINE 2405 and 2415 or permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3424 - Interactive Media

Summer 2010 Registration F A 3424

A workshop exploring how interactive media can be used to convey a message and deliver information. Through critiques of projects, discussion and research, students will learn principles of user interface design, aesthetics and structure including their potential cultural impact. Note: priority seating given to Digital Design and Transmedia majors. Prereq: Digital Design majors: passed portfolio review, FINE 2405 and 2415. Digital Design minors: FINE 2405 and 2415. Transmedia: FINE 2405, 2510, 3505 - can be taken concurrently with 3414 and 3438 or permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3428 - Design Studio II

Summer 2010 Registration F A 3428

In a studio environment students will develop advanced projects using animation, interactivity and motion graphics to create innovative solutions to design problems. Students will learn to apply design theory to practice through discussion, critiques and assigned projects throughout the semester. Prereq: FINE 3410, 3414, 3424 or permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3434 - 3D Motion Design

Summer 2010 Registration F A 3434

A workshop devoted to 3D as a medium for creating works of art. Through demonstration, discussion, readings and project based explorations, students will learn to navigate and create in the 3D digital environment. Note: Priority seating given to Digital Design and Transmedia majors. Prereq: Digital Design majors: FINE 3410, FINE 3414 and FINE 3424; Digital Design minors and Transmedia majors: FINE 2405, FINE 3414 or permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3438 - Text, Image and Electronic Art

Summer 2010 Registration F A 3438

A workshop-laboratory devoted to examining advanced concepts concerning the role of image and text within time-based and interactive media in design/artistic practices. Through creative investigations, readings and discussion students consider the new and expanding roles of text and image within the electronic sphere. Note: priority is given to Digital Design and Transmedia majors. Prereq: Digital Design majors: FINE 3410, 3414, 3424 and portfolio review. Transmedia: FINE 2405, 2510, 3505 - can be taken concurrently with 3414 and 3424. Other: Permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3441 - Narrative and Experience

Summer 2010 Registration F A 3441

A workshop-laboratory that focuses on narrative structure and its ability to create, control and manipulate viewer and user-experience. Through creative explorations, students will examine issues of narrative, identity, reception and audience and private/public space and develop approaches to creating user-centered works of art and design. Note: Priority seating is given to Digital Design and Transmedia majors. Prereq: Digital Design majors: FINE 3410, FINE 3414 and FINE 3424; Transmedia majors: FINE 3414, FINE 3424 and FINE 3438; Other: Permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3444 - Interactive Media II

Summer 2010 Registration F A 3444

An intense workshop-laboratory devoted to using interactivity as a medium for communicating ideas and information. Through creative investigations, readings and discussions, students will create projects that explore active viewer participation using vector and raster animation, non-linear editing and viewer interaction. Prereq: Digital Design majors: FINE 3410, FINE 3414, FINE 3424, can be taken concurrently with FINE 3434; Transmedia majors: FINE 3414, FINE 3424 or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3450 - Digital Painting

Summer 2010 Registration F A 3450

Digital Painting is a studio designed for student exploration of artistic expression using digital tools for traditional painting and illustration techniques. Prereq: FINE 1100 and all FINE foundation classes. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3454 - Motion Design II

Summer 2010 Registration F A 3454

An intense workshop-laboratory devoted to using time and motion as a medium for communicating ideas and information. Through creative investigations, readings and discussions students will explore linkages between non-linear editing, animation and 3-dimensional animation as used in motion graphics. Prereq: FINE 3434, 3444, and portfolio review. Can be taken concurrently with FINE 3428/3444/3454. Transmedia: FINE 3414, 3424 or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3500 - Modeling and Casting the Figure

Summer 2010 Registration F A 3500

Study of the human figure from life and imagination directs visual vocabulary towards expression three dimensionally. Mold making using rubber, alginate and plaster is introduced for casting in metal, resin, synthetics, plastic, paper and biodegradable materials. Drawing is included. Prereq: FINE 1015, FINE 1100, FINE 1400, FINE 1500, FINE 2015, FINE 2600, FINE 2610, FINE 2500, FINE 2510. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3505 - Sculpture Topics

Summer 2010 Registration **F A 3505**

Developed to cover new technical and conceptual areas of sculpture. Some topics may expand traditional processes, others may introduce new processes and ideas. **Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3510 - Installation Art

Summer 2010 Registration **F A 3510**

Students learn to modify the way a particular space is experienced through material intervention in everyday public or private spaces. Material use ranges from everyday and natural materials to new media such as video, sound, performance, computers and the Internet. Prereq: FINE 1015, FINE 1100, FINE 1400, FINE 1500, FINE 2015, FINE 2500, FINE 2510, FINE 2600, FINE 2610. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3515 - Public Art

Summer 2010 Registration **F A 3515**

Students connect with professional/visiting artists installing public art works on campus for the Auraria Sculpture Park. Public relations, installation techniques, curatorial and administration skills are developed. Students learn to establish, maintain and promote the current sculpture collection on campus. Prereq: FINE 1015, FINE 1100, FINE 1400, FINE 1500, FINE 2015, FINE 2500, FINE 2510, FINE 2600, FINE 2610. **Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3520 - Sculpture: Contemporary Artists and Concepts

Summer 2010 Registration **F A 3520**

Provides the art student (sculpture majors and non-majors) with a focused opportunity to look at contemporary sculpture, installation and performance art, and to examine the philosophical issues, processes, and methods, motivating practicing artists today.

Prereq: FINE 1100, 1500, 2600 and 2610. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3525 - Environmental Sculpture

Summer 2010 Registration **F A 3525**

Students create environmental site-specific work to exist in a certain place. This involves temporary outdoor landscaping combined with permanently site sculptured elements.

The format, the political, the historical, or the social context of the natural environment will be explored. Prereq: FINE 1015, FINE 1100, FINE 1400, FINE 1500, FINE 2500,

FINE 2510, FINE 2600, FINE 2610, FINE 3500, FINE 3510. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3530 - Iron Casting

Summer 2010 Registration F A 3530

Students will learn traditional and innovative mold making techniques for casting iron. Working with lost wax, sand molds and space age materials students will cast ingots molds to final object. Furnace and Cupola design and fabrication techniques are researched. Prereq: FINE 1015, FINE 1100, FINE 1400, FINE 1500, FINE 2015, FINE 2500, FINE 2510, FINE 2600, FINE 2610. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3535 - Sculpture Rendering

Summer 2010 Registration F A 3535

Students apply traditional and mixed media drawing skills, photography and digital reproduction to depict the sculptural object in two and three-dimensional space. Students learn to construct small-scale models and develop sculpture proposals. Drawing as sculpture medium is explored. Prereq: FINE 1015, FINE 1100, FINE 1400, FINE 1500, FINE 2015, FINE 2500, FINE 2510, FINE 2600, FINE 2610. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3600 - Art History Survey III: Non-Western Art

Summer 2010 Registration F A 3600

Introduces the art of non-western cultures through a survey of diverse cultures. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3630 - History of Photography

Summer 2010 Registration F A 3630

Students examine the history of photography from its origins to the present. Emphasis is placed on photography as an artistic medium. Topics covered include important movements, photographers, and technical innovations, as well as photographer's broader role in visual culture. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3631 - Photography: Theory and Criticism

Summer 2010 Registration F A 3631

Students investigate the historical texts of photographic criticism. Readings relate to

photography as a fine art form, concentrating on 1970 to the present. Through discussions, readings and critical writing, students examine and appreciate the significance of photographic theory. Prereq: FINE 3630. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3635 - Photography Now

Summer 2010 Registration F A 3635

Students investigate trends in fine art photography from 1990 through the present. By examining current topics, styles, and techniques students gain insights into contemporary photographic practice and its relationship to the history and future of the medium. Prereq: FINE 3630. **Semester Hours:** 3to 3 **When Offered:** FALL
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3640 - Topics in Art History

Summer 2010 Registration F A 3640

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3644 - Topics in Art History

Summer 2010 Registration F A 3644

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3645 - Aesthetics

Summer 2010 Registration F A 3645

Studies aesthetics in art and art history from a theoretical and historical perspective focusing on ancient, modern and contemporary ideas. This course looks at the cultural, political and social environments that define art. Prereq: Must have at least two survey classes in art history. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3650 - Art Criticism

Summer 2010 Registration F A 3650

Studies art criticism from a theoretical and historical perspective, focusing on ancient, modern and contemporary thought and research. Prereq: Must have at least two survey classes in art history. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3720 - Native American Art

Summer 2010 Registration F A 3720

Includes discussions of traditional Native American art forms by geographical area, the impact that European contact had upon these forms, and the responses of contemporary Native American artists to these issues. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3810 - Digital Animation Studio: Set/Environment Design

Summer 2010 Registration F A 3810

A mid-program capstone studio course focuses on developing a project from preproduction through final product using a standard production pipeline model within a collaborative work environment. Students will design and create high-production value CG set/environment utilizing current 3D technologies. Note: This course is required for all DAC students entering year four of the animation emphasis. It is also open to all visual arts students, subject to course instructor approval, with a sophomore or greater standing. Coreq: FINE 2830, 2850 and Acceptance into the Digital Animation Center Animation Program. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3820 - Digital Animation Techniques: Rigging and Animation

Summer 2010 Registration F A 3820

A lecture/lab course focused on mastery of skills for rigging and animating digital 3D objects/characters. Students explore the processes/techniques of animation rigging, its relationship to the skeletal/muscular system, articulated joints for manipulating character bones, muscle deformations, clothes and facial features Note: Offered through Extended Studies (Continuing and Professional Education) due to separate tuition structure. Acceptance to the Digital Animation Center is competitive by interview/portfolio review with the Area Head for the program. Prereq: FINE 2830, 2840 and acceptance into the Digital Animation Center Animation Program. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3830 - Digital Animation Technique: Character Animation

Summer 2010 Registration F A 3830

A lecture/lab course focused on mastery of skills for animating digital 3D objects/characters. Students explore the process/techniques of key frame/pose-to- pose animating considering character performance, thought, constraints and velocity with an emphasis on artistic excellence through applications of current 3D technologies. Note: Offered through Extended Studies (Continuing and Professional Education) due to separate tuition structure. Acceptance to the Digital Animation Center is competitive by interview/portfolio review with the Area Head for the program. Prereq: FINE 3810, 3820

and acceptance into the Digital Animation Center Animation Program. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3845 - Digital Animation Discovery and Preproduction Seminar

Summer 2010 Registration F A 3845

A seminar course focused on the development and preproduction phases for the DAC senior thesis short. The principle focus of the course will be story development, preproduction activities and organizing the production team and production pipeline for the thesis short. Note: this course is required for all DAC students entering year four of the animation emphasis. It is also open to all visual arts students, subject to course instructor approval, with a sophomore or greater standing. Coreq: FINE 3830 and 3850 for all DAC thesis students. All other visual arts students, sophomore or greater, with permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3850 - Digital Animation Techniques: Dynamic Simulation

Summer 2010 Registration F A 3850

A lecture/lab course exploring the theory/techniques of dynamic and particle simulations for 3D content. Students explore how to develop effects (smoke, fire, steam, explosions) and dynamic materials (cloth), with an emphasis on artistic excellence through application of current 3D technologies. Note: Offered through Extended Studies (Continuing and Professional Education) due to separate tuition structure. Acceptance to the Digital Animation Center is competitive by interview/portfolio review with the Area Head for the program. Prereq: FINE 3810, 3820 and acceptance into the Digital Animation Center Animation Program. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3939 - Internship/Cooperative Education

Summer 2010 Registration F A 3939

Designed experiences involving application of specific, relevant concepts and skills in supervised employment situations. Prereq: Junior standing and 2.75 GPA. **Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 3995 - Travel Study Topics

Summer 2010 Registration F A 3995

Created for students doing travel study in a foreign country. Students register through the Office of International Education. **Semester Hours:** 1to 15

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 4000 - Advanced Drawing I

Summer 2010 Registration F A 4000

This course is the first advanced level study of drawing. Students will explore techniques and develop a rigorous body of drawings that express their concepts and theories through various processes needed in creating an independent body of work. Note: Students missing the first 2 classes of this course may be administratively dropped. Students will not be allowed to add course if they have missed the first 2 classes. Prereq: FINE 1015, 1100, 1400, 1500, 1600, 2000, 2015, 2020, 2100, 2600, 2610, 3000, 3230, 3310. Cross-listed with FINE 5000. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 4010 - Advanced Drawing II

Summer 2010 Registration F A 4010

This course is the second advanced level study of drawing. Students will create a more rigorous and challenging body of work that emphasizes a stylistic development of critical ideas and methodologies that were developed in the first level of advanced drawing. Note: Students missing the first 2 classes of this course may be administratively dropped. Students will not be allowed to add course if they have missed the first 2 classes. Prereq: FINE 1015, 1100, 1400, 1500, 1600, 2000, 2015, 2020, 2100, 2600, 2610, 3000, 3230, 3310, 4020, 4000, 4100. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 4020 - Anatomy for the Artist

Summer 2010 Registration F A 4020

An intensive study of the human figure, focusing on its structure, movement and proportions. Skeletal and muscular systems are explored in depth using the classic texts of artistic anatomy to enhance students' drawings from observation. Note: Students missing the first 2 classes of this course may be administratively dropped. Students will not be allowed to add course if they have missed the first 2 classes. Prereq: FINE 1015, 1100, 1400, 1500, 1600, 2000, 2015, 2020, 2100, 2600, 2610, 3000, 3310. Cross-listed with FINE 5020. **Semester Hours:** 3to 3 **When Offered:** *SPRING*
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 4100 - Painting & Drawing Theory & Practice

Summer 2010 Registration F A 4100

This course focuses on a study of critical art theory from 1900 to now and its effects on art practice. Students read, research, discuss writing, and produce artwork while forming connections between published critical theory and their own creative ideas. Note: Students missing the first 2 classes of this course may be administratively dropped. Students will not be allowed to add course if they have missed the first 2 classes.

Prereq: FINE 1015, 1100, 1400, 1500, 1600, 2000, 2015, 2600, 2610, must have Junior standing, 90 credits completed. **Semester Hours:** 3to 3 **When Offered:** FALL
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 4110 - Science Visualization Projects

Summer 2010 Registration F A 4110

Students work with medicine/science professionals to transform data into creative representations such as animations, video, illustrations, and web pages. Students will gain insight into the multifaceted field of medical and scientific visualization and the exciting relationship between art and science. Note: This course focuses on using existing artistic and technical skills to complete projects. Prereq: 90 credit hours completed, 45 in fine arts including FINE 2015 Intermedia Foundations or permission of instructor. Cross-listed with FINE 5110. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 4140 - Topics in Photography

Summer 2010 Registration F A 4140

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 4195 - Advanced Photography I

Summer 2010 Registration F A 4195

Students create an independent body of photographic work that integrates sophisticated concepts with technical mastery. Through critiques, presentations and discussions, students relate subject matter to historical and contemporary context. Students build expertise in the area of professional development in photography. Prereq: FINE 1150, FINE 2155, FINE 3160, FINE 3161, FINE 3162, FINE 3171, FINE 3172, FINE 3630. Photography majors must also have completed the Fine Arts Foundation Core including: FINE 1015, FINE 1100, FINE 1400, FINE 1500, FINE 2015, FINE 2600, FINE 2610. Photography majors and minors must apply to the program to enroll in this class. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 4196 - Advanced Photography II

Summer 2010 Registration F A 4196

Students create an independent body of photographic work that integrates sophisticated concepts with technical mastery. Through critiques, presentations and discussions, students relate subject matter to historical and contemporary context. Students build expertise in the area of professional development in photography. Prereq: FINE 1150, FINE 2155, FINE 3160, FINE 3161, FINE 3162, FINE 3171, FINE 3172, FINE 3630,

FINE 4195. Photography majors must also have completed the Fine Arts Foundation Core including: FINE 1015, FINE 1100, FINE 1400, FINE 1500, FINE 2015, FINE 2600, FINE 2610. Photography majors and minors must apply to the program to enroll in this class. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 4200 - Advanced Painting I

Summer 2010 Registration F A 4200

This course is the advanced level study of painting where students are to create an independent body of work that expresses an individual vision and direction based on the cumulative experiences and knowledge gained from previous painting and drawing courses. Note: Students missing the first 2 classes of this course may be administratively dropped. Students will not be allowed to add course if they have missed the first 2 classes. Prereq: FINE 1015, 1100, 1400, 1500, 1600 Painting Methods and Materials, 2000 Life Drawing, 2015 Intermedia, 2200 Painting I, 2210 Painting II: Figure, 2600-2610, Art Survey I & II, 3200 Intermediate Painting I, 3210 Intermediate Painting II, 3240 Abstract Painting, 3300 Painting and the Printed Image, 4100 Painting and Drawing Theory & Practice. Cross-listed with FINE 5200. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 4210 - Advanced Painting II

Summer 2010 Registration F A 4210

This course is the second advanced level study of painting where students are to create an independent body of work that expresses an individual vision and direction based on the cumulative experiences and knowledge gained from previous painting and drawing courses. Note: Students missing the first 2 classes of this course may be administratively dropped. Students will not be allowed to add course if they have missed the first 2 classes. Prereq: FINE 1015, 1100, 1400, 1500, 1600 Painting Methods and Materials, 2000 Life Drawing, 2015 Intermedia, 2200 Painting I, 2210 Painting II: Figure, 2600-2610, Art Survey I & II, 3200 Intermediate Painting I, 3210 Intermediate Painting II, 3240 Abstract Painting, 3300 Painting and the Printed Image, 4100 Painting and Drawing Theory & Practice. Cross-listed with FINE 5210. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 4340 - Topics in Studio Art

Summer 2010 Registration F A 4340

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 4350 - Topics in Multimedia

Summer 2010 Registration F A 4350

Specialized topics are offered in new multimedia technologies, theories, processes and conceptual thinking. Course titles are unique and changing semester to semester.

Prereq: Multimedia majors must have completed all required FINE 2000 level classes with a 2.75 GPA or have passed a portfolio review. Other majors must have permission of instructor as course prerequisites may vary depending on course subject matter. Priority seating is given to multimedia majors. Cross-listed with FINE 5350. **Semester Hours: 1 to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 4400 - Design Studio III

Summer 2010 Registration F A 4400

Set up as a collaborative studio course, students learn to identify problems in the cultural and urban environment and design solutions that address those problems. Through discovery and research students will learn how design can be a catalyst for change.

Prereq: Digital Design majors: FINE 3428, FINE 3434, FINE 3444, FINE 3454, can be taken concurrently with FINE 4480, portfolio review or permission of instructor. **Semester Hours: 3 to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 4434 - Virtual Landscapes

Summer 2010 Registration F A 4434

In a studio environment students will explore place in relation to contemporary digital art practice. Through readings, lectures and production of projects assigned, students will create work that addresses the natural, urban and virtual environment. Prereq: Digital Design majors: FINE 3434 and portfolio review. Transmedia: FINE 3434 and 4500. Or permission of instructor. **Semester Hours: 3 to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 4480 - The Practice of Design

Summer 2010 Registration F A 4480

Through lectures, studio visits and research, students will engage the profession and examine the role of the artist as a designer. Projects will focus on resume writing, interview techniques, portfolio and general business practices to prepare students for entering profession or post-graduate studies. Note: Priority seating given to Digital Design majors. Prereq: Digital Design majors: FINE 3428, FINE 3434, FINE 3454, and portfolio review. **Semester Hours: 3 to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 4495 - Design Studio IV

Summer 2010 Registration F A 4495

Through critique, research, writing and discussion, students will critically explore a topic and develop professional quality visual solutions. Students will create work that expresses their personal artistic vision in relation to significant contemporary and historical artists and practice. Prereq: Digital Design majors: FINE 4400, FINE 4480, and portfolio review. Prereq/Coreq: FINE 4950 or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 4500 - Kinetic Sculpture

Summer 2010 Registration F A 4500

Students explore movement and balance in sculptural work using pivot points and motors. Sound, projection, sensors and mechanics provide cause and effect scenarios in conjunction with knowledge, materials, and techniques acquired to date in the program.

Prereq: FINE 1015, FINE 1100, FINE 1400, FINE 1500, FINE 2015, FINE 2500, FINE 2510, FINE 2600, FINE 2610. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 4505 - Performance Art

Summer 2010 Registration F A 4505

Students use the human body as a vehicle and premise to examine social, political and personal concerns through events and situations around conceptual idea, time, space, and a relationship between performer and audience. Site, object and documentation are integral components.

Prereq: FINE 1015, FINE 1100, FINE 1400, FINE 1500, FINE 2015, FINE 2500, FINE 2510, FINE 2600, FINE 2610. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 4510 - Advanced Sculpture

Summer 2010 Registration F A 4510

Individual decision-making is stressed in developing a strong body of work. Competent technical skills and conceptual ideology are expanded to achieve complete visual experiences and development of conceptual ideas.

Prereq: FINE 1015, FINE 1100, FINE 1400, FINE 1500, FINE 2015, FINE 2500, FINE 2510, FINE 2600, FINE 2610, FINE 3500, FINE 3510, FINE 3515, FINE 3525, FINE 3530, FINE 3535, FINE

4500. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 4520 - Performance/Installation in Fine Art

Summer 2010 Registration F A 4520

Individual and collaborative projects, pieces, and events that develop one's attitudes,

trust, and abilities to express through the awareness of space, environment, and the human condition and body. Prereq: FINE 1500.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 4522 - Interdisciplinary Art in Ireland

Summer 2010 Registration F A 4522

The interdisciplinary course introduces students to the methods and concepts of contemporary site-specific art as critical theory through lecture and critique and as practice in the rural/urban landscape and studio along Ireland's County Clare coastline in the Burren region.**Semester Hours:** 6to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 4524 - Topics in Art History

Summer 2010 Registration F A 4524

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 4525 - Museum Studies

Summer 2010 Registration F A 4525

Introduces the student to an understanding of the dynamics of the museum as a creative and intellectual institution for the preservation and display of cultural materials. The opportunities and challenges of working in a museum context are explored. Prereq: Must have at least two survey classes in art history. Cross-listed with FINE 5525.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 4610 - Pre-Columbian Art

Summer 2010 Registration F A 4610

Architecture, sculpture, and painting of the high cultures of Meso-America and the Andean area before the Spanish conquest. Prereq: FINE 2600 or FINE 2610 or permission of instructor. Cross-listed with FINE 5610.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 4620 - American Art

Summer 2010 Registration F A 4620

Studies American art and architecture from the colonial period to the present. Prereq: FINE 2600 or 2610. Cross-listed with FINE 5620.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 4625 - Studio Creative Process

Summer 2010 Registration F A 4625

Provides students with an understanding of the artistic creative process which is learned through an examination of pre-studio, studio and post-studio practices. Prereq: Must have at least two art history survey courses. Cross-listed with FINE 4625. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 4632 - Media History and Aesthetics

Summer 2010 Registration F A 4632

This survey class will present the current and historic impact of media technology on the arts and professional design practice. Through lectures, research and discussion students will become familiar with issues specific to digital media and design. Prereq: Digital Design majors: FINE 3410, portfolio review or permission of instructor. Cross-listed with FINE 5632. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 4650 - Nineteenth-Century Art

Summer 2010 Registration F A 4650

History of European movements of the late 19th century from the French Revolution through Post-Impressionism, with attention to Neoclassicism, Romanticism, Realism, and Impressionism. Prereq: FINE 2600 or 2610. Cross-listed with FINE 5650. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 4660 - Twentieth-Century Art

Summer 2010 Registration F A 4660

Surveys major trends in painting, sculpture, and architecture from Post-Impressionism to the present. Prereq: FINE 2600 or 2610. Cross-listed with FINE 5660. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 4670 - Greek and Roman Art

Summer 2010 Registration F A 4670

Greek art and architecture from Archaic through Hellenistic periods, Etruscan art, Roman art, and architecture from the Republican period to the fall of the Empire. Prereq: FINE 2600 or 2610. Cross-listed with FINE 5670. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 4680 - Art of the Middle Ages

Summer 2010 Registration F A 4680

Treats significant issues and themes related to artistic production in Western Europe from the 4th to the 14th centuries. Prereq: FINE 2600 or FINE 2610 or permission of instructor. Cross-listed with FINE 5680. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 4690 - Renaissance Art

Summer 2010 Registration F A 4690

The art and architecture of Italy and Northern Europe (Flanders, France and Germany) from the late 14th century to the late 16th century. Prereq: FINE 2600 or 2610. Cross-listed with FINE 5690. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 4710 - Baroque and Rococo Art

Summer 2010 Registration F A 4710

History of art in Italy, Spain, France, England, and the Low Countries in the 17th and 18th centuries. Prereq: FINE 2600 or 2610. Cross-listed with FINE 5710. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 4712 - Applied Digital Media

Summer 2010 Registration F A 4712

This lab course provides students with the opportunity to execute practical applications in the use of digital 3D media for commercial and/or non-profit venue. Prereq: Permission of instructor. **Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 4720 - Art of Native America

Summer 2010 Registration F A 4720

Surveys major trends in Native American art across North America. Prereq: FINE 2600 or 2610 or permission of instructor. Cross-listed with FINE 5720. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 4730 - Arts of Japan

Summer 2010 Registration F A 4730

Appreciation and chronological development of the arts of Japan. Emphasis is upon the arts of Shinto and Buddhism as well as the particular Japanese aesthetic. Prereq: FINE

2600 or 2610. Cross-listed with FINE 5730 **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 4740 - African Visual, Verbal and Musical Metaphors

Summer 2010 Registration F A 4740

Introduces students to the visual, verbal and musical traditions of Africa. The artistic traditions of Africa from a comprehensive perspective on the visual cultural are explored. Prereq: Junior standing Cross-listed with FINE 5740. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 4745 - African American Visual Culture

Summer 2010 Registration F A 4745

Thematic exploration of African American art, based on issues of identity. Lectures focus on historical, political, religious and aesthetic aspects of African American visual culture, since the 19th century. Prereq: Junior standing or permission of instructor. Cross-listed with FINE 5745. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 4750 - Arts of China

Summer 2010 Registration F A 4750

Surveys Chinese painting, sculpture, and architecture from the Neolithic period through the present era, including the art of Tibet. Prereq: FINE 2600 or 2610. Cross-listed with FINE 5750. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 4770 - Art of India and Southeast Asia

Summer 2010 Registration F A 4770

Surveys the architecture, sculpture, and painting of India and those areas of Southeast Asia influenced by India, from the period of Mohenjo Dato and Harappa to the present. The Himalayan region will be treated, as will Tantric art in general. Prereq: FINE 2600 or 2610. Cross-listed with FINE 5770. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 4780 - Art of Islam

Summer 2010 Registration F A 4780

Art and architecture of the Muslim world from the time of Mohammed to the present. Prereq: FINE 2600 or 2610. Cross-listed with FINE 5780. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 4785 - Chicano/Chicana Art

Summer 2010 Registration F A 4785

Introduces the student to Chicano/a art and visual artistic traditions among Chicano/a people from a cultural perspective. Prereq: Junior standing. Cross-listed with FINE 5785. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 4790 - Methods in Art History

Summer 2010 Registration F A 4790

Seminar in the nature and purpose of the study of the history of art, in which the student is introduced to basic approaches and various research methodologies in the history of art. Prereq: FINE 2600 or FINE 2610. Cross-listed with FINE 5790. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 4800 - Senior Art Seminar

Summer 2010 Registration F A 4800

Required of Fine Arts majors in the B.F.A. and B.A. studio degree tracks majoring in Painting/Drawing, Photography or Sculpture. Course work covers research into professional practices, business practices, creative practice and career development. Note: Students missing the first 2 classes of this course may be administratively dropped. Students will not be allowed to add course if they have missed the first 2 classes. Prereq: 90 credits completed, 45 credits in fine arts; open to UCD Fine Arts Majors only. Cross-listed with FINE 5800. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 4810 - Digital Animation Studio: Animation Production I

Summer 2010 Registration F A 4810

A mid-program capstone studio course focuses on developing a project from reproduction through final product using a standard production pipeline model within a collaborative work environment. Students will design and create high-production value CG set/environment utilizing current 3D technologies. Note: This course is required for all DAC students entering year four of the animation emphasis. It is also open to all visual arts students, subject to course instructor approval, with a sophomore or greater standing. Coreq: FINE 3830, FINE 3845, FINE 3850, and acceptance into the Digital Animation Center Animation Program. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 4820 - Digital Animation Studio: Animation Production II

Summer 2010 Registration **F A 4820**

The continuation of the two-course capstone production experience preparing DAC students for their animation career. Students will work in a one-on-one mentorship environment focused on completion of the BFINE thesis short and their student "Demo Reel" in preparation for graduation. Note: Offered through Extended Studies (Continuing and Professional Education) due to separate tuition structure. Acceptance to the Digital Animation Center is competitive by interview/portfolio review with the Area Head for the program. Prereq: FINE 4810 and acceptance into the Digital Animation Center Animation Program. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 4840 - Independent Study: FINE

Summer 2010 Registration **F A 4840**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 4950 - BFA Thesis

Summer 2010 Registration **F A 4950**

The BFA thesis course involves the preparation, exhibition and critical faculty response to creative work and self-promotional materials as developed by graduating seniors on the B.F.A. degree track. Note: Students missing the first 2 classes of this course may be administratively dropped. Students will not be allowed to add course if they have missed the first 2 classes. Prereq: 90 credits completed, 45 credit in fine arts; open to UCD Fine Arts Majors only. **Semester Hours:** 1to 1
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 4951 - Bachelor of Art Thesis

Summer 2010 Registration **F A 4951**

Prepares students for creative and original thinking demonstrated through the production of a thesis focused on a selected researched topic in Art History. Prereq: Senior status in art history. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 4990 - Contemporary Art - 1945 To the Present

Summer 2010 Registration **F A 4990**

A lecture for students involving viewing, reading, and discussion of conventions of post 1945 art including painting, photography, sculpture, installation, multi-media and other. Prereq: FINE 2600 and FINE 2610. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 4995 - Travel Study Topics

Summer 2010 Registration F A 4995

Created for students doing travel study in a foreign country. Students register through the Office of International Education. **Semester Hours:** 1to 15

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 5000 - Graduate Drawing

Summer 2010 Registration F A 5000

Students are independently directed through an intensive process of critical investigation of drawing. Students will develop professional creative work through a rigorous exploration of process and content, while researching the role of contemporary drawing in artistic, cultural and social discourse. Note: Students missing the first 2 classes of this course may be administratively dropped. Students will not be allowed to add course if they have missed the first 2 classes. Prereq: Graduate Level Standing. Cross-listed with FINE 4000. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 5020 - Graduate Anatomy for Artists

Summer 2010 Registration F A 5020

An intensive figure drawing course that focuses on structure, movement and proportions. Skeletal and muscular systems are studied using the classic texts of artistic anatomy. A research paper examining the figure in relation to architecture, perspective and pictorial narrative is also required. Note: Students missing the first 2 classes of this course may be administratively dropped. Students will not be allowed to add course if they have missed the first 2 classes. Prereq: Graduate Level Standing. Cross-listed with FINE 4020. **Semester Hours:** 3to 3 **When Offered:** SPRING

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 5110 - Science Visualization Projects

Summer 2010 Registration F A 5110

Students work with medicine/science professionals to transform data into creative representations such as animations, video, illustrations, and web pages. Students will gain insight into the multifaceted field of medical and scientific visualization and the exciting relationship between art and science. Note: This course focuses on using existing artistic and technical skills to complete projects. Prereq: 90 credit hours completed, 45 in fine arts including FINE 2015 Intermedia Foundations or permission of instructor. Cross-listed with FINE 4110. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 5190 - Graduate Photography

Summer 2010 Registration F A 5190

Graduate level project-oriented class with an emphasis on integrating visual and conceptual ideas into a cohesive body of work. The final body of work must demonstrate mastery of technical skills and an understanding of the role of photography in art and contemporary culture. Prereq: FINE 1150, FINE 2155, FINE 3155, FINE 3160, FINE 4195 and FINE 4196. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 5200 - Graduate Painting I

Summer 2010 Registration F A 5200

An intensive painting course for students who want to further their development of an independent body of work beyond the advanced level. Students will produce mature work using self-directed means of rigorous artistic productivity based on previous bodies of work. Note: Students missing the first 2 classes of this course may be administratively dropped. Students will not be allowed to add course if they have missed the first 2 classes. Prereq: Graduate level standing. Cross-listed with FINE 4200. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 5210 - Graduate Painting II

Summer 2010 Registration F A 5210

An intensive painting course for students who want to further their development of an independent body of work beyond the advanced level. Students will produce mature work using self-directed means of rigorous artistic productivity based on previous bodies of work. Note: Students missing the first 2 classes of this course may be administratively dropped. Students will not be allowed to add course if they have missed the first 2 classes. Prereq: Graduate level standing. Cross-listed with FINE 4210. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 5340 - Topics in Studio Art

Summer 2010 Registration F A 5340

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 5350 - Topics in Multimedia

Summer 2010 Registration F A 5350

Specialized topics are offered in new multimedia technologies, theories, processes and

conceptual thinking. Course titles are unique and changing semester to semester.
Prereq: Multimedia majors must have completed all required FINE 2000 level classes with a 2.75 GPA or have passed a portfolio review. Other majors must have permission of instructor as course prerequisites may vary depending on course subject matter.

Priority seating is given to multimedia majors. Cross-listed with FINE 4350.

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 5500 - Graduate Sculpture I

Summer 2010 Registration F A 5500

A tutorial format which asks students to be self-directed. Conceptual ideology is expanded through research connected to projects. Portfolio documentation and presentation are required. Prereq: FINE 1015, FINE 1100, FINE 1400, FINE 1500, FINE 2015, FINE 2500, FINE 2510, FINE 2600, FINE 2610, FINE 3500, FINE 3510, FINE 3515, FINE 3525, FINE 3530, FINE 3535, FINE 4500, FINE 4510. Cross-listed with FINE 4000 level sculpture courses.

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 5510 - Graduate Sculpture II

Summer 2010 Registration F A 5510

A self-directed format where students engage in mentored individualized projects as an extension of FINE 5500, Graduate Sculpture I. Conceptual ideology is expanded through research connected to projects. Portfolio documentation and presentation are required.

Prereq: FINE 1015, FINE 1100, FINE 1400, FINE 1500, FINE 2015, FINE 2500, FINE 2510, FINE 2600, FINE 2610, FINE 3500, FINE 3510, FINE 3515, FINE 3525, FINE 3530, FINE 3535, FINE 4500, FINE 4510, FINE 5500.

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 5522 - Interdisciplinary Art in Ireland

Summer 2010 Registration F A 5522

The interdisciplinary course introduces students to the methods and concepts of contemporary site-specific art as critical theory through lecture and critique and as practice in the rural/urban landscape and studio along Ireland's County Clare coastline in the Burren region.

Semester Hours: 6to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 5524 - Topics in Art History

Summer 2010 Registration F A 5524

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 5525 - Museum Studies

Summer 2010 Registration F A 5525

Introduces the student to an understanding of the dynamics of the museum as a creative and intellectual institution for the preservation and display of cultural materials. The opportunities and challenges of working in a museum context are explored. Prereq: Must have at least two survey classes in art history. Cross-listed with FINE 4525. **Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 5610 - Pre-Columbian Art

Summer 2010 Registration F A 5610

Architecture, sculpture, and painting of the high cultures of Meso-America and the Andean area before the Spanish conquest. Prereq: FINE 2600 or FINE 2610. Cross-listed with FINE 4610. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 5620 - American Art

Summer 2010 Registration F A 5620

Studies American art and architecture from the colonial period to the present. Prereq: FINE 2600 or 2610. Cross-listed with FINE 4620. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 5625 - Studio Creative Process

Summer 2010 Registration F A 5625

Provides students with an understanding of the artistic creative process which is learned through an examination of pre-studio, studio and post-studio practices. Prereq: Must have at least two art history survey courses. Cross-listed with FINE 4625. **Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 5632 - History of Digital Music Media

Summer 2010 Registration F A 5632

Art historical survey and critical discourse of digital and electronic multimedia that covers the influences which have shaped this medium, its major contributors, the technological innovations and cultural impacts on society as an art form and commercial market form.

Prereq: Junior standing or permission of instructor. Cross-listed with FINE 4632. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 5644 - Topics in Art History

Summer 2010 Registration F A 5644

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 5650 - Nineteenth-Century Art

Summer 2010 Registration F A 5650

History of European movements of the late 19th century from the French Revolution through Post-Impressionism, with attention to Neoclassicism, Romanticism, Realism and Impressionism. Prereq: FINE 2600 or 2610. Cross-listed with FINE 4650. **Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 5660 - Twentieth-Century Art

Summer 2010 Registration F A 5660

Surveys major trends in painting, sculpture, and architecture from Post-Impressionism to the present. Prereq: FINE 2600 or 2610. Cross-listed with FINE 4660. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 5670 - Greek and Roman Art

Summer 2010 Registration F A 5670

Greek art and architecture from Archaic through Hellenistic periods, Etruscan art, Roman art, and architecture from the Republican period to the fall of the Empire. Prereq: FINE 2600 or 2610. Cross-listed with FINE 4670. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 5680 - Art of the Middle Ages

Summer 2010 Registration F A 5680

Treats significant issues and themes related to artistic production in Western Europe from the 4th to the 14th centuries. Prereq: FINE 2600 or FINE 2610 or permission of instructor. Cross-listed with FINE 4680. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 5690 - Renaissance Art

Summer 2010 Registration F A 5690

Art and architecture of Italy and Northern Europe (Flanders, France, and Germany) from the late 14th century to the late 16th century. Prereq: FINE 2600 or 2610. Cross-listed

with FINE 4690. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 5710 - Baroque and Rococo Art

Summer 2010 Registration F A 5710

History of art in Italy, Spain, France, England, and the Low Countries in the 17th and 18th centuries. Prereq: FINE 2600 or 2610. Cross-listed with FINE 4710. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 5720 - Art of Native America

Summer 2010 Registration F A 5720

Surveys major trends in Native American art across North America. Prereq: FINE 2600 or 2610 or permission of instructor. Cross-listed with FINE 4720. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 5730 - Arts of Japan

Summer 2010 Registration F A 5730

Appreciation and chronological development of the arts of Japan. Emphasis upon the arts of Shinto and Buddhism as well as the particular Japanese aesthetic. Prereq: FINE 2600 or 2610. Cross-listed with FINE 4730. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 5740 - African Visual, Verbal and Musical Metaphors

Summer 2010 Registration F A 5740

Introduces students to the visual, verbal and musical traditions of Africa. The artistic traditions of Africa from a comprehensive perspective on the visual cultural are explored. Prereq: Junior standing Cross-listed with FINE 4740. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 5745 - African American Visual Culture

Summer 2010 Registration F A 5745

Thematic exploration of African American art, based on issues of identity. Lectures focus on historical, political, religious and aesthetic aspects of African American visual culture, since the 19th century. Prereq: Junior standing or permission of instructor. Cross-listed with FINE 4745. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 5750 - Arts of China

Summer 2010 Registration F A 5750

Surveys Chinese painting, sculpture, and architecture from the Neolithic period through the present era, including the art of Tibet. Prereq: FINE 2600 or 2610. Cross-listed with FINE 4750. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 5770 - Art of India and Southeast Asia

Summer 2010 Registration F A 5770

Surveys the architecture, sculpture, and painting of India and those areas of Southeast Asia influenced by India, from the period of Mohenjo Dato and Harappa to the present. The Himalayan region will be treated, as will Tantric art in general. Prereq: FINE 2600 or 2610. Cross-listed with FINE 4770. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 5780 - Art of Islam

Summer 2010 Registration F A 5780

Art and architecture of the Muslim world from the time of Mohammed to the present. Prereq: FINE 2600 or 2610. Cross-listed with FINE 4780. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 5785 - Chicano/Chicana Art

Summer 2010 Registration F A 5785

Introduces the student to Chicano/a art and visual artistic traditions among Chicano/a people from a cultural perspective. Prereq: Junior standing. Cross-listed with FINE 4785. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 5790 - Methods in Art History

Summer 2010 Registration F A 5790

A seminar in the nature and purpose of the study of the history of art, in which the student is introduced to basic approaches and various research methodologies in the history of art. Prereq: FINE 2600 or FINE 2610. Cross-listed with FINE 4790. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 5800 - Art Seminar

Summer 2010 Registration **F A 5800**

Required of Fine Arts majors in the B.F.A. and B.A. studio degree tracks majoring in Painting/Drawing, Photography or Sculpture. Course work covers research into professional practices, business practices, creative practice and career development.

Note: Students missing the first 2 classes of this course may be administratively dropped. Students will not be allowed to add course if they have missed the first 2 classes. Prereq: Graduate Level Standing. Cross-listed with FINE 4800. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 5840 - Independent Study: FINE

Summer 2010 Registration **F A 5840**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 5939 - Internship/Cooperative Education

Summer 2010 Registration **F A 5939**

Semester Hours: 1to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

FINE 5995 - Travel Study Topics

Summer 2010 Registration **F A 5995**

Created for students doing travel study in a foreign country. Students register through the Office of International Education. **Semester Hours:** 1to 15

Registration is changing. Visit our website for details ucdenver.edu/registration.

FNCE 2939 - Cooperative Education

Summer 2010 Registration **FNCE 2939**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FNCE 3000 - Principles of Finance

Summer 2010 Registration **FNCE 3000**

This course provides an introduction to financial markets and institutions, interest rates and the time value of money, principles of security valuation, concepts of risk and return, costs of capital and capital budgeting. Note: This course is required in the Business Core. A grade of 'C' or better must be earned to receive credit as a core course and to take subsequent courses for which it is a prerequisite. Prereq: MATH 1070 or MATH 1080 and MATH 1110 and DSCI 2010, ACCT 2200, ECON 2012, ECON 2022 and junior

standing. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FNCE 3500 - Management of Business Capital

Summer 2010 Registration **FNCE 3500**

Students learn the basic principles of managing capital in the business firm. Topics include financial statement analysis, management of working capital, theory and management of capital structure and cost of capital. A grade of 'C' or better must be earned to receive credit for this course and to take subsequent courses for which it is a prerequisite. Prereq: MATH 1080, DSCI 2010, ACCT 2220, FNCE 3000 with a grade of 'C' or better. **Semester Hours:** 3to 3 **When Offered:** FASPRSUM

Registration is changing. Visit our website for details ucdenver.edu/registration.

FNCE 3840 - Independent Study: FNCE

Summer 2010 Registration **FNCE 3840**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FNCE 3939 - Internship/Cooperative Education

Summer 2010 Registration **FNCE 3939**

Supervised experiences involving the application of concepts and skills in an employment situation. Prereq: Senior standing and approval of Business advisor. **Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FNCE 4330 - Investment and Portfolio Management

Summer 2010 Registration **FNCE 4330**

In this course students learn about the different types of investment vehicles, including methods to estimate their value and analyze their risk. They will also be introduced to portfolio management, including the identification of objectives and constraints and the analysis and use of investment information. Topics include the functioning of security markets, asset allocation, security valuation, and portfolio analysis. A grade of 'C' or better must be earned to receive credit for the course, and to take subsequent courses for which it is a prerequisite. Prereq: FNCE 3500 (and its prerequisites) and FNCE 4330, FNCE 4350 (which may be taken concurrently). **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FNCE 4350 - Financial Markets and Institutions

Summer 2010 Registration **FNCE 4350**

Focuses on the supply and demand for loanable funds, the process of money creation, the structure of interest rates, and the role of banks and the Federal Reserve in the financial system. Special attention is devoted to the impact of monetary and fiscal policies on interest rates, the flow of funds and economic activity; and the operation of financial markets and institutions. A grade of 'C' or better must be earned in this course to receive credit for the area of emphasis and to take subsequent courses for which it is a prerequisite. Prereq: FNCE 3000. **Semester Hours:** 3to 3**When Offered:** FALL SPR
Registration is changing. Visit our website for details ucdenver.edu/registration.

FNCE 4370 - International Financial Management

Summer 2010 Registration **FNCE 4370**

Financial management in the international environment. Topics include international capital movements; international operations as they affect the financial functions; foreign and international institutions; and the foreign exchange process. Also considers foreign exchange theory and risk management, financial requirements, problems, sources, and policies of firms doing business internationally. A grade of 'C' or better must be earned to receive credit for the course and to take subsequent courses for which it is a prerequisite. Prereq: FNCE 3000. **Semester Hours:** 3to 3**When Offered:** FASPRSUM
Registration is changing. Visit our website for details ucdenver.edu/registration.

FNCE 4500 - Corporate Financial Decisions

Summer 2010 Registration **FNCE 4500**

This is a required capstone course for the financial management emphasis. It uses the case method to develop the analytical and decision making skills of students. Students are required to apply theories and concepts learned in previous finance and accounting classes to real world scenarios. Topical coverage includes financial analysis, planning, control, working capital management, long-term investment and financing decisions and corporate valuation. A grade of 'C' or better must be earned to receive credit towards graduation. Prereq: FNCE 3000, FNCE 3500 and FNCE 4330 all with a grade of 'C' or better and senior standing. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FNCE 4750 - Business Intelligence and Financial Modeling

Summer 2010 Registration **FNCE 4750**

In this course, the student learns to analyze and solve financial problems with spreadsheet models, apply Oracle Financial and Business Intelligence software that is widely used in corporate financial operations and model risk and uncertainty with Monte Carlo software. Prereq: ISMG 2050, FNCE 3000 and ISMG 3000 (or ACCT 3054) with a grade of 'C' or better. Cross-listed with ISMG 4750. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FNCE 4840 - Independent Study: FNCE

Summer 2010 Registration **FNCE 4840**

Semester Hours: 1to 8

Registration is changing. Visit our website for details ucdenver.edu/registration.

FNCE 4950 - Special Topics

Summer 2010 Registration **FNCE 4950**

Research methods and results, special topics and professional development in finance.

Prerequisites vary according to topic and instructor requirements. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FNCE 5939 - Internship or Cooperative Education

Summer 2010 Registration **FNCE 5939**

Supervised experiences involving the application of concepts and skills in an employment situation. Prereq: 21 semester hours and 3.5 GPA. **Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FNCE 6290 - Quantitative Methods for Finance

Summer 2010 Registration **FNCE 6290**

This course provides a statistical foundation for subsequent courses in the Master of Science in Finance program. Major topics include descriptive statistics, probability theory, statistical estimation and inference and regression analysis. The emphasis is on finance applications, such as risk measurement, for portfolio diversification and the "market model". In addition, students develop competence in the use of statistical software packages. This course provides preparation for the statistical portions of the Certified Financial Analyst professional examinations. Note: Students cannot receive credit for both FNCE 6290 and BUSN 6530. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FNCE 6300 - Macroeconomics and Financial Markets

Summer 2010 Registration **FNCE 6300**

Covers the U.S. financial system in the global economy. Specific topics include financial institutions, money creation and monetary policy; the Federal Reserve System and its operation; the international financial system; interest rate determination, yield curves, and their relation to fiscal policy; the role of households and business in financial markets; stock markets; and money markets and instruments. (Required for the M.S. in Finance degree.) Prereq: BUSN 6620 (may be taken concurrently if student has

previous economics coursework). **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FNCE 6310 - Financial Decisions and Policies

Summer 2010 Registration **FNCE 6310**

Emphasizes investment and financing decisions, and the analysis of the financial condition of the firm. Specific topics include capital budgeting, cost of capital, financing mix and strategy, firm valuation and management of working capital. Instruction is by the case method. Prereq: BUSN 6640. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FNCE 6330 - Investment Management Analysis

Summer 2010 Registration **FNCE 6330**

In this course students will learn investment theories and how to apply them to portfolio management. Topics covered include asset allocation, security markets, the analysis and use of investment information, risk analysis and security valuation. This course is required for the M.S. in Finance degree. Prereq: BUSN 6620 and BUSN 6640. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FNCE 6340 - Security Analysis and Firm Valuation

Summer 2010 Registration **FNCE 6340**

Focuses on the application of fundamental analysis techniques to the diagnosis of firms' financial condition; the valuation of publicly traded firms and privately owned businesses; and the valuation of debt and equity securities. These techniques are useful in a variety of situations such as qualifying firms for bank loans or partnerships, valuing firms for mergers and acquisitions and decisions, and the valuation of stocks for investment decisions. Prereq: BUSN 6640 and FNCE 6330. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FNCE 6350 - Financial Innovations

Summer 2010 Registration **FNCE 6350**

Covers financial innovations in fixed income securities, including zero coupon bonds, floating rate instruments and inflation indexed bonds, asset backed securities, structured notes, collateralized mortgage obligations, and the use of interest rate swaps in hedging. The student learns about the markets and pricing of these securities, and how they are used to manage interest rate risk. The course prepares the student for careers in corporate treasury management, structured financing, swaps trading, and mortgage backed securities. Prereq: BUSN 6640 and FNCE 6300. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FNCE 6360 - Management of Financial Institutions

Summer 2010 Registration **FNCE 6360**

Presents an analysis of the structure, markets, regulation, chartering of commercial banks and other financial institutions. Topics include problems and policies of the internal management of funds, loan practices and procedures, investment behavior, deposit and capital adequacy, liquidity and solvency. Analytical methodology for these problems is developed. (Case format) Prereq: BUSN 6640. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FNCE 6365 - Banking Principles and Practices

Summer 2010 Registration **FNCE 6365**

Covers money and capital markets, commercial lending, asset and liability management, loan portfolio management and bank management. This class is only available to Colorado Graduate School of Banking students. Similar material is covered in FNCE 6300 and FNCE 6360. Therefore Business School students must enroll in those courses. Banking students cannot receive credit for FNCE 6300 or FNCE 6360. **Semester Hours:** 3to 9
Registration is changing. Visit our website for details ucdenver.edu/registration.

FNCE 6370 - International Financial Management

Summer 2010 Registration **FNCE 6370**

Addresses financial management in an international context that considers international capital movements and foreign exchange problems, and international operations as they affect financial functions. It reviews foreign and international institutions and the foreign exchange process and considers financial requirements, problems, sources and policies of firms doing business internationally. Prereq: BUSN 6640. Cross-listed with INTB 6372. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FNCE 6372 - Business Forecasting

Summer 2010 Registration **FNCE 6372**

Modern businesses use forecasts in marketing, finance, accounting, human resources management and supply chain and production management decision making. This course focuses on practical application of forecasting techniques, choosing and comparing appropriate methods and applying the results to the business application. Prereq: BUSN 6530 or FNCE 6290. Cross-listed with BUSN 6824 and DSCI 6230. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FNCE 6380 - Futures and Options

Summer 2010 Registration **FNCE 6380**

Covers both speculation and hedging using futures and options. The student learns about futures pricing, how futures are related to the underlying commodities and how to hedge risks. Stock index futures and interest rates futures get particular attention. The course covers the theory and application of option pricing, focusing on the binomial and Black-Scholes models. Option trading strategies such as bull and bear spreads, straddles, strangles, and other popular strategies are discussed. Prereq: BUSN 6640 and FNCE 6330. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FNCE 6382 - Survey of Financial Derivatives: Futures, Options and Swaps

Summer 2010 Registration **FNCE 6382**

This course provides an overview of financial derivatives and their markets. It covers futures, options, interest rate and currency swaps, convertible bonds, asset-backed securities and mortgage derivatives. Diagrams and simple mathematics are used to show how these instruments work and how they are used in corporate financing. This course is a less technical presentation of the topics covered in both FNCE 6350, Financial Innovations and FNCE 6380, Futures and Options. The course is suitable for both MBA and MS-Finance students. However, MS-Finance students who are interested in the deeper knowledge necessary for trading derivatives are advised to take either or both FNCE 6350 and FNCE 6380. Prereq: BUSN 6640. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FNCE 6410 - Real Options and Investment Decisions Under Uncertainty

Summer 2010 Registration **FNCE 6410**

This course introduces the student to the concepts of options and option pricing as applied to the problem of making capital investment decisions for a firm. Firms often face investment decisions that include opportunities and options for future strategy shifts and the adoption of new projects. The methods of real options provide a mechanism to analyze the values of these future opportunities. With this course, the student will learn about the theory and application of real options and learn how to identify, analyze and evaluate real options that are imbedded in many corporate investment situations. Note: This course will fulfill the requirement for an options course in the MS-Finance program. Prereq: BUSN 6640. (Good mathematical and analytical skills are needed.) **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FNCE 6411 - International Corporate Governance

Summer 2010 Registration **FNCE 6411**

Discusses the structure and goals of the modern corporation, the primary governance mechanisms used to help companies achieve these goals, and how and why these roles, goals, and mechanisms vary across nations. The topics to be covered in the course include how share ownership, particularly by institutional shareholders, managerial compensation and board of director activities are being used to improve corporate governance systems. The class compares the Codes of Best Governance Practices from several countries as well as recent innovations in individual company governance rating systems. Prereq: BUSN 6640. Note: Students cannot receive credit for both FNCE 6411 and INTB 6411. Cross-listed with INTB 6411. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FNCE 6420 - Mergers and Acquisitions

Summer 2010 Registration **FNCE 6420**

Examines the processes and decisions by which mergers, takeovers and other corporate restructuring occur, the transactions occur. Analyzes merger and acquisition decisions as part of strategic decision making, and how firms are valued in mergers. Discusses the market for corporate control and the public policy implications of mergers and corporate governance. Prereq: BUSN 6640. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FNCE 6430 - Practical Equity Analysis & Portfolio Management

Summer 2010 Registration **FNCE 6430**

This class focuses on the application of the concepts of portfolio theory and security valuation to the tasks of analyzing security investments and managing a security portfolio. Topics include the economic and financial analysis of the industry, understanding how financial statements are used in security analysis, security valuation methods and portfolio management. Prereq: BUSN 6640 and FNCE 6330. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FNCE 6450 - Short-Term Financial Management

Summer 2010 Registration **FNCE 6450**

This course is a survey of methods for managing short term assets and liabilities. Specific topics include the analysis of the firm's liquidity and cash flow, banking relationships; collection and disbursement systems; management of short term investment and financing; management of receivables, payables and inventory; and short term forecasting. This course is affiliated with the Association of Financial Professionals, allowing students earning at least a 'B' to sit for the Certified Treasury

Professional (CTP-A) exam. Prereq: BUSN 6640. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FNCE 6480 - Financial Modeling

Summer 2010 Registration **FNCE 6480**

Develops and implements financial models for purposes of financial planning and decision making. This course is intended to allow the student to increase her or his knowledge and skill in the development of various types of computer-based financial planning models. The students are exposed to the uses of a variety of computer software packages that can be used for modeling financial planning problems. Prereq: BUSN 6640, knowledge of computer and spreadsheet software. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FNCE 6800 - Special Topics

Summer 2010 Registration **FNCE 6800**

Experimental course offered irregularly for the purpose of presenting new subject matter in finance. Prerequisites vary depending upon topics covered. (Consult the 'Schedule Planner' for semester offerings.) Prereq: BUSN 6640 **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FNCE 6840 - Independent Study: FNCE

Summer 2010 Registration **FNCE 6840**

Instructor approval required. Allowed only under special and unusual circumstances. Regularly scheduled courses cannot be taken as independent study. **Semester Hours:** 1to 8
Registration is changing. Visit our website for details ucdenver.edu/registration.

FNCE 6995 - Travel Study

Summer 2010 Registration **FNCE 6995**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FNDS 5000 - Teaching as a Profession

Summer 2010 Registration **FNDS 5000**

General foundations of education course for pre-service candidates. Provides a broad overview of the historical, sociological, philosophical, and legal foundations of education. Includes an examination of contemporary issues in schooling, school organizational patterns, and the professional rights and responsibilities of the teacher. **Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FNDS 5050 - Critical Issues in American Education

Summer 2010 Registration **FNDS 5050**

Examines the social values and forces in American society which shape or influence the aims, philosophies, methods, content, and problems of the American educational enterprise.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FNDS 5100 - Education in Other Countries

Summer 2010 Registration **FNDS 5100**

Comparative examination of the political, historical, philosophical, sociological, economic, religious and other foundational aspects of education in several selected countries.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FNDS 5410 - History and Philosophy of Modern Education

Summer 2010 Registration **FNDS 5410**

Examines Western intellectual heritage from the 16th to the 20th century; tracing corresponding development of educational theory and practice and its continuing impact on modern society.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FNDS 5420 - History and Philosophy of Education: Twentieth Century America

Summer 2010 Registration **FNDS 5420**

Designed around selected themes from 20th century American social, political, and economic history. Students examine such issues as immigration, racism war, and social reform to identify the larger societal forces, ideas, and values that have shaped contemporary American education. Overriding purpose of the course is the development of an enlarged frame of reference from which to exercise professional judgment. Cross-listed with FNDS 7420.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FNDS 5500 - Contemporary Philosophies of Education

Summer 2010 Registration **FNDS 5500**

Provides an examination of selected contemporary philosophies and their impact on educational thought and practice. Students are challenged to determine their own educational philosophy, while yet recognize and respect the variety of beliefs of

educators. Students are asked to re-examine current educational issues from within the perspectives of different philosophies. Cross-listed with FNDS 7500. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FNDS 5800 - Seminar: Foundations of Education

Summer 2010 Registration **FNDS 5800**

An in-depth exploration of topics, issues, and ideas largely generated by students through their other course experiences in foundations. Prereq: At least one graduate level course in foundations and permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FNDS 5810 - Special Topics

Summer 2010 Registration **FNDS 5810**

Variable credit courses designed to deal with specific areas of content not covered in-depth in other program offerings; e.g., the social structure of the classroom. **Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FNDS 5840 - Independent Study: FNDS

Summer 2010 Registration **FNDS 5840**

Semester Hours: 1to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

FNDS 5920 - Readings in Foundations of Education

Summer 2010 Registration **FNDS 5920**

Critical examination of very recent publications in the field of foundations: books and professional journal publications. Prereq: At least one graduate-level course in foundations and permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FNDS 6350 - Seminar: Foundations of Education

Summer 2010 Registration **FNDS 6350**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FNDS 6600 - Special Topics: Laboratory in Educational Leadership and Innovation

Summer 2010 Registration **FNDS 6600**

Laboratories are organized by professors to engage students in on-going research programs. They provide opportunities for students to extend and apply knowledge and skills developed in course work. The laboratories enable students to complete portfolio requirements and work on doctoral dissertations. Prereq: Admission to M.A. or PhD programs; permission of instructor. Cross-listed with FNDS 7600. **Semester Hours:** 1to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

FNDS 6920 - Readings in Foundations of Education

Summer 2010 Registration **FNDS 6920**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FNDS 6950 - Master's Thesis

Summer 2010 Registration **FNDS 6950**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FNDS 7370 - Dissertation Seminar

Summer 2010 Registration **FNDS 7370**

Semester Hours: 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

FNDS 7420 - History and Philosophy of Education: Twentieth Century America

Summer 2010 Registration **FNDS 7420**

Designed around selected themes from 20th century American social, political and economic history. Students examine such issues as immigration, racism, war, and social reform to identify the larger societal forces, ideas, and values that have shaped contemporary American education. Overriding purpose of the course is the development of an enlarged frame of reference from which to exercise professional judgment. Cross-listed with FNDS 5420. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FNDS 7500 - Contemporary Philosophies of Education

Summer 2010 Registration **FNDS 7500**

Provides an examination of selected contemporary philosophies and their impact on educational thought and practice. Students are challenged to determine their own educational philosophy, while yet recognize and respect the variety of beliefs of

educators. Students are asked to re-examine current educational issues from within the perspectives of different philosophies. Cross-listed with FNDS 5500. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FNDS 7600 - Special Topics: Laboratory in Educational Leadership and Innovation

Summer 2010 Registration **FNDS 7600**

Laboratories are organized by professors to engage students in on-going research programs. They provide opportunities for students to extend and apply knowledge and skills developed in course work. The laboratories enable students to complete portfolio requirements and work on doctoral dissertations. Prereq: Admission to M.A. or PhD programs; permission of instructor. Cross-listed with FNDS 6600. **Semester Hours:** 1to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

FNDS 7840 - Independent Study: FNDS

Summer 2010 Registration **FNDS 7840**

Semester Hours: 1to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

FNDS 7930 - Teaching Internship in Foundations of Education

Summer 2010 Registration **FNDS 7930**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FNDS 8990 - Doctor of Philosophy Dissertation

Summer 2010 Registration **FNDS 8990**

Semester Hours: 3to 10

Registration is changing. Visit our website for details ucdenver.edu/registration.

FNDS 8991 - Doctor of Education Dissertation

Summer 2010 Registration **FNDS 8991**

Semester Hours: 3to 10

Registration is changing. Visit our website for details ucdenver.edu/registration.

FREN 1000 - Introduction to Cultures of the French- Speaking World

Summer 2010 Registration **FR 1000**

Introduces students to the many cultures of the French-speaking world. Taught in

English for accessibility to students from different colleges at the University. The countries studied are: France, its overseas departments (Guadeloupe and Martinique) and territories (Tahiti); Quebec; Senegal; and other African countries. **Semester Hours:** 3to 3 **GT Pathways Category Key:** GT-AH1
Registration is changing. Visit our website for details ucdenver.edu/registration.

FREN 1010 - Beginning French I

Summer 2010 Registration **FR 1010**

Basic grammatical and syntactic structures are introduced, together with an elementary vocabulary and cultural items that allow the student to carry on simple conversations in French. Note: Students may not enroll in any lower division (1000/2000) language skills course in which their level of proficiency exceeds that of the course. Students placing into a course through any means other than following the regular sequence must consult with an appropriate faculty member of the Dept. of Modern Languages prior to enrollment. No previous study of French is required. **Semester Hours:** 5to 5
Registration is changing. Visit our website for details ucdenver.edu/registration.

FREN 1020 - Beginning French II

Summer 2010 Registration **FR 1020**

(Continuation of FREN 1010.) More complex grammatical structures are introduced, and literary and cultural readings are added. Elementary vocabulary and cultural awareness are expanded to enable the student to carry on more complicated conversations. Note: Students may not enroll in any lower division (1000/2000) language skills course in which their level of proficiency exceeds that of the course. Students placing into a course through any means other than following the regular sequence must consult with an appropriate faculty member of the Dept. of Modern Languages prior to enrollment. Prereq: FREN 1010 with a grade of 'C' (2.0) or higher. **Semester Hours:** 5to 5
Registration is changing. Visit our website for details ucdenver.edu/registration.

FREN 1111 - Freshman Seminar

Summer 2010 Registration **FR 1111**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FREN 2110 - Intermediate French I: Grammar Review, Reading and Composition

Summer 2010 Registration **FR 2110**

Designed to further develop all the language skills, with particular emphasis on reading and writing, and to further continue students' introduction to French culture. Students review grammar and vocabulary, read and discuss *Le Petit Prince*, and express their reactions to the text both orally and in writing. Note: Students may not enroll in any lower

division (1000/2000) language skills course in which their level of proficiency exceeds that of the course. Students placing into a course through any means other than following the regular sequence must consult with an appropriate faculty member of the Dept. of Modern Languages prior to enrollment. Prereq: FREN 1020 with a grade of 'C' (2.0) or higher. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FREN 2120 - Intermediate French II: Grammar Review and Conversation

Summer 2010 Registration **FR 2120**

Designed to further develop all the language skills, with particular emphasis on speaking, and to continue students' introduction to French culture. Students review grammar and vocabulary, read and discuss short cultural texts and participate in oral activities intended to increase communication skills. Note: Students may not enroll in any lower division (1000/2000) language skills course in which their level of proficiency exceeds that of the course. Students placing into a course through any means other than following the regular sequence must consult with an appropriate faculty member of the Dept. of Modern Languages prior to enrollment. Prereq: FREN 2110 with a grade of 'C' (2.0) or higher. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FREN 2939 - Internship/Cooperative Education

Summer 2010 Registration **FR 2939**

Experiences involving application of specific, relevant concepts and skills in supervised employment situations. Prereq: 15 hours of 2.75 GPA. **Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FREN 2995 - Travel Study: Amiens, France

Summer 2010 Registration **FR 2995**

An intensive language and culture course, taught in Amiens, France. Students are enrolled in either beginning, intermediate, or advanced courses at the University of Picardie/Jules Verne. Afternoon sessions and weekends include excursions to Paris, the northern coasts, lectures, movies, business tours, discussions, and field trips. Register through the Office of International Education. Prereq: FREN 2110. **Semester Hours:** 0to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

FREN 3010 - French Phonetics and Pronunciation

Summer 2010 Registration **FR 3010**

Helps students acquire speech habits through knowledge of phonetics. Topics include the function of the speech organs, accurate production and recognition of sound, and

the use of phonetic symbols. Note: Students with native or near-native level proficiency in French must consult with the French advisor before enrolling in this course. These students may, in some cases, take this course. The instructor of the course and/or the French advisor reserve the right to determine the level of linguistic proficiency of the student and his or her admission to the class by means of an oral interview and/or placement exam scores. Prereq: FREN 2120 or equivalent. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FREN 3020 - Oral Practice

Summer 2010 Registration **FR 3020**

Conversation course, using dialogues, debates, small-group discussion, and short oral presentations to improve fluency in spoken French and to build vocabulary. Discussions center around current issues. Note: Students with native or near-native-level proficiency will not be allowed to take FREN 3020. The instructor of the course and/or the French advisor reserve the right to determine the level of linguistic proficiency of the student and his or her admission to the class by means of an oral interview and/or placement exam scores. Prereq: FREN 2120 or equivalent. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FREN 3050 - Advanced Grammar and Composition

Summer 2010 Registration **FR 3050**

Rigorous review of grammar (including past and future tenses, conditional mood and nominal phrase), along with development of writing skills through analysis and discussion of selections from French writers. Through questions and written exercises, students familiarize themselves with vocabulary, spelling, syntax and grammar. Note: May be taken before or after FREN 3060. Students with native or near-native level proficiency in French must consult with the French advisor before enrolling in this course. These students may, in some cases, take this course. The instructor of the course and/or the French advisor reserve the right to determine the level of linguistic proficiency of the student and his or her admission to the class by means of an oral interview and/or placement exam scores. Prereq: FREN 2120 or equivalent. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FREN 3060 - Advanced French Language Skills

Summer 2010 Registration **FR 3060**

Rigorous review of grammar (including subjunctive, interrogative, verbal phrase and passive voice), along with development of writing skills through analysis and discussion of selections from French writers. Through questions and written exercises, students familiarize themselves with vocabulary, spelling, and grammar. Note: May be taken before or after FREN 3050. Students with native or near-native level proficiency in

French must consult with the French advisor before enrolling in this course. These students may, in some cases, take this course. The instructor of the course and/or the French advisor reserve the right to determine the level of linguistic proficiency of the student and his or her admission to the class by means of an oral interview and/or placement exam scores. Prereq: FREN 2120 or equivalent. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FREN 3112 - Survey of French Literature I

Summer 2010 Registration **FR 3112**

Introduces survey of the major literary trends and prominent writers of French literature from 842 A.D. to the end of the 18th century. Note: May be taken before or after FREN 3122. Prereq: FREN 2120 or equivalent. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FREN 3120 - French Cultural Identities: Myths and Realities

Summer 2010 Registration **FR 3120**

The self-assured demeanor of the average French man or woman both attracts and confounds. In fact, a French person's behavior -- or that of the French government -- can seem impossible to decode if not understood within an authentically French context. This course examines that context and explores how the French view everyday life. Includes analysis of classic French films. Prereq: FREN 2120 or equivalent. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FREN 3122 - Survey of French Literature II

Summer 2010 Registration **FR 3122**

Introduces survey of the major literary trends (romanticism, realism and existentialism) and writers of the 19th and 20th centuries. Students become acquainted with prominent writers of the period such as Beauvoir, Chateaubriand, Hugo, Balzac, Flaubert, Proust, Camus and Sartre. Note: May be taken before or after FREN 3112. Prereq: FREN 2120 or permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FREN 3130 - Current Topics of the French-Speaking World

Summer 2010 Registration **FR 3130**

Combines discussion and writing on political, economic, and social conditions in contemporary France and the Francophone world. Articles from current French newspapers, news magazines, television broadcasts, and the World Wide Web are analyzed for a better understanding of modern French culture. Prereq: FREN 2120 or

equivalent. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FREN 3140 - Contemporary Francophone Cultures

Summer 2010 Registration **FR 3140**

Through the reading of short stories and cultural texts, engages students in the exploration of cultures of the Francophone world. Addresses political, economic and geographic status of each region as well as societal identity, immigration, the individual and cultural identity. Prereq: FREN 2120 or equivalent. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FREN 3200 - The Francophone World in the Post-Colonial Era

Summer 2010 Registration **FR 3200**

Focuses on the many Francophone regions of the world, including (but not limited to) France, North and West Africa, Southeast Asia, and the Caribbean, and surveys a wide span of subject matter as it pertains to the post-colonial situations in these regions. Taught in English. Prereq: Sophomore standing. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FREN 3840 - Independent Study: FREN

Summer 2010 Registration **FR 3840**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FREN 3939 - Internship/Cooperative Education

Summer 2010 Registration **FR 3939**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FREN 3970 - Special Topics

Summer 2010 Registration **FR 3970**

Varying topics in French and Francophone language, literature and culture appropriate to the 3000 level, not otherwise covered by regular courses. Prereq: FREN 2120 or equivalent. Note: May be taken more than once, provided that the topic is different each time. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FREN 3995 - Travel Study: Amiens, France

Summer 2010 Registration **FR 3995**

An intensive language and culture course, taught in Amiens, France. Students are enrolled in either beginning, intermediate, or advanced courses at the University of Picardie/Jules Verne. Afternoon sessions and weekends include excursions to Paris, the northern coasts, lectures, movies, business tours, discussions, and field trips. (Register through the Office of International Education.) Prereq: FREN 2120 or equivalent. **Semester Hours:** 3to 6
Registration is changing. Visit our website for details ucdenver.edu/registration.

FREN 4010 - Advanced Composition: Stylistics

Summer 2010 Registration **FR 4010**

Focuses on improvement of writing skills and development of the student's ability to compose logically and convincingly. The writing styles to be studied include: narration, description, portrait, persuasive essay and report. Prereq: FREN 3050 or 3060 plus one other 3000-level French course or permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FREN 4050 - Advanced French for Business

Summer 2010 Registration **FR 4050**

Concentrates on the technical language necessary to meet the economic and commercial needs of the modern world. Prepares students for the practical certificate of business and economic French of the Paris Chamber of Commerce. Note: Students with native or near-native level proficiency in French must consult with the French advisor before enrolling in this course. These students may, in some cases, take this course. The instructor of the course and/or the French advisor reserve the right to determine the level of linguistic proficiency of the student and his or her admission to the class by means of an oral interview and/or placement exam scores. Prereq: FREN 3050 or 3060 plus one other 3000-level French course or permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FREN 4082 - Introduction to Translation

Summer 2010 Registration **FR 4082**

Introduces the methodology and practice of written translation from English to French/French to English. Students will learn techniques on how to avoid word-by-word translation, faulty sentence structure and Anglicisms by focusing on grammar, syntax and vocabulary. Note: Students must demonstrate third-year competence and advanced writing skills in English. Students with native or near-native level proficiency in French must consult with the French advisor before enrolling in this course. These students may, in some cases, take this course. The instructor of the course and/or the French advisor reserve the right to determine the level of linguistic proficiency of the student and

his or her admission to the class by means of an oral interview and/or placement exam scores. Prereq: FREN 3050 or 3060 and one other upper-division French class. Cross-listed with FREN 5082. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FREN 4200 - French Civilization Through the Nineteenth Century

Summer 2010 Registration **FR 4200**

Development of French culture and civilization from a historical perspective, beginning with the origins of France and continuing through the 19th century. Includes historical background, sciences and techniques, daily life, the arts, literature and philosophy, and religion. Note: May be taken before or after FREN 4210. Prereq: Two 3000-level courses or permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FREN 4210 - French Civilization - Twentieth and Twenty-First Centuries

Summer 2010 Registration **FR 4210**

(Continuation of FREN 4200) The development of French culture and civilization in a historical perspective from the beginning of the 20th century to the present. Includes historical background, sciences and techniques, daily life, the arts, literature and philosophy, and religion. Note: May be taken before or after FREN 4200. Prereq: Two 3000-level courses or permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FREN 4310 - Seventeenth Century Literature

Summer 2010 Registration **FR 4310**

An in-depth study of the century considered to be the pinnacle of French theatre. Includes plays by Racine, Moliere and Corneille, as well as poetry by Lafontaine and Boileau. Prereq: FREN 3112 or 3122 plus one other 3000-level French course or permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FREN 4360 - Eighteenth Century Novel, Theater and Poetry

Summer 2010 Registration **FR 4360**

Studies several novels and plays characteristic of the 18th century as well as some of the more famous poems. Includes Diderot, Rousseau, Voltaire, Marivaux and Laclos. Prereq: FREN 3112 or 3122 plus one other 3000-level French course or permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FREN 4430 - Nineteenth Century French Novel

Summer 2010 Registration **FR 4430**

Development of the French novel during the 19th century. Includes such writers as Stendhal, Hugo, Balzac, George Sand, Flaubert, Maupassant and Zola. Prereq: FREN 3112 or 3122 plus one other 3000-level French course or permission of instructor.

Cross-listed with FREN 5430. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FREN 4480 - Twentieth Century French Novel

Summer 2010 Registration **FR 4480**

Represents novels of the 20th century, a period of great innovation in the French novel. Authors generally treated are Camus, Giono, Ernaux and Duras. Prereq: FREN 3112 or 3122 plus one other 3000-level French course or permission of instructor. Cross-listed with FREN 5480. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FREN 4490 - Twentieth Century French Theater

Summer 2010 Registration **FR 4490**

Surveys the major movements in French literature of the 20th century as represented in the theater arts. Such authors as Jarry, Artaud, Apollinaire, Giraudoux, Sartre, and Beckett are discussed. Prereq: FREN 3112 or 3122 plus one other 3000-level French course or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FREN 4500 - Black Literature of the French-Speaking World

Summer 2010 Registration **FR 4500**

Black poetry, drama, and novel of the French-speaking world in the 20th century. Prereq: FREN 3112 or 3122 plus one other 3000-level French course or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FREN 4510 - French Women Writers

Summer 2010 Registration **FR 4510**

Designed to explore writings by French and Francophone women from the Middle Ages to the present. Addresses the question of what it means to be a woman and want to write. The selections include a wide variety of genres: autobiographical writings, stories, poems, manifestos, letters, political and historical documents. Prereq: FREN 3112 or 3122 plus one other 3000-level French course or permission of instructor. Cross-listed

with FREN 5510 and WGST 4511. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FREN 4600 - History of the French Language

Summer 2010 Registration **FR 4600**

Studies phonological, morphological, and syntactic changes in the language of Gaul from Latin to modern French. Prereq: FREN 3010 and FREN 3050 or FREN 3060 or permission of instructor. Cross-listed with FREN 5600. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FREN 4840 - Independent Study: FREN

Summer 2010 Registration **FR 4840**

Semester Hours: 1to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FREN 4841 - Independent Study: FREN

Summer 2010 Registration **FR 4841**

Semester Hours: 1to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FREN 4970 - Special Topics

Summer 2010 Registration **FR 4970**

Varying topics in French and Francophone language, literature and culture appropriate to the 4000 level, not otherwise covered by regular courses. Prereq: FREN 2120 or equivalent. Note: May be taken more than once, provided that the topic is different each time. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

FREN 4995 - Travel Study Topics

Summer 2010 Registration **FR 4995**

For students doing travel study in France; register through the Office of International Education. Cross-listed with FREN 5995. **Semester Hours:** 0to 15
Registration is changing. Visit our website for details ucdenver.edu/registration.

FREN 5082 - Introduction to Translation

Summer 2010 Registration **FR 5082**

Introduces the methodology and practice of written translation from English to French/French to English. Students will learn techniques on how to avoid word by word

translation, faulty sentence structure and anglicisms by focusing on grammar, syntax and vocabulary. Note: Students must demonstrate third-year competence and advanced writing skills in English. Students with native or near-native level proficiency in French must consult with the French advisor before enrolling in this course. These students may, in some cases, take this course. The instructor of the course and/or the French advisor reserve the right to determine the level of linguistic proficiency of the student and his or her admission to the class by means of an oral interview and/or placement exam scores. Prereq: Graduate standing in French. Cross-listed with FREN 4082. **Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

FREN 5200 - French Civilization Through the Nineteenth Century

Summer 2010 Registration **FR 5200**

Development of French culture and civilization from a historical perspective, beginning with the origins of France and continuing through the 19th century. Includes historical background, sciences and techniques, daily life, the arts, literature and philosophy, and religion. Prereq: Graduate standing in French. **Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

FREN 5210 - French Civilization - Twentieth and Twenty-First Centuries

Summer 2010 Registration **FR 5210**

(Continuation of FREN 5200) The development of French culture and civilization in a historical perspective from the beginning of the 20th century to the present. Includes historical background, sciences and techniques, daily life, the arts, literature and philosophy, and religion. Prereq: Graduate standing in French. **Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

FREN 5430 - Nineteenth Century French Novel

Summer 2010 Registration **FR 5430**

Development of the French novel during the 19th century. Includes such writers as Stendhal, Hugo, Balzac, George Sand, Flaubert, Maupassant and Zola. Prereq: Graduate standing in French. Cross-listed with FREN 4430. **Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

FREN 5480 - Twentieth Century French Novel

Summer 2010 Registration **FR 5480**

Represents novels of the 20th century, a period of great innovation in the French novel. Authors generally treated are Camus, Giono, Ernaux and Duras. Prereq: Graduate standing in French. Cross-listed with FREN 4480. **Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

FREN 5510 - French Women Writers

Summer 2010 Registration **FR 5510**

Designed to explore writings by French and Francophone women from the Middle Ages to the present. Addresses the question of what it means to be a woman and want to write. The selections include a wide variety of genres: autobiographical writings, stories, poems, manifestos, letters, political and historical documents. Prereq: FREN 3112 or 3122 plus one other 3000-level French course or permission of instructor. Cross-listed with FREN 4510 and WGST 4511. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FREN 5600 - History of the French Language

Summer 2010 Registration **FR 5600**

Studies phonological, morphological, and syntactic changes in the language of Gaul from Latin to modern French. Prereq: Graduate standing in French. Cross-listed with FREN 4600. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FREN 5840 - Independent Study: FREN

Summer 2010 Registration **FR 5840**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

FREN 5995 - Travel Study Topics

Summer 2010 Registration **FR 5995**

For students doing travel study in France; register through the Office of International Education. Cross-listed with FREN 4995. **Semester Hours:** 0to 15

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEMM 6000 - 21st Century Global Energy Issues and Realities

Summer 2010 Registration **GEMM 6000**

Introduction to the global energy industry's past, present and future. Current and historical issues in regions such as: Atlantic Basin, former Soviet Union, East of Suez, North and South America will be covered. World production centers and markets are discussed to include relevant energy security, scenario planning, risk management and regulation, deregulation, and environmental concerns. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEMM 6100 - Global Energy Economics and Geography

Summer 2010 Registration **GEMM 6100**

Introduction to managerial tools of trade including energy geo-economic. Topics discussed are: world energy markets, demand, supply, refining, marketing, forecasting, national v. international oil companies, transportation. An introduction to environmental economics will help connect energy industry to sustainable work practices, which include geographic distribution and political and governmental systems associated with the resources. **Semester Hours:** 3 to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEMM 6200 - Environmental, Regulatory, Legal & Political Environment in the Energy Industry

Summer 2010 Registration **GEMM 6200**

Exploration of current political situations regarding the energy industry, its environmental impact in the short and long term. Topics include climate change, pollution, solid wastes and conversions to natural resources. Students will become familiar with national and international energy laws and regulations, financial arrangements, confidentiality, and bidding agreements. **Semester Hours:** 3 to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEMM 6210 - Land Management and Energy Contracts

Summer 2010 Registration **GEMM 6210**

The elective will focus on the process of managing the use and development of land resources in a sustainable way. Topics such as; public controls, powers used for land regulation, and an intro to real estate will be covered to enhance students understanding of land management and its application to the energy industry. **Semester Hours:** 3 to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEMM 6300 - Renewable and Alternative Energy: Opportunities & Challenges

Summer 2010 Registration **GEMM 6300**

This course will familiarize students with the newest renewable and alternative energy sources. The course does not focus on hydrocarbon sources but examines challenges and opportunities that exist for the establishment of the new energy sources to become viable in the industry. **Semester Hours:** 3 to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEMM 6400 - Leadership and Decision Making in the Global Energy Environment

Summer 2010 Registration **GEMM 6400**

Students will examine leadership from an energy executive perspective. Topics include: how execs lead, change, innovation, interacting with top management teams, the board, leadership issues involved with governance of the firm, strategies for enhancing

executive influence and ethics and responsibilities associated with exec. **Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEMM 6410 - People Management in the Global Energy Environment

Summer 2010 Registration **GEMM 6410**

Explains that people are energy's most important asset. Students will learn the latest research in human resource theories, study models, and learn how to develop organizational effectiveness from the firm's human capital. Concepts on: effective teamwork, attracting and retaining talent and using HR processes such as performance management and development to drive engagement will be discussed. **Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEMM 6430 - Organizational Behavior in the Energy Industry

Summer 2010 Registration **GEMM 6430**

Students will learn how to lead and manage human assets inside energy industries. Students will be exposed to fundamental principles of human behavior and increase their competence of working in diverse settings. Proper management can lead to a sustainable competitive advantage, because of management of employees and developing them into enthusiasts of your firm. **Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEMM 6450 - Strategic Management of the Energy Industry

Summer 2010 Registration **GEMM 6450**

The course focuses on how to improve an organization's competitiveness in a changing global environment. Emphasis on sustainable strategies, students develop skills to formulate, implement and evaluate organizational strategies in the rapidly changing environment. **Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEMM 6460 - Integrated Information Management for Energy Firms

Summer 2010 Registration **GEMM 6460**

This course covers issues associated with developing an integrated information managing strategy to identify major information categories used with an energy firm. It covers relationships to business processes to guide applications development and facilitate the integration and sharing of data. Using case studies from energy firms operational, administrative and strategic systems will be discussed. **Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEMM 6470 - Energy Marketing

Summer 2010 Registration **GEMM 6470**

This course covers the challenges faced by energy industries in developing branding, and developing new markets. Marketing both products and the company to its stakeholders, in the face of competitive pressures, students learn practical marketing tools and how they can be used to effect corporate strategy. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEMM 6500 - Energy Accounting in Global Markets

Summer 2010 Registration **GEMM 6500**

The course builds a basic understanding of how to convey to decision makers, in and out of the firm, information about its resources. Emphasis on; analysis of income statements, balance sheet, statement and cash flows (historical financial accounting information) with specific coverage of cost-volume-profit, variance, forecasting, joint interest accounting and measurement of divisional performance. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEMM 6600 - Financial Management and Hedging in the Global Energy Markets

Summer 2010 Registration **GEMM 6600**

Introduction to fundamental principal of asset valuation and financing in competitive global markets. Providing the tools necessary to analyze day-to-day financial issues in the energy industry (time value of money, valuation of income streams, risk weighted investment returns.) Topics such as: risk management, arbitrage, hedging and foreign exchange will be covered. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEMM 6610 - Advanced Financial Management in the Energy Industry

Summer 2010 Registration **GEMM 6610**

This course is focused on understanding the costs and benefits of various forms of capital. By examining internal and external managers, students will be able to assess alternative capital sources to achieve their strategic objectives. The course will introduce effective investor communication techniques. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEMM 6620 - Energy Asset Management

Summer 2010 Registration **GEMM 6620**

The course covers management of an organization's energy resources and facilities as well as broader coverage of project management. Portfolio strategy, planning, scope, time, cost, quality and organizational effectiveness will be addressed. Also when budget,

material, vendor relations or other factors disrupt a project, students will be prepared on how to react. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEMM 6630 - Production and Supply Chain Management for the Energy Industry

Summer 2010 Registration **GEMM 6630**

This course will focus on the business aspects running a renewable energy entity either as a separate company or sector within an established company. Students taking this course have completed a previous course on the basic science of renewable energy. This course is intended to focus on leadership issues and decision making regarding renewable energy. As a significant part of the course, students will learn how to review information and data supplied to them by engineers, accountants, finance, marketing, scientists, and other stakeholders within and outside their company including federal, state, and local governments and regulatory agencies to make sound business decisions. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 1102 - World Regional Geography

Summer 2010 Registration **GEOG 1102**

Analysis of the relationships of man and the landscape based on geographic distributions in the world. **Semester Hours:** 3to 3 **GT Pathways Category Key:** GT-SS2
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 1111 - Freshman Seminar

Summer 2010 Registration **GEOG 1111**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 1202 - Introduction to Physical Geography

Summer 2010 Registration **GEOG 1202**

The science that studies the processes, forms, and spatial or geographic structures of natural systems operating at or near the earth's surface, including weather, climate, and landform processes. **Semester Hours:** 3to 3 **GT Pathways Category Key:** GT-SC2
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 1302 - Introduction to Human Geography

Summer 2010 Registration **GEOG 1302**

Systematic introduction to basic concepts and approaches in human geographic

analysis. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 1332 - Topics in Science

Summer 2010 Registration **GEOG 1332**

A series of five-week modules on various topics in physical geography. Section 001. Violent Storms. Analysis of the causes, characteristics, and regional patterns of thunderstorms, tornadoes and hurricanes, emphasizing the hazards associated with each type of storm. Section 002. Elementary Surveying. Introduces the various techniques of running a traverse, location of points by intersection and resection, determination of distance by pacing, chaining, stadia and trigonometry and carrying of elevations. Section 003. Basic Navigation. Introduces the principles of navigation using the sun as the celestial body. Emphasis is on determining latitude and longitude at solar noon. Section 004. Earthquakes. The characteristics, causes, and results of earth movements along faults. Section 005. Waves and Beaches. Analysis of wind-generated waves in the open ocean and the changes that occur as waves enter shallow water, forming surf. The tides and seismic sea waves are discussed for comparison. Section 006. Rivers and Flood Plains. Introduces the nature of stream channels and stream landscapes, with emphasis on the problems associated with man's occupation of such landscapes. Section 007. World Food and Hunger. Analysis of the world food problem with emphasis on the nutritional characteristics of major foods, the physical factors affecting food production, and the potential of the world's land for producing food. Section 008. Volcanoes. Why do some volcanoes erupt and some flow? Why do they occur where they do? How do they affect the environment and man? We discuss these aspects and other characteristics of volcanoes in this course section. **Semester Hours:** 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 1602 - Introduction to Urban Studies

Summer 2010 Registration **GEOG 1602**

Surveys the process of urbanization, emphasizing the development of American cities and using Denver as an example. Topics covered include the evolution of metropolitan form and land use patterns, cultural landscape formation, city planning and architectural design, and urban social and policy issues. **Semester Hours:** 3to 3 **GT Pathways**

Category Key: GT-SS2

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 2080 - Introduction to Mapping and Map Analysis

Summer 2010 Registration **GEOG 2080**

Studies major elements in the preparation of thematic maps, including sources of data collection and manipulation of data, and cartographic techniques for display of

data. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 2202 - Natural Hazards

Summer 2010 Registration **GEOG 2202**

Surveys those physical phenomena that often cause substantial damage when they occur in areas of human settlement. **Semester Hours:** 3to 3 **GT Pathways Category**

Key: GT-SS2

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 2939 - Internship/Cooperative Education

Summer 2010 Registration **GEOG 2939**

Experiences involving application of specific, relevant concepts and skills in supervised employment situations. Prereq: 15 hours of 2.75 Gpa. **Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 3100 - Geography of Colorado

Summer 2010 Registration **GEOG 3100**

An analysis of the physical environment, history of settlement, and resource base of Colorado in relation to present economic patterns of the state. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 3120 - Geography of Europe

Summer 2010 Registration **GEOG 3120**

An analysis of the physical environment, resource utilization, economic development and cooperation in Europe. A cultural and political geography which focuses on continuity and change in Eastern and Western Europe. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 3130 - Central America and the Caribbean

Summer 2010 Registration **GEOG 3130**

Surveys the physical environment and cultural development of Central America and the Caribbean Islands. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 3140 - Geography of South America

Summer 2010 Registration **GEOG 3140**

The physical environment, cultural development, and political instability within the area

are analyzed. Influence of the landscape and climate, as well as Iberian cultural and land tenure patterns on historic settlement and modern growth are discussed. Problems associated with population, economics, politics, education, and geography are emphasized.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 3150 - Middle East

Summer 2010 Registration **GEOG 3150**

Physical, cultural, and economic approach to the arid lands of the Middle East, including Arab land of the Sahara.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 3160 - Geography of China

Summer 2010 Registration **GEOG 3160**

Geographic survey of the physical, cultural, and economic features characterizing the geography of China.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 3232 - Weather and Climate

Summer 2010 Registration **GEOG 3232**

Introduces the processes and systems that govern both day-to-day weather and longer-term climate variations. Covers instrumentation and weather forecasting techniques.

Prereq: GEOG 1202 or permission of instructor.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 3240 - Colorado Climates

Summer 2010 Registration **GEOG 3240**

Provides a broad overview of the various weather and climate patterns that are found within the state of Colorado. To accomplish this, the state of Colorado will be divided into regions which (hopefully) have a large degree of homogeneity in terms of weather and climate controls. Note: Taught in a seminar style with students giving presentations and reports on their findings about a given region. Prereq: GEOG 1202 and/or GEOG 3232 or permission of instructor.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 3300 - Population and Resources in the World Environment

Summer 2010 Registration **GEOG 3300**

Increasing world human populations are examined in the context of regional and global resources. Opposing viewpoints are studied, and students are required to complete a

case study of a self-selected issue analyzing viewpoints associated with relevant opposing opinions. Prereq: upper division standing. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 3302 - Water Resources

Summer 2010 Registration **GEOG 3302**

Introduces water resources aimed at students with little or no background in the field. This is a broad course covering topics ranging from the physical aspects of water to water politics and international law. While the course is largely a lecture format, discussion of current issues is a significant part of the class. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 3411 - Globalization and Regional Development

Summer 2010 Registration **GEOG 3411**

Addresses global political-restructuring and its implications for regional development in the U.S. Both historical and contemporary processes of globalization are examined. Topics include: the environmental basis of American industrial growth, the relationship between technological change and geographical shifts, the rise and decline of Fordism, the transfer of Japanese manufacturing methods to the U.S., the role of regional and national industrial policy, and the social consequences of globalization for labor and communities. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 3420 - Political Ecology

Summer 2010 Registration **GEOG 3420**

Addresses the political economy of development in the third world, focusing on contemporary issues of agrarian change, ecological degradation, deforestation and urbanization. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 3430 - Geography of Tourism

Summer 2010 Registration **GEOG 3430**

Geographic analysis of trends in recreation, travel, and tourism, and their economic, social, and environmental impacts. Examines growth and change in resorts and tourist destination areas. Prereq: GEOG 1302 or 3411. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 3501 - Geography of Health

Summer 2010 Registration **GEOG 3501**

Offers a critical geographic perspective to human health issues, examining disease distributions, how changing relationships between people and their environments (natural, built, and social environments) influence health, and different approaches to the study of health in geography. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 3770 - Geography and Film

Summer 2010 Registration **GEOG 3770**

Geographic analysis of past and current film production and distribution systems and the complex relationships between film making and place in feature, documentary and educational film. Prereq: GEOG 1302 or 2411. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 3840 - Independent Study: GEOG

Summer 2010 Registration **GEOG 3840**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 3939 - Internship/Cooperative Education

Summer 2010 Registration **GEOG 3939**

Designed experiences involving application of specific, relevant concepts and skills in supervised employment situations. Prereq: Junior standing and 2.75 Gpa. **Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 3990 - Special Topics

Summer 2010 Registration **GEOG 3990**

Investigation of current topics in geography such as analysis of issues (crime, public transportation), techniques (socioeconomic impact analysis), or areas of specialization (climatology). Prereq: Vary with each topic, but no less than six hours in relevant social or physical science. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4000 - Planning Methods I

Summer 2010 Registration **GEOG 4000**

Focuses on the application of statistical, quantitative, and mathematical techniques and computer applications for urban and regional planning and policy development. Major topics include types of data, sampling, basic probability distributions, hypothesis testing,

regression and correlation, and an introduction to multivariate and cluster analysis. Applications in planning and development are emphasized. Cross-listed with URPL 5510. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4010 - Landscape Geochemistry

Summer 2010 Registration **GEOG 4010**

A holistic approach to studying the role chemical elements play in synthesis/decomposition cycles, and the resultant environment from interaction of the lithosphere with the hydrosphere, atmosphere, biosphere, and pedosphere during geological and ecological timeframes, together with anthropogenic activities. Prereq: Introductory college-level physical geography or environmental science course or permission of instructor. Cross-listed with GEOL 4010/ENVS 5010. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4020 - Earth Environments and Human Impacts

Summer 2010 Registration **GEOG 4020**

Basic concepts describing earth's biomes and physical environment are presented in a systems context. Global warming assessment, from both political and scientific perspectives, is then presented. Model visualization of these concepts to consider human impacts on Earth's biomes is discussed. Earth system viewpoint, having links of Earth's biomes to oceans and atmosphere, completes the course discussion. Prereq: GEOG 1202 and 3232 or permission of instructor. Cross-listed with ENVS 5020, GEOL 4020. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4060 - Remote Sensing I: Introduction to Environmental Remote Sensing

Summer 2010 Registration **GEOG 4060**

An in-depth treatment of the use of aerial photographs and other forms of imagery for the analysis of urban-industrial patterns, vegetation, agriculture, landforms, and geologic structure. Prereq: GEOG 3080 or permission of instructor. Cross-listed with GEOG 5060, GEOL 4060, GEOL 5060. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4070 - Remote Sensing II: Advanced Remote Sensing

Summer 2010 Registration **GEOG 4070**

Focuses on digital image processing of satellite and aerial images. Students explore the nature of digital image data, gain an understanding of image analysis using PCs, and learn about the use of analysis products in the development of GIS databases. Prereq:

GEOG 4060/5060 or GEOL 4060/5060 or permission of instructor. Cross-listed with GEOG 5070, GEOL 4070, 5070.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4080 - Introduction to GIS

Summer 2010 Registration **GEOG 4080**

Introduces various aspects of geographic information systems (GIS), including justification, definition of hardware/software, database design, and data conversion. GIS is a computer-based mapping system providing a graphical interface to locational and relational attribute data on facilities and land. Includes hands-on use of a geographic information system workstation. Prereq: GEOG 3080 or permission of instructor. Cross-listed with GEOG 5080.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4081 - Introduction to Cartography and Computer Mapping

Summer 2010 Registration **GEOG 4081**

Provides an introduction to the art and science of cartography (map making). Students will learn about design principles, tools and techniques of map production, culminating in the creation of a high-quality map through hands-on exercises. Prereq: GEOG 3080. Cross-listed with GEOG 5081.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4085 - GIS Applications for the Urban Environment

Summer 2010 Registration **GEOG 4085**

Takes a more detailed look at basic concepts presented in the introductory GIS course, concentrating on how GIS is used to solve real-world geographic problems. Various GIS applications within both the natural and social sciences are highlighted. The selection of specific topics is flexible, based on the interests of enrolled students. Prereq: GEOG 4080 or GEOG 5080 or permission of instructor. Cross-listed with GEOG 5085.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4090 - Environmental Modeling with Geographic Information Systems

Summer 2010 Registration **GEOG 4090**

Expands the basic knowledge of GIS to spatial models. Establishes a comprehensive framework that can be used to address a wide range of applications in natural and built environments. Prereq: GEOG 4080 or GEOG 5080 or permission of instructor. Cross-listed with GEOG 5090.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4095 - Deploying GIS Functionality on the Web

Summer 2010 Registration **GEOG 4095**

Covers the core principles and technologies that allow the deployment of geographic information system (GIS) functionality over the World Wide Web. Hands-on exercises make use of the latest commercial software as well as open source technologies.

Prereq: GEOG 4080 or GEOG 5080, computer science background, or permission of instructor. Cross-listed with GEOG 5095. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4220 - Environmental Impact Assessment

Summer 2010 Registration **GEOG 4220**

The objective of this course is to provide the foundation for understanding the environmental impact assessment process, its legal context, and the criteria and methods for procedural and substantive compliance. Prereq: URPL 5530 or permission of instructor. Cross-listed with GEOG 5220, URPL 6651. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4230 - Hazard Mitigation and Vulnerability Assessment

Summer 2010 Registration **GEOG 4230**

Examines hazard mitigation and its planning and policy implications, emphasizing how vulnerability assessments play an integral role. Students explore how mitigation minimizes the impacts from hazards and use GIS to conduct a local study. Prereq: GEOG 2202 or permission of instructor. Cross-listed with GEOG 5230. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4235 - GIS Applications in the Health Sciences

Summer 2010 Registration **GEOG 4235**

Examines how GIS is used throughout the health care industry and public health. Covers environmental health, disease surveillance, and health services research. Students critically review current literature and gain hands-on experience with GIS software.

Prereq: GEOG 4080 or GEOG 5080, public health background, or consent of instructor. Cross-listed with GEOG 5235, HBSC 7235. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4240 - Principles of Geomorphology

Summer 2010 Registration **GEOG 4240**

Systematic study of processes associated with rock structures, weathering, mass wasting, fluvial, wind, glacial, and shorelines, and the resultant landforms they can

produce, influence, and change over time. Course includes field trips and in-class exercises to help solidify concepts. Cross-listed with GEOL 4630 and GEOG 5240. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4260 - Natural Resource Planning and Management

Summer 2010 Registration **GEOG 4260**

Considers methods for managing renewable and non-renewable resources using both legislative and economic controls. The role of technology, ideologies, and equity are discussed. Decision making techniques are applied to problems of resource and environmental management. The ability to allocate and control resource usage to ensure sustainability are discussed. Cross-listed with URPL 6653. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4265 - Sustainability in Resources Management

Summer 2010 Registration **GEOG 4265**

Sustainability and sustainable development are the dominant economic, environmental and social issues of the 21st century. Follows a multi-disciplinary approach to these concepts. Case studies demonstrate their implementation in different geographical, ecological and socio-economic conditions worldwide. Prereq: ENVS 1042 or permission of instructor. Cross-listed with GEOG 5265. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4270 - Glacial Geomorphology

Summer 2010 Registration **GEOG 4270**

Provides an in-depth view of the processes and systems found in glacial environments. Topics include: evidence of past glaciation; present-day glacial extent; glacier dynamics; glacial erosional processes and landforms; glacial depositional processes and landforms. Prereq: GEOG 1202 or GEOL 1072. Cross-listed with GEOG/GEOL 4270/5270. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4335 - Contemporary Environmental Issues

Summer 2010 Registration **GEOG 4335**

Provides an overview of environmental challenges facing society today, focusing on how humans impact and change the environment. Opposing views and environmental policy at the local, state, national, and international levels are explored. Cross-listed with GEOG 5335. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4350 - Environment and Society in the American Past

Summer 2010 Registration **GEOG 4350**

Overview of the geographical development of North American society from the late 15th century to the mid-20th century. A comparative regional approach emphasizing relationships between natural resource exploitation, cultural landscape formation and environmental change. Cross-listed with GEOG 5350. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4400 - Regional Economic Development

Summer 2010 Registration **GEOG 4400**

Examines the economies of metropolitan, rural, state, and national regions, placing each within the fabric of global relations that direct capital, manage productive activities, and govern prosperity's geography. Organized both sectorally and spatially, the course addresses key sectors of the emerging global economy, as well as the rationale of the "entrepreneurial" state at the public-private interface. Posits institutional approaches and professional roles in the management of regional economies. Seeks in theory a template of regional change, and both the means and purpose of policy intervention. Finds in strategic planning, an integration of developmental and environmental perspectives. Prereq: URPL 5520 or permission of instructor. Cross-listed with URPL 6671. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4630 - Transportation Planning I: Transport Network Analysis

Summer 2010 Registration **GEOG 4630**

Examines several important aspects of the transport network: accessibility and connectivity of nodes and linkages and the volume and direction of the flow of a transport network. Descriptive, predictive, and planning methods and models discussed include graph theoretical measures, connectivity matrices, gravity model, abstract mode model, entropy-maximization, trip generation model and flow allocation models. Prereq: URPL 5510 or permission of instructor. Cross-listed with URPL 6673. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4640 - Urban Geography: Denver and the U.S.

Summer 2010 Registration **GEOG 4640**

Uses a combined lecture/seminar format to explore research themes in urban geography. Topics covered include both historical and contemporary processes of urban development and transformation. Particular emphasis is placed on the U.S. and

Colorado's Front Range. Cross-listed with GEOG 5640. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4670 - Transportation Planning II: Urban Transportation Planning

Summer 2010 Registration **GEOG 4670**

Examines major issues of transportation in urban development, the urban transportation system, the relationship between land use planning and transportation planning, urban transportation planning processes and selected issues. Introduces the use of two state-of-the-art multi-modal transportation computer programs - EMME2 and TransCAD.

Prereq: URPL 6673. Cross-listed with URPL 6674. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4710 - Disasters, Climate Change, and Health

Summer 2010 Registration **GEOG 4710**

Provides a review of the impacts of disasters and climate change on human health, using a broad framework of preparedness, mitigation, response, recovery, and adaptation. Prereq: GEOG 2202 or GEOG 3501. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4770 - Applied Statistics for the Natural Sciences

Summer 2010 Registration **GEOG 4770**

Surveys statistical techniques including: quick review of basic statistics, tests for normality and outliers, display of data; simple and multiple regression; ANOVA and its relation to regression. Emphasis on computer or stat-pak analysis and interpretation of statistical results. Prereq: College algebra and GEOG 3080, or consent of instructor.

Cross-listed with ENVS 5600, GEOL 4770, 5770. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4840 - Independent Study: GEOG

Summer 2010 Registration **GEOG 4840**

Independent research primarily for undergraduate majors. Prereq: Permission of department. **Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4940 - Senior Seminar

Summer 2010 Registration **GEOG 4940**

Introduces students to the professional literature in the field. Various professionals and faculty lecture about geography/planning research and careers. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4950 - Honors Thesis

Summer 2010 Registration **GEOG 4950**

A capstone course designed to promote critical thinking, research methodology, and writing/oral presentation skills. Students design and develop a research project under the supervision of a faculty advisor. Each student gives an oral presentation or defense of his or her thesis at the end of the semester in which they enroll. Prereq: GEOG 4940 and junior or senior standing. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4990 - Special Topics

Summer 2010 Registration **GEOG 4990**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 4995 - Travel Study

Summer 2010 Registration **GEOG 4995**

Rigorous yet flexible fieldwork-based experience exploring geographical and environmental phenomena in diverse world locations. Course begins with intensive regional and methodological introductions, followed by on-location field investigations in environmental analyses, cultural studies, GIS applications, tourism evaluation and/or hazards assessment. Prereq: GEOG 1202 and GEOG 1302, or permission of instructor.

Cross-listed with ENVS 4995, ENVS 5995, and GEOG 5995. **Semester Hours:** 3to 9

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 5060 - Remote Sensing I: Introduction to Environmental Remote Sensing

Summer 2010 Registration **GEOG 5060**

An in-depth treatment of the use of aerial photographs and other forms of imagery for the analysis of urban-industrial patterns, vegetation, agriculture, landforms, and geologic structure. Prereq: GEOG 3080 or permission of instructor. Cross-listed with GEOG 4060, GEOL 4060, 5060. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 5070 - Remote Sensing II: Advanced Remote Sensing

Summer 2010 Registration **GEOG 5070**

Focuses on digital image processing of satellite and aerial images. Students explore the nature of digital image data, gain an understanding of image analysis using PCs, and learn about the use of analysis products in the development of GIS databases. Prereq: GEOG 5060/4060 or GEOL 5060/4060 or permission of instructor. Cross-listed with

GEOG 4070, GEOL 5070, 4070.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 5080 - Introduction to GIS

Summer 2010 Registration **GEOG 5080**

Introduces various aspects of geographic information systems (GIS), including justification, definition of hardware/software, database design, and data conversion. GIS is a computer-based mapping system providing a graphical interface to locational and relational attribute data on facilities and land. Includes hands-on use of a geographic information system workstation. Cross-listed with GEOG 4080.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 5081 - Introduction to Cartography and Computer Mapping

Summer 2010 Registration **GEOG 5081**

Provides an introduction to the art and science of cartography (map making). Students will learn about design principles, tools and techniques of map production, culminating in the creation of a high-quality map through hands-on exercises. Prereq: GEOG 3080. Cross-listed with GEOG 4081.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 5085 - GIS Applications for the Urban Environment

Summer 2010 Registration **GEOG 5085**

Takes a more detailed look at basic concepts presented in the introductory GIS course, concentrating on how GIS is used to solve real-world geographic problems. Various GIS applications within both the natural and social sciences are highlighted. The selection of specific topics is flexible, based on the interests of enrolled students. Prereq: GEOG 4080 or GEOG 5080 or permission of instructor. Cross-listed with GEOG 4085.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 5090 - Environmental Modeling with Geographic Information Systems

Summer 2010 Registration **GEOG 5090**

Expands the basic knowledge of GIS to spatial models. Establishes a comprehensive framework that can be used to address a wide range of applications in natural and built environments. Prereq: GEOG 4080 or GEOG 5080 or permission of instructor. Cross-listed with GEOG 4090.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 5095 - Deploying GIS Functionality on the Web

Summer 2010 Registration **GEOG 5095**

Covers the core principles and technologies that allow the deployment of geographic information system (GIS) functionality over the World Wide Web. Hands-on exercises make use of the latest commercial software as well as open source technologies.

Prereq: GEOG 4080 or GEOG 5080, computer science background, or permission of instructor. Cross-listed with GEOG 4095. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 5220 - Environmental Impact Assessment

Summer 2010 Registration **GEOG 5220**

The objective of this course is to provide the foundation for understanding the environmental impact assessment process, its legal context, and the criteria and methods for procedural and substantive compliance. Prereq: URPL 5530 or permission of instructor. Cross-listed with GEOG 4220, URPL 6651. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 5230 - Hazard Mitigation and Vulnerability Assessment

Summer 2010 Registration **GEOG 5230**

Examines hazard mitigation and its planning and policy implications, emphasizing how vulnerability assessments play an integral role. Students explore how mitigation minimizes the impacts from hazards and use GIS to conduct a local study. Prereq: GEOG 2202 or permission of instructor. Cross-listed with GEOG 4230. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 5235 - GIS Applications in the Health Sciences

Summer 2010 Registration **GEOG 5235**

Examines how GIS is used throughout the health care industry and public health. Covers environmental health, disease surveillance, and health services research. Students critically review current literature and gain hands-on experience with GIS software.

Prereq: GEOG 4080 or GEOG 5080, public health background, or consent of instructor. Cross-listed with GEOG 4235, HBSC 7235. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 5240 - Principles of Geomorphology

Summer 2010 Registration **GEOG 5240**

Systematic study of processes associated with rock structures, weathering, mass wasting, fluvial, wind, glacial, and shorelines, and the resultant landforms they can produce, influence, and change over time. Course includes field trips and in-class exercises to help solidify concepts. Cross-listed with GEOG 4240 and GEOL

4630.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 5265 - Sustainability in Resources Management

Summer 2010 Registration **GEOG 5265**

Sustainability and sustainable development are the dominant economic, environmental and social issues of the 21st century. Follows a multi-disciplinary approach to these concepts. Case studies demonstrate their implementation in different geographical, ecological and socio-economic conditions worldwide. Prereq: ENVS 1042 or permission of instructor. Cross-listed with GEOG 4265.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 5270 - Glacial Geomorphology

Summer 2010 Registration **GEOG 5270**

Provides an in-depth view of the processes and systems found in glacial environments. Topics include: evidence of past glaciation; present-day glacial extent; glacier dynamics; glacial erosional processes and landforms; glacial depositional processes and landforms. Prereq: GEOG 1202 or GEOL 1072. Cross-listed with GEOG/GEOL 4270/5270.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 5335 - Contemporary Environmental Issues

Summer 2010 Registration **GEOG 5335**

Provides an overview of environmental challenges facing society today, focusing on how humans impact and change the environment. Opposing views and environmental policy at the local, state, national, and international levels are explored. Cross-listed with GEOG 4335.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 5350 - Environment and Society in the American Past

Summer 2010 Registration **GEOG 5350**

Overview of the geographical development of North American society from the late 15th century to the mid-20th century. A comparative regional approach emphasizing relationships between natural resource exploitation, cultural landscape formation and environmental change. Cross-listed with GEOG 4350.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 5640 - Urban Geography: Denver and the U.S.

Summer 2010 Registration **GEOG 5640**

Uses a combined lecture/seminar format to explore research themes in urban geography. Topics covered include both historical and contemporary processes of urban development and transformation. Particular emphasis is placed on the U.S. and Colorado's Front Range. Cross-listed with GEOG 4640. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 5710 - Disasters, Climate Change, and Health

Summer 2010 Registration **GEOG 5710**

Provides a review of the impacts of disasters and climate change on human health, using a broad framework of preparedness, mitigation, response, recovery, and adaptation. Prereq: GEOG 2202 or GEOG 3501. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 5840 - Independent Study

Summer 2010 Registration **GEOG 5840**

Section 1, economic; 2, physical; 3, urban; 4, social; 5, quantitative; 6, transportation. **Semester Hours:** 1to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 5939 - Internship/Cooperative Education

Summer 2010 Registration **GEOG 5939**

Semester Hours: 1to 6
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 5990 - Special Topics In Geography

Summer 2010 Registration **GEOG 5990**

Course content varies from semester to semester, depending on faculty member teaching the course. Prereq: Graduate standing. **Semester Hours:** 1to 6
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 5995 - Travel Study

Summer 2010 Registration **GEOG 5995**

Rigorous yet flexible fieldwork-based experience exploring geographical and environmental phenomena in diverse world locations. Course begins with intensive regional and methodological introductions, followed by on-location field investigations in environmental analyses, cultural studies, GIS applications, tourism evaluation and/or hazards assessment. Prereq: GEOG 1202 and GEOG 1302, or permission of instructor.

Cross-listed with ENVS 4995, ENVS 5995, and GEOG 4995. **Semester Hours:** 3to 9
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 6840 - Independent Study: GEOG

Summer 2010 Registration **GEOG 6840**

Independent research for graduate major students. Prereq: Permission of department. **Semester Hours:** 1to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 6950 - Master's Thesis

Summer 2010 Registration **GEOG 6950**

Semester Hours: 6to 6
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOG 8990 - Doctor's Thesis

Summer 2010 Registration **GEOG 8990**

Semester Hours: 1to 8
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOL 1022 - History of Life

Summer 2010 Registration **GEOL 1022**

Non-technical study of fossils through time and their relationships to environments through earth history. Includes discussion of evolution and extinction events and current controversies. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOL 1072 - Physical Geology: Surface Processes

Summer 2010 Registration **GEOL 1072**

Introductory course in physical geology that covers surface processes and landforms, and includes one all-day field trip. Note: Required for geology majors. **Semester Hours:** 4to 4 **GT Pathways Category Key:** GT-SC1
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOL 1082 - Physical Geology: Internal Processes

Summer 2010 Registration **GEOL 1082**

Introductory course in physical geology that covers internal processes and properties of the earth's interior, with plate tectonics as the underlying theme. Includes one all-day field trip. Note: Required for geology majors. **Semester Hours:** 4to 4 **GT Pathways**

Category Key: GT-SC1

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOL 1111 - Freshman Seminar

Summer 2010 Registration **GEOL 1111**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOL 1115 - Earth Sciences Content

Summer 2010 Registration **GEOL 1115**

Covers content areas of undergraduate earth sciences. Topics include physical geology; historical geology; oceanography; meteorology; and astronomy. **Semester Hours:** 1to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOL 1202 - Introduction to Oceanography

Summer 2010 Registration **GEOL 1202**

Surveys modern scientific knowledge of the world's oceans. Intended for non-science students, the course offers a non-quantitative introduction to the major facts and principles of physical, chemical, biological, and geological oceanography. The impact of natural and anthropic events on the marine environment are included. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOL 1302 - Introduction to Astrogeology

Summer 2010 Registration **GEOL 1302**

Surveys the geology of the planets and their environments in space, including the origin and destiny of the universe. Intended for non-majors, the course provides an introduction to the geological origin, evolution, structure, and geomorphology of the planets. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOL 1400 - Geology of the National Parks

Summer 2010 Registration **GEOL 1400**

Combines lecture and laboratory exercises to help students interpret Earth history using the national parks as examples. Students learn to identify the common rocks and minerals, and how to interpret topographic and geologic maps. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOL 1402 - Introduction to the Ice Ages

Summer 2010 Registration **GEOL 1402**

Surveys the natural history of earth's ice ages, the processes that led to paleoclimatic change, environmental changes, and the effects on the geological earth. Included are topics in ocean-atmosphere influences, glaciers, glacial geology, influences on world flora and fauna, extinction of pleistocene mammal populations and the emergence of hominids. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOL 1840 - Independent Study: GEOL

Summer 2010 Registration **GEOL 1840**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOL 2939 - Internship/Cooperative Education

Summer 2010 Registration **GEOL 2939**

Experiences involving application of specific, relevant concepts and skills in supervised employment situations. Prereq: 15 hours of 2.75 GPA. **Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOL 3011 - Mineralogy

Summer 2010 Registration **GEOL 3011**

Principles of mineralogy, including crystallography, crystal chemistry, and a systematic study of the more important nonsilicate and silicate minerals. Origins and occurrences of minerals. Prereq: Physical geology and college-level chemistry. **Semester Hours:** 4to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOL 3032 - Geology of Colorado

Summer 2010 Registration **GEOL 3032**

Introductory course focused on the geology of Colorado. The course is divided into two parts: the first half covers general principles of geology, and the second is devoted to the observation of rock types, structures, and geologic relationships in the field. Discussion of plate tectonics, rock formation, construction and interpretation of geologic maps, the geologic time scale, geologic provinces of Colorado, evolution of major landforms, formation and development of mineral resources of Colorado, and current topics in environmental geology. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOL 3100 - Current Perspectives on the Evolution of Consciousness and Culture

Summer 2010 Registration **GEOL 3100**

Studies of evolution traditionally regard morphology (anatomy)/behavior and mind/consciousness as separate fields that belong either in biology/paleontology or in psychology/philosophy. The "middle ground" behavior, anthropology, social systems, is also treated separately in most cases. Recent approaches tend toward a more holistic view using unifying principles and "laws of nature" that show similar processes (dissipative effects, information theory, development theory) operating across all fields. Examines the relationships and common threads between the physical anatomical evolution of organisms and their behavior perception and consciousness. Prereq: Introductory course in evolution (biology/paleontology), psychology, philosophy, anthropology or permission of instructor. Cross-listed with PHIL 3100 and RLST 4280. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOL 3102 - Dinosaurs Past and Present

Summer 2010 Registration **GEOL 3102**

A broad-based, non-technical new look at the world's most popular prehistoric animals. Stresses the rapid and perennial growth of knowledge about dinosaurs and the relevance of such knowledge in the 20th century. Prereq: Introductory geology and/or biology are recommended. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOL 3231 - Introductory Petrology

Summer 2010 Registration **GEOL 3231**

Introduces classification, distribution, and origin of igneous, metamorphic, and sedimentary rocks, including their identification in hand-held specimens. Prereq: Physical geology and mineralogy. **Semester Hours:** 4to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOL 3411 - Introductory Paleontology

Summer 2010 Registration **GEOL 3411**

Studies invertebrate fossils, including a survey of the organic world and its history in the geological past. Includes an introduction to evolution and paleoecology, and discussion of the uses of fossils in geologic correlations. Prereq: Introductory geology-surface processes, or an introductory biology class. **Semester Hours:** 4to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOL 3415 - Museum Studies in Paleontology

Summer 2010 Registration **GEOL 3415**

A practical laboratory-based course covering aspects of museum studies related to paleontological collections. Students learn how to stabilize and prepare bones removed from fossil quarries; learn molding and casting techniques for bones and fossils; assist with the cataloging and curation of the collection; and participate in designing museum displays. Prereq: At least one science class. Cross-listed with ELED 5480, SECE 5480. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOL 3418 - Field Paleontology

Summer 2010 Registration **GEOL 3418**

Introduces methods of paleontological field techniques, including care and maintenance of a late Jurassic dinosaur quarry, field conservation techniques, quarry map-making and surveying, paleontological sampling, and fossil extraction. Students also contribute to research and fossil collections at CU-Denver. Prereq: At least one science class. **Semester Hours:** 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOL 3421 - Sedimentation and Stratigraphy

Summer 2010 Registration **GEOL 3421**

Introduces the principles of sedimentology and stratigraphy. Emphasis is on dynamic processes within sedimentary environments and the resulting stratigraphic record.

Prereq: GEOL 1082 or equivalent. **Semester Hours:** 4to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOL 3840 - Independent Study: GEOL

Summer 2010 Registration **GEOL 3840**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOL 3939 - Internship/Cooperative Education

Summer 2010 Registration **GEOL 3939**

Designed experiences involving application of specific, relevant concepts and skills in supervised employment situations. Prereq: Junior standing and 2.75 GPA. **Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOL 4010 - Landscape Geochemistry

Summer 2010 Registration **GEOL 4010**

A holistic approach to studying the role chemical elements play in synthesis/decomposition cycles, and the resultant environment from interaction of the lithosphere with the hydrosphere, atmosphere, biosphere, and pedosphere during geological and ecological timeframes, together with anthropogenic activities. Prereq: Introductory college-level physical geography or environmental science course or permission of instructor. Cross-listed with GEOG 4010/ENVS 5010. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOL 4020 - Earth Environments and Human Impacts

Summer 2010 Registration **GEOL 4020**

Basic concepts describing earth's biomes and physical environment are presented in a systems context. Global warming assessment, from both political and scientific perspectives, is then presented. Model visualization of these concepts to consider human impacts on Earth's biomes is discussed. Earth system viewpoint, having links of Earth's biomes to oceans and atmosphere, completes the course discussion. Cross-listed with ENVS 5020, GEOG 4020. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOL 4030 - Environmental Geology

Summer 2010 Registration **GEOL 4030**

Applies geological information to interactions between people and the physical environment. Increasing awareness of its importance in our society means that this is an expanding field as companies are required to address the environmental consequences of their actions. Prereq: Entry into MSES program, senior standing in sciences or geography, or permission of instructor. Cross-listed with ENVS 5030 and GEOL 5030. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOL 4060 - Remote Sensing I: Introduction to Environmental Remote Sensing

Summer 2010 Registration **GEOL 4060**

An in-depth treatment of the use of aerial photographs and other forms of imagery for the analysis of urban-industrial patterns, vegetation, agriculture, landforms, and geologic structure. Prereq: GEOG 3080 or consent of instructor. Cross-listed with GEOL 5060, GEOG 4060, 5060. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOL 4111 - Field Geology

Summer 2010 Registration **GEOL 4111**

Introduces methods of geologic mapping in sedimentary, igneous and metamorphic rocks. Includes plane table surveying, brunton and pace methods, and the use of aerial photographs. Prereq: GEOL 3011; GEOL 3231 and 3421 strongly recommended. **Semester Hours:** 5 to 5
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOL 4270 - Glacial Geomorphology

Summer 2010 Registration **GEOL 4270**

Provides an in-depth view of the processes and systems found in glacial environments. Topics include: evidence of past glaciation; present-day glacial extent; glacier dynamics; glacial erosional processes and landforms; glacial depositional processes and landforms. Prereq: GEOG 1202 or GEOL 1072. Cross-listed with GEOG/GEOL 4270/5270. **Semester Hours:** 3 to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOL 4402 - Unsaturated Zone Hydrology

Summer 2010 Registration **GEOL 4402**

Focuses on water and contaminant transport through the unsaturated zone, infiltration and drainage, and heat and gas transport. Students learn to design, perform field installation, and collect data in order to model and predict contaminant movement on/off site. Prereq: Chemistry, physics, calculus or permission of instructor. Cross-listed with ENVS 5403. **Semester Hours:** 3 to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOL 4460 - Vertebrate Paleontology and Evolution

Summer 2010 Registration **GEOL 4460**

Surveys the evolutionary history of the backboned animals from primitive fish through dinosaurs to man. Includes paleoecology, functional morphology, and uses of vertebrate fossils in geologic correlations. Prereq: Introductory geology, biology or anthropology. **Semester Hours:** 3 to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOL 4513 - Geology of the Grand Canyon

Summer 2010 Registration **GEOL 4513**

Raft down the Grand Canyon and examine the geology of igneous, sedimentary and metamorphic rocks from the Precambrian to the Holocene. Study marine and terrestrial fossils, migmatization and observe modern sedimentary processes. Prereq: Introduction to geology. **Semester Hours:** 3 to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOL 4630 - Principles of Geomorphology

Summer 2010 Registration **GEOL 4630**

Systematic study of rock structures, weathering, mass wasting, fluvial, wind, glacial, shoreline processes, and the landforms they produce. Prereq: Introductory college-level geology or physical geography. Cross-listed with GEOG 4240. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOL 4770 - Applied Statistics for the Natural Sciences

Summer 2010 Registration **GEOL 4770**

Surveys statistical techniques including: quick review of basic statistics, tests for normality and outliers, display of data; simple and multiple regression; Anova and its relation to regression. Emphasis on computer or stat-pak analysis and interpretation of statistical results. Prereq: College algebra and GEOG 3080, or consent of instructor. Cross-listed with GEOL 5770, GEOG 4770, ENVS 5600. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOL 4780 - Engineering Geology

Summer 2010 Registration **GEOL 4780**

Studies geology as utilized in engineering and environmental practice. Emphasizes a conceptual integration of geologic materials, processes, and rates of change as a basis for successful application of geologic knowledge to environmental planning and engineering design projects. Prereq: MATH 2411 and CVEN 2121. Cross-listed with GEOL 5780 and CVEN 4780. **Semester Hours:** 4to 4
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOL 4840 - Independent Study: GEOL

Summer 2010 Registration **GEOL 4840**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOL 5001 - RM-MSMSP: Earth Processes I

Summer 2010 Registration **GEOL 5001**

Systematic study of geological concepts, rock and mineral formation, plate tectonics, volcanism and earthquakes, landforms and weathering, historical environmental interpretation. Includes a field component. This course is not applicable toward any degree in the College of Liberal Arts and Sciences. Prereq: Permission of project director. **Semester Hours:** 4to 4
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOL 5002 - RM-MSMSP: Earth Sciences II - Sedimentology and Paleontology

Summer 2010 Registration **GEOL 5002**

Field and lecture course building on Earth Sciences I, which covers internal earth processes. Students learn about erosional processes and how sedimentary rocks are deposited and may be preserved; the different ways fossils are preserved; describing rocks in the field; and collecting, preparing and describing fossils. Provides an overview of the geology of the area so that students can place the detailed studies in context. This course is not applicable toward any degree in the College of Liberal Arts and Sciences. Prereq: GEOL 5001 (or equivalent) or permission of project director. **Semester Hours:** 4to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOL 5003 - RM-MSMSP: Earth Science in Context

Summer 2010 Registration **GEOL 5003**

Designed for teachers in the RM-MSMSP program. Topics include global climate change, glaciers, coastal geology, volcanism, and their effects on culture. Monuments such as Florissant Fossil Beds, Ice Core, Cave of the Winds and a quarry will be visited. Note: This course is not applicable toward any degree in the College of Liberal Arts and Sciences. **Semester Hours:** 4to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOL 5030 - Environmental Geology

Summer 2010 Registration **GEOL 5030**

Applies geological information to interactions between people and the physical environment. Increasing awareness of its importance in our society means that this is an expanding field as companies are required to address the environmental consequences of their actions. Prereq: Entry into MSES program, senior standing in sciences or geography, or permission of instructor. Cross-listed with GEOL 4030 and ENVS 5030. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOL 5060 - Remote Sensing I: Introduction to Environmental Remote Sensing

Summer 2010 Registration **GEOL 5060**

An in-depth treatment of the use of aerial photographs and other forms of imagery for the analysis of urban-industrial patterns, vegetation, agriculture, landforms, and geologic structure. Prereq: GEOG 3080 or consent of instructor. Cross-listed with GEOL 4060, GEOG 4060, 5060. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOL 5270 - Glacial Geomorphology

Summer 2010 Registration **GEOL 5270**

Provides an in-depth view of the processes and systems found in glacial environments. Topics include: evidence of past glaciation; present-day glacial extent; glacier dynamics; glacial erosional processes and landforms; glacial depositional processes and landforms. Prereq: GEOG 1202 or GEOL 1072. Cross-listed with GEOG/GEOL 4270/5270. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOL 5770 - Applied Statistics for the Natural Sciences

Summer 2010 Registration **GEOL 5770**

Surveys statistical techniques including: quick review of basic statistics, tests for normality and outliers, display of data; simple and multiple regression; Anova and its relation to regression. Emphasis on computer or stat-pak analysis and interpretation of statistical results. Prereq: College algebra and GEOG 3080, or consent of an instructor. Cross-listed with GEOL 4770, GEOG 4770, ENV5 5600. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOL 5780 - Engineering Geology

Summer 2010 Registration **GEOL 5780**

Studies geology as utilized in engineering and environmental practice. Emphasizes a conceptual integration of geologic materials, processes, and rates of change as a basis for successful application of geologic knowledge to environmental planning and engineering design projects. Cross-listed with GEOL 4780 and CVEN 5780. **Semester Hours:** 4to 4
Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOL 5939 - Internship/Cooperative Education

Summer 2010 Registration **GEOL 5939**

Semester Hours: 1to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOL 5950 - Master's Thesis

Summer 2010 Registration **GEOL 5950**

Semester Hours: 1to 8

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOL 6840 - Independent Study: GEOL

Summer 2010 Registration **GEOL 6840**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOL 6950 - Master's Thesis

Summer 2010 Registration **GEOL 6950**

Semester Hours: 1to 8

Registration is changing. Visit our website for details ucdenver.edu/registration.

GEOL 6960 - Master's Project

Summer 2010 Registration **GEOL 6960**

Semester Hours: 1to 8

Registration is changing. Visit our website for details ucdenver.edu/registration.

GRMN 1000 - Germany and the Germans

Summer 2010 Registration **GER 1000**

Introduces the ways in which the various aspects of German culture help define German life and national identity. By examining art, music and media, primarily of the 20th century, students explore what it means to be German. Note: Taught in English.**Semester Hours:** 3to 3**GT Pathways Category Key:** GT-AH1
Registration is changing. Visit our website for details ucdenver.edu/registration.

GRMN 1010 - Beginning German I

Summer 2010 Registration **GER 1010**

Introduces basic grammar, sentence structure and speech patterns. Note: Students may not enroll in any lower division(1000/2000) language skills course in which their level of proficiency exceeds that of the course. Students placing into a course through any means other than following the regular sequence must consult with an appropriate faculty member of the Dept. of Modern Languages prior to enrollment.**Semester Hours:** 5to 5

Registration is changing. Visit our website for details ucdenver.edu/registration.

GRMN 1020 - Beginning German II

Summer 2010 Registration **GER 1020**

(Continuation of GRMN 1010.) Note: Students may not enroll in any lower division (1000/2000) language skills course in which their level of proficiency exceeds that of the course. Students placing into a course through any means other than following the regular sequence must consult with an appropriate faculty member of the Dept. of Modern Languages prior to enrollment. Prereq: GRMN 1010 or one year of high school

German. **Semester Hours:** 5 to 5

Registration is changing. Visit our website for details ucdenver.edu/registration.

GRMN 1111 - Freshman Seminar

Summer 2010 Registration **GER 1111**

Semester Hours: 1 to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GRMN 2110 - Intermediate German I

Summer 2010 Registration **GER 2110**

(Continuation of German 1020.) Note: Students may not enroll in any lower division (1000/2000) language skills course in which their level of proficiency exceeds that of the course. Students placing into a course through any means other than following the regular sequence must consult with an appropriate faculty member of the Dept. of Modern Languages prior to enrollment. Prereq: GRMN 1020 or two years of high school German. **Semester Hours:** 3 to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GRMN 2130 - Intermediate German II

Summer 2010 Registration **GER 2130**

A fourth-semester course designed for those majoring or minoring in International Affairs. Along with grammar review, the course deals with contemporary topics in cultural, political, economic and social affairs. Note: Open to all those wanting to satisfy a fourth semester language requirement to qualify for upper division German courses. Satisfies the language requirement for the minor in International Affairs, may be applied to the major and minor in German, and will satisfy the fourth-semester foreign requirement at most graduate schools. Prereq: GRMN 2110 or placement by exam. **Semester Hours:** 3 to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GRMN 2150 - Intermediate German II: Grammar Review and Oral Practice

Summer 2010 Registration **GER 2150**

Prepares students for upper division. German language skills courses. Students practice abilities gained in previous semesters of language instruction, improve conversational abilities, develop skills using reference works, learn tactics for reading and discussing newspaper style German and develop written composition abilities. Note: Students may not enroll in any lower division (1000/2000) language skills course in which their level of proficiency exceeds that of the course. Students placing into a course through any means other than following the regular sequence must consult with an appropriate faculty member of the Dept. of Modern Languages prior to enrollment. Taught in

German. Prereq: GRMN 2110 or equivalent. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GRMN 2210 - Readings and Translation

Summer 2010 Registration **GER 2210**

Stresses reading and translation skills rather than speaking. Students work with short German texts in a variety of areas: natural and social sciences, history and literature.

Note: Taught in English. Prereq: GRMN 1020. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GRMN 2240 - Intermediate Composition and Vocabulary Building

Summer 2010 Registration **GER 2240**

A fourth-semester composition and vocabulary building course. Note: Taught in English.

Prereq: GRMN 2110 or 2210. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GRMN 2840 - Independent Study: GRMN

Summer 2010 Registration **GER 2840**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GRMN 2939 - Internship/Cooperative Education

Summer 2010 Registration **GER 2939**

Experiences involving application of specific, relevant concepts and skills in supervised employment situations. Prereq: 15 hours with 2.75 GPA. **Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GRMN 2995 - Travel Study Topics

Summer 2010 Registration **GER 2995**

For students doing travel study in Germany; register through the Office of International Education. **Semester Hours:** 0to 15

Registration is changing. Visit our website for details ucdenver.edu/registration.

GRMN 3030 - Advanced Conversation: Idioms and Vocabulary Building

Summer 2010 Registration **GER 3030**

An advanced conversation course, using small-group discussion, skits, and short oral presentations to improve fluency in spoken German and to build vocabulary. Prereq:

GRMN 2130 or fourth semester equivalency. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GRMN 3050 - Phonetics and Pronunciation of German

Summer 2010 Registration **GER 3050**

Students acquire skills for articulating German with a high degree of accuracy, and systematically develop a more native-like pronunciation of German. Students learn basic linguistic principles for the purpose of gaining insight into the mechanics of spoken German. Note: Taught in German. Prereq: GRMN 2130. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GRMN 3060 - Advanced German Language Skills I

Summer 2010 Registration **GER 3060**

An advanced course in German language skills with equal emphasis devoted to speaking, listening, reading and writing. Students improve their cultural awareness, pronunciation, and vocabulary as well. Specific grammar topics include: subjunctive I and II, participles I and II, extended adjectives, verb tenses, gender of nouns, and reflexive. Note: Primary language of instruction for this course is German. Prereq: GRMN 2130 or permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GRMN 3070 - Advanced German Language Skills II

Summer 2010 Registration **GER 3070**

An advanced course in German language skills with equal emphasis devoted to speaking, listening, reading and writing. Students improve their cultural awareness, pronunciation and vocabulary. Specific grammar topics include: semantic categories, functions of nouns, determiners, adjectives, relative clauses, pronouns. Note: Primary language of instruction for this course is German. Prereq: GRMN 2130 or permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GRMN 3080 - Advanced German Language Skills III

Summer 2010 Registration **GER 3080**

An advanced course in German language skills with equal emphasis devoted to speaking, listening, reading and writing. Students improve their cultural awareness, pronunciation, and vocabulary as well. Specific grammar topics include: prepositions and idioms, "da" compounds, German syntax, clause typology numerals, and time expressions. Note: Primary language of instruction for this course is German. Prereq: GRMN 2130 or permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GRMN 3090 - Advanced German Language Skills IV

Summer 2010 Registration **GER 3090**

An advanced course in German language skills with equal emphasis devoted to speaking, listening, reading, and writing. Students improve their cultural awareness, pronunciation and vocabulary. Specific grammar topics include: modal verbs, complex clause and sentence structure, "werden," passive voice, double infinitives, perfect infinitives, and dependent infinitives. Note: Primary language of instruction for this course is German. Prereq: GRMN 2130 or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GRMN 3110 - Introduction to German Literature I

Summer 2010 Registration **GER 3110**

Selected readings from German short stories, drama, and poetry, primarily from the modern period. Emphasis on techniques of reading. Note: Primary language of instruction for this course is German. Prereq: GRMN 2110. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GRMN 3130 - Current Topics of the German-Speaking World

Summer 2010 Registration **GER 3130**

Combines discussion and writing on political, economic, and social conditions in contemporary Germany, Austria and Switzerland. Articles from current German newspapers, magazines, television broadcasts, and the World Wide Web are analyzed for a better understanding of how citizens of these countries see themselves and the world. Prereq: Any third-year German course. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GRMN 3200 - Current German Society and Culture

Summer 2010 Registration **GER 3200**

Provides students with a detailed overview of the systems in modern, united Germany such as social, educational, and political. Examines how Germany sees itself as a vital member of the EU. Exposes students to rudimentary use of the German language. Prereq: Sophomore standing or permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GRMN 3230 - German Civilization I: From Medieval Through Age of Idealism

Summer 2010 Registration **GER 3230**

Selected highlights of major cultural aspects of the Middle Ages, the Reformation, the

Enlightenment, and the Age of Idealism. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

GRMN 3240 - German Civilization II: The Modern Age

Summer 2010 Registration **GER 3240**

Selected highlights of major cultural aspects of the later 19th century, the Wilhelminian period, the Weimar Republic, the Third Reich, and the period since 1945. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GRMN 3310 - Techniques of Translation

Summer 2010 Registration **GER 3310**

Trains students in strategic translation skills that aid in rapid comprehension of short German texts and the ability to render them into well written contemporary English. Students choose content areas of individual interest (e.g. history, literature, chemistry). Prereq: GRMN 2130 or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GRMN 3512 - Faust in Literature and Music

Summer 2010 Registration **GER 3512**

Surveys the Faust legend in literature and music. Includes works by Marlowe, Goethe, Berlioz, Schumann, Gounod, Boito and others. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GRMN 3540 - German Cinema and Society

Summer 2010 Registration **GER 3540**

Studies several key German films from 1918 to the present that illuminate the political/cultural discourses of their times. Readings from historical and film-critical texts aid in contextualizing the films. Note: Taught in English. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GRMN 3840 - Independent Study: GRMN

Summer 2010 Registration **GER 3840**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GRMN 3939 - Internship/Cooperative Education

Summer 2010 Registration **GER 3939**

Designed experiences involving application of specific, relevant concepts and skills in supervised employment situations. Prereq: Junior standing and 2.75 GPA. **Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GRMN 3995 - Travel Study Topics

Summer 2010 Registration **GER 3995**

For students doing travel study in Germany; register through the Office of International Education. **Semester Hours:** 0to 15

Registration is changing. Visit our website for details ucdenver.edu/registration.

GRMN 4050 - Advanced German Phonetics and Language History

Summer 2010 Registration **GER 4050**

Students develop advanced phonetic skills for analyzing the sounds and orthography of German. They apply these skills by examining the diachronic (historic) developments in the grammatical and phonological structures of German over the last two millennia.

Note: Taught in German. Prereq: GRMN 3050 or equivalent. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GRMN 4840 - Independent Study: GRMN

Summer 2010 Registration **GER 4840**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

GRMN 4995 - Travel Study Topics

Summer 2010 Registration **GER 4995**

For students doing travel study in Germany; register through the Office of International Education. **Semester Hours:** 0to 15

Registration is changing. Visit our website for details ucdenver.edu/registration.

GRMN 5995 - Travel Study Topics

Summer 2010 Registration **GER 5995**

For students doing travel study in Germany; register through the Office of International Education. **Semester Hours:** 0to 15

Registration is changing. Visit our website for details ucdenver.edu/registration.

HBSC 1111 - Freshman Seminar

Summer 2010 Registration **HBSC 1111**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HBSC 2001 - Introduction to Community and Population Health Science

Summer 2010 Registration **HBSC 2001**

Introduces undergraduate students to the mission, history, knowledge-base, values, concepts, and tools of community and population health science, a field that broadly encompasses health and the socio-behavioral sciences, and forms the core of public health. Provides an overview of the principal strategies and methods of public health. **Semester Hours:** 3to 3 **GT Pathways Category Key:** GT-SS3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HBSC 2051 - Introduction to Population Studies

Summer 2010 Registration **HBSC 2051**

Examines current issues in population growth, fertility, mortality and migration in the United States and globally. Introduces students to the basic tools of demography and encourages them to think critically about the causes and consequences of population change. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HBSC 3001 - Introduction to Epidemiology

Summer 2010 Registration **HBSC 3001**

Introduces the basic concepts of public health and epidemiology, including assessment of disease in the community, the study of causation and association of disease with lifestyle and environmental risk factors, as well as related special topics. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HBSC 3002 - Ethnicity, Health and Social Justice

Summer 2010 Registration **HBSC 3002**

Surveys core issues contributing to racial or ethnic minority differences in health status. Historical and contemporary U.S. health and social policy, including the areas of environmental health, sexual and reproductive health, children and immigrants, are examined. Cross-listed with ETST 3002. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HBSC 3010 - Evolution of Human Sexuality

Summer 2010 Registration **HBSC 3010**

Surveys the biological and social evolution of human sexuality from an interdisciplinary perspective. Encourages critical thinking about human sexual behavior and challenges assumptions about sexuality. Students explore what happens when sexual behaviors that have evolved over the millennia mix with the cultural, political, and economic influences imposed by contemporary civilization. Prereq: Introductory courses in anthropology, biology, psychology, sociology or political science. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HBSC 3021 - Fundamentals of Health Promotion

Summer 2010 Registration **HBSC 3021**

Provides an overview of the field of health promotion, including an introduction to key theories and methods, as well as exposure to the breadth of programs and diversity of settings through several case studies. Includes attention to health behaviors as contributors to current public health problems and community-based approaches to health promotion in addressing them. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HBSC 3031 - Health, Human Biology and Behavior

Summer 2010 Registration **HBSC 3031**

Introduces the study of human health and well-being, and the allied disciplines of epidemiology and demography. The course considers the nature of disease, health problems related to nutrition and the physical environment, and morbidity and mortality from an integrated "biobehavioral" perspective. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HBSC 3041 - Health, Culture and Society

Summer 2010 Registration **HBSC 3041**

A critical, holistic interpretation of health, illness, and human bodies that emphasizes power as a key social-structural factor in health and societal responses to illness. Explores those areas of social and cultural life where power differences are most evident in their impact on health. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HBSC 3071 - Global Topics in Sexual and Reproductive Health

Summer 2010 Registration **HBSC 3071**

Surveys trends and determinants of sexual and reproductive health around the globe and in the United States. Examines the social and behavioral determinants of sexual and reproductive health and the influence of policy. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HBSC 3200 - Human Migration: Nomads, Sojourners, and Settlers

Summer 2010 Registration **HBSC 3200**

Explores the relationship between human migration, voluntary and forced, and social organization and culture in the modern world. Case studies include pastoralists, foragers, refugees, immigrants, sojourners, and settlers and their impact on health, culture, identity, ethnicity, tradition and nationality. Cross-listed with ANTH

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HBSC 3939 - Cooperative Education

Summer 2010 Registration **HBSC 3939**

Experiences involving application of specific, relevant concepts and skills in supervised employment situations. Prereq: Junior standing and 2.75 GPA. **Semester Hours:** 1to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HBSC 4010 - Global Health Studies I: The Biocultural Basis of Health

Summer 2010 Registration **HBSC 4010**

This course is concerned with the underlying biological and cultural determinants of health throughout the human life cycle in global and cross-cultural perspective. Note: The first of a two-course sequence in medical anthropology and global health studies; the second is HBSC 4020. Prereq: Upper division and/or graduate standing. Cross-listed with HBSC 5010, ANTH 4010 and 5014. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HBSC 4020 - Global Health Studies II: Comparative Health Systems

Summer 2010 Registration **HBSC 4020**

The course has three parts: (1) examines the social and cultural construction of sickness, systems of etiology cross culturally, the therapeutic encounter, varying roles of healer and patient, and the cultural basis of all healing systems; (2) considers health systems in the context of global health reform, and the history, organization, and roles of institutions of global health governance; and (3) considers the inter-relationship of health, foreign policy and global security. Prereq: Upper division and/or graduate standing. Cross-listed with HBSC 5020, ANTH 4020 and 5024. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HBSC 4021 - Community Health Assessment

Summer 2010 Registration **HBSC 4021**

Introduces applied methods of public health, including: analyzing community-level assessment data, developing a casual model for selected health outcomes, maximizing

community participation in the assessment process, developing assessments as a team, and setting the stage for effective intervention and evaluation. Prereq: Upper division standing, a course in statistics, and an introductory course in epidemiology (HBSC 4001, 5001). Cross-listed with HBSC 5021. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HBSC 4031 - Ethnographic Research in Public Health

Summer 2010 Registration **HBSC 4031**

Qualitative, ethnographic tools for practical applications in public health, including methods of direct observation, informant interviews, focus groups, structured ethnographic methods, rapid assessment and participatory action research. Basic analytic strategies, including review of computer software, coding and data display techniques. Cross-listed with HBSC 5031. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HBSC 4040 - Social Determinants of Health

Summer 2010 Registration **HBSC 4040**

This course explores social inequalities in physical and mental health, the illness experience, the healing professions, health policy, relations between providers and patients, and the structure, access to, and financing of health care organizations, with some cross-national discussions. Prereq: Upper-division standing. Cross-listed with HBSC 5040, SOCY 4040/5040. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HBSC 4060 - Evolutionary Medicine

Summer 2010 Registration **HBSC 4060**

Applies evolutionary principles to an understanding of human health and illness. The view complements perspectives on health and disease emanating from biological and social sciences, but considers the health or disease process from the perspective of pathogen and host, current and previous environments, and various phases of the life cycle. Prereq: ANTH 1303. Cross-listed with HBSC 5060, ANTH 4060 and 5060. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HBSC 4080 - Global Health Practice

Summer 2010 Registration **HBSC 4080**

A travel-study course that provides students the opportunity to work on global health issues in the context of a supervised internship experience. In addition to a formal internship placement or directed research opportunity, students attend formal lectures and participate in seminars devoted to addressing those health issues most relevant to

the country in which the course is being taught. Prereq: HBSC/ANTH 4010/5014, HBSC/ANTH 4020/5024, HLTH 6070 or equivalent. Cross-listed with HBSC 5080, ANTH 4080 and 5080. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HBSC 4090 - Political Economy of Drug Culture

Summer 2010 Registration **HBSC 4090**

An anthropological study of how illegal drug use impacts the social, political, economic and medical sectors of any community. Examines the interplay between these sectors and drug users through the lens of political economy. Prereq: ANTH 2102. Cross-listed with HBSC 5090. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HBSC 4110 - Public Health Perspectives on Family Violence

Summer 2010 Registration **HBSC 4110**

Public health views family violence from a prevention perspective. Our exploration of child abuse, intimate partner violence, and other forms of family violence will complement other disciplinary approaches by focusing heavily on the community and social factors that contribute to abusive relationships. Theories of power and coercion and approaches to researching these issues will be analyzed and discussed through our exploration of the various forms of family violence. Prereq: Advanced undergraduate standing. Cross-listed with HBSC 5110. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HBSC 4200 - The Global HIV/AIDS Epidemic

Summer 2010 Registration **HBSC 4200**

Provides a foundation for a critical analysis of HIV/AIDS in global context, concerning topics such as disease, the body, ethnicity/race, gender, sexuality, risk, addiction, power, and culture together with a set of ethnographic texts that explore the epidemic's impact. Cross-listed with HBSC 5200. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HBSC 4620 - Health Risk Communication

Summer 2010 Registration **HBSC 4620**

Acquaints students with contemporary theory, research, and practice in health risk communication. Cross-listed with HBSC 5620, COMM 4620, 5620, and ENVS 5620. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HBSC 4840 - Independent Study

Summer 2010 Registration **HBSC 4840**

This course requires active independent learning based upon a written curricular outline and agreement with a faculty member from Health and Behavioral Sciences who supervises the student's work throughout the semester. Prereq: permission of instructor required. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HBSC 4995 - Travel Study

Summer 2010 Registration **HBSC 4995**

A flexible format that permits courses to be taught in various areas of the world. Prereq: upper division undergraduate standing and permission of instructor. Cross-listed with HBSC 5995. **Semester Hours:** 3to 9

Registration is changing. Visit our website for details ucdenver.edu/registration.

HBSC 4999 - Topics in the Health and Behavioral Sciences

Summer 2010 Registration **HBSC 4999**

An in-depth study of selected social science perspectives/theories and their applications to population health. Topics will vary from semester to semester, with a particular emphasis on current, salient population health problems. Prereq: Junior or senior standing or permission of instructor. Cross-listed with HBSC 5999. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HBSC 5010 - Global Health Studies I: The Biocultural Basis of Health

Summer 2010 Registration **HBSC 5010**

This course is concerned with the underlying biological and cultural determinants of health throughout the human life cycle in global and cross-cultural perspective. Note: The first of a two-course sequence in medical anthropology and global health studies; the second is HBSC 5020. Prereq: Upper division and/or graduate standing. Cross-listed with HBSC 4010, ANTH 4010 and 5014. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HBSC 5020 - Global Health Studies II: Comparative Health Systems

Summer 2010 Registration **HBSC 5020**

The course has three parts: (1) examines the social and cultural construction of sickness, systems of etiology cross culturally, the therapeutic encounter, varying roles of healer and patient, and the cultural basis of all healing systems; (2) considers health systems in the context of global health reform, and the history, organization, and roles of

institutions of global health governance; and (3) considers the inter-relationship of health, foreign policy and global security. Prereq: Upper division and/or graduate standing. Cross-listed with HBSC 4020, ANTH 4020, and ANTH 5024. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HBSC 5021 - Community Health Assessment

Summer 2010 Registration **HBSC 5021**

Introduces applied methods of public health, including: analyzing community-level assessment data, developing a casual model for selected health outcomes, maximizing community participation in the assessment process, developing assessments as a team, and setting the stage for effective intervention and evaluation. Prereq: Upper division standing, a course in statistics, and an introductory course in epidemiology (HBSC 5001, 4001). Cross-listed with HBSC 4021. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HBSC 5031 - Ethnographic Research in Public Health

Summer 2010 Registration **HBSC 5031**

Qualitative, ethnographic tools for practical applications in public health, including methods of direct observation, informant interviews, focus groups, structured ethnographic methods, rapid assessment and participatory action research. Basic analytic strategies, including review of computer software, coding and data display techniques. Cross-listed with HBSC 4031. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HBSC 5040 - Social Determinants of Health

Summer 2010 Registration **HBSC 5040**

This course explores social inequalities in physical and mental health, the illness experience, the healing professions, health policy, relations between providers and patients, and the structure, access to, and financing of health care organizations, with some cross-national discussions. Prereq: Graduate standing. Cross-listed with HBSC 4040, SOCY 4040/5040. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HBSC 5060 - Evolutionary Medicine

Summer 2010 Registration **HBSC 5060**

Applies evolutionary principles to an understanding of human health and illness. The view complements perspectives on health and disease emanating from biological and social sciences, but considers the health or disease process from the perspective of pathogen and host, current and previous environments, and various phases of the life

cycle. Prereq: ANTH 1303. Cross-listed with HBSC 4060, ANTH 4060 and 5060.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HBSC 5080 - Global Health Practice

Summer 2010 Registration **HBSC 5080**

A travel-study course that provides students the opportunity to work on global health issues in the context of a supervised internship experience. In addition to a formal internship placement or directed research opportunity, students attend formal lectures and participate in seminars devoted to addressing those health issues most relevant to the country in which the course is being taught. Prereq: HBSC/ANTH 5014/4010, HBSC/ANTH 5024/4020, HLTH 6070 or equivalent. Cross-listed with HBSC 4080, HBSC 5080 and 4080.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HBSC 5090 - Political Economy of Drug Culture

Summer 2010 Registration **HBSC 5090**

An anthropological study of how illegal drug use impacts the social, political, economic and medical sectors of any community. Examines the interplay between these sectors and drug users through the lens of political economy. Prereq: ANTH 2102. Cross-listed with HBSC 4090.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HBSC 5110 - Public Health Perspectives on Family Violence

Summer 2010 Registration **HBSC 5110**

Public health views family violence from a prevention perspective. Our exploration of child abuse, intimate partner violence, and other forms of family violence will complement other disciplinary approaches by focusing heavily on the community and social factors that contribute to abusive relationships. Theories of power and coercion and approaches to researching these issues will be analyzed and discussed through our exploration of the various forms of family violence. Prereq: Graduate standing. Cross-listed with HBSC 4110.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HBSC 5200 - The Global HIV/AIDS Epidemic

Summer 2010 Registration **HBSC 5200**

Provides a foundation for a critical analysis of HIV/AIDS in global context, concerning topics such as disease, the body, ethnicity/race, gender, sexuality, risk, addiction, power, and culture together with a set of ethnographic texts that explore the epidemic's impact.

Cross-listed with HBSC 4200. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HBSC 5620 - Health Risk Communication

Summer 2010 Registration **HBSC 5620**

Acquaints students with contemporary theory, research, and practice in health risk communication. Cross-listed with HBSC 4620, COMM 5620, 4620, and ENVS 5620. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HBSC 5840 - Independent Study

Summer 2010 Registration **HBSC 5840**

This course requires active independent learning based upon a written curricular outline and agreement with a faculty member from Health and Behavioral Sciences who supervises the student's work throughout the semester. Prereq: permission of instructor required. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HBSC 5939 - Cooperative Education

Summer 2010 Registration **HBSC 5939**

Semester Hours: 1to 6
Registration is changing. Visit our website for details ucdenver.edu/registration.

HBSC 5995 - Travel Study

Summer 2010 Registration **HBSC 5995**

A flexible format that permits courses to be taught in various areas of the world. Prereq: graduate standing and permission of instructor. Cross-listed with HBSC 4995. **Semester Hours:** 3to 9
Registration is changing. Visit our website for details ucdenver.edu/registration.

HBSC 5999 - Topics in the Health and Behavioral Sciences

Summer 2010 Registration **HBSC 5999**

An in-depth study of selected social science perspectives/theories and their applications to population health. Topics will vary from semester to semester, with a particular emphasis on current, salient population health problems. Prereq: Graduate standing or permission of instructor. Cross-listed with HBSC 4999. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HBSC 6320 - Human Genetics: Legal, Ethical and Social Issues

Summer 2010 Registration **HBSC 6320**

Examines legal, ethical, and social issues that have come about with advances in human genetics. Topics include privacy, informed consent, discrimination, forensics, medical malpractice, and property rights. Prereq: Graduate standing. Cross-listed with HBSC 7320, ANTH 6041. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HBSC 6840 - Independent Study: HBSC

Summer 2010 Registration **HBSC 6840**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HBSC 7001 - Colloquium Series in the Health and Behavioral Sciences

Summer 2010 Registration **HBSC 7001**

Bi-weekly lectures given by Health and Behavioral Sciences faculty, advanced graduate students and alums, on selected and current topics in the health and behavioral sciences. Required of all first and second year students in HBSC; may be taken up to three times for credit. **Semester Hours:** 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

HBSC 7011 - Theoretical Perspectives in Health and Behavioral Science I

Summer 2010 Registration **HBSC 7011**

Covers the following subject areas: philosophy and epistemology of the social and behavioral sciences as they are applied in public health and health care contexts; historical perspectives of Western biomedicine and public health; cross-cultural perspectives on health systems; class, ethnic, and gender correlates of health and sickness; critical perspectives on Western health and health care models; and the structure and organization of health care systems. Note: Part I of a required, two-semester, interdisciplinary, team-taught, seminar-format course that meets three hours a week for the academic year. Prereq: Admission to the Health and Behavioral Sciences program. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HBSC 7021 - Theoretical Perspectives in Health and Behavioral Science II

Summer 2010 Registration **HBSC 7021**

Reviews multiple approaches and strategies for understanding and changing the health of systems, organizations, communities and individuals. Course is intended to give students content knowledge and practical skills for assessing, planning, and

implementing change processes. Note: Part II of two-semester seminar course that meets three hours a week for the academic year. Prereq: HBSC 7011 and admission to the Health and Behavioral Sciences program. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HBSC 7031 - Human Ecology and Environmental Adaptation

Summer 2010 Registration **HBSC 7031**

Focuses on the interplay of biology, environment, culture, and behavior in the causes and exacerbation of disease. The course includes the following topics: health in environmental and evolutionary contexts; models of causation in biomedicine and other medical systems; individual, community, and population manifestations of health and disease; and biocultural interaction in disease process. Specific case studies drawn from contemporary health problems are used to illustrate in detail the nature of these processes. Prereq: Admission to the Health and Behavioral Sciences program. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HBSC 7041 - Research Design and Methods in the Health and Behavioral Sciences I

Summer 2010 Registration **HBSC 7041**

This course has four principal aims: (1) to provide students a working knowledge of research methodology as applied to field research efforts; (2) to enable students to apply research methodologies to areas of particular interest in the health and behavioral sciences; (3) to expose students to data manipulation techniques common to social science quantitative research; and (4) to teach basic research proposal development techniques. Prereq: Admission to the Health and Behavioral Sciences program. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HBSC 7051 - Qualitative Research Design and Methods

Summer 2010 Registration **HBSC 7051**

Much of the data collected in the social sciences is interview- and text-based. This course explores methods for collecting and analyzing these data and theoretical paradigms that underlie these methods. Cross-listed with ANTH 6063. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HBSC 7061 - Social Statistics

Summer 2010 Registration **HBSC 7061**

This course covers the theory and application of basic and advanced statistical methods

for social and health research. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HBSC 7071 - Social and Behavioral Determinants of Health and Disease

Summer 2010 Registration **HBSC 7071**

Surveys the distribution, determinants, and psychological and behavioral aspects of health and disease. Social, economic, environmental, and cultural variations in and determinants of health, disease, and quality of life, as well as barriers to access and utilization, geopolitical influences, environmental and social injustice, historical trends, and future directions are addressed. Prereq: HBSC 5001 or equivalent. **Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HBSC 7111 - Applications of the Health and Behavioral Sciences

Summer 2010 Registration **HBSC 7111**

Students focus on eight or nine specific health problems, applying multiple social and behavioral science perspectives in pursuit of a truly interdisciplinary understanding of the most significant dimensions of each problem. Guest experts provide "grand rounds" type presentations on each selected topic. Prereq: HBSC 7041. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HBSC 7120 - Human Reproductive Technologies and The Law

Summer 2010 Registration **HBSC 7120**

Examines the legal, ethical, and social issues that have come about with advances in assisted reproductive technologies (ART). Illustrates how lawyers, judges, bioethicists, legislators, and policy makers have addressed these issues. Prereq: Graduate standing. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HBSC 7121 - Dissertation Proposal and Research

Summer 2010 Registration **HBSC 7121**

Semester Hours: 6to 8

Registration is changing. Visit our website for details ucdenver.edu/registration.

HBSC 7210 - Human Health and Environmental Pollution

Summer 2010 Registration **HBSC 7210**

Examines the roles of technology and society in the etiology and control/prevention of adverse health outcomes associated with releases of toxic substances. Examples come from experience and the literature on occupational cancer and reproductive hazards,

occupational and environmental regulation of hazardous wastes, air, and water pollution. Cross-listed with ENVS 6210. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HBSC 7235 - GIS Applications in the Health Sciences

Summer 2010 Registration **HBSC 7235**

Examines how GIS is used throughout the health care industry and public health. Covers environmental health, disease surveillance, and health services research. Students critically review current literature and gain hands-on experience with GIS software.

Prereq: GEOG 4080 or GEOG 5080, public health background, or consent of instructor.

Cross-listed with GEOG 4235, GEOG 5235. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HBSC 7310 - Environmental Epidemiology

Summer 2010 Registration **HBSC 7310**

Provides a basic understanding of the methods used to study the effects on human health of exposures to physical, chemical, or biological factors in the external environment. The course explains the use of epidemiologic methods through a problem solving approach to investigating environmental health case studies. Prereq: A basic statistics course and graduate standing or permission of instructor. Cross-listed with ENVS 6230. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HBSC 7320 - Human Genetics: Legal, Ethical and Social Issues

Summer 2010 Registration **HBSC 7320**

Examines legal, ethical, and social issues that have come about with advances in human genetics. Topics include privacy, informed consent, discrimination, forensics, medical malpractice, and property rights. Prereq: Graduate standing. Cross-listed with HBSC 6320, ANTH 6041. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HBSC 7340 - Risk Assessment

Summer 2010 Registration **HBSC 7340**

The process of determining the likelihood and extent of harm that may result from an activity or event. Topics covered are: hazard identification, dose-response evaluation, exposure assessment, and risk characterization. The subjects of risk management, risk perception, and risk communication are also discussed. Prereq: Graduate standing or permission of instructor. Cross-listed with CVEN 5494, ENVS 6200. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HBSC 7360 - Toxicology

Summer 2010 Registration **HBSC 7360**

Introduces the field of toxicology. Emphasizes the mechanisms by which chemicals produce toxic effects and the methods for assessing toxicity. Note: Designed for students in the environmental sciences and occupational health fields. Prereq: One year college chemistry and one year college biology. Cross-listed with ENV5 6220. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HBSC 7400 - Topics in the Health and Behavioral Sciences

Summer 2010 Registration **HBSC 7400**

A flexible seminar format for dealing with topics of special interest in the health and behavioral sciences. Topics to be considered vary from semester to semester. Prereq: Graduate standing. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HBSC 8990 - Doctoral Dissertation

Summer 2010 Registration **HBSC 8990**

Prereq: Admission to the Health and Behavioral Sciences program. **Semester Hours:** 1to 10

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 1016 - World History to 1500

Summer 2010 Registration **HIST 1016**

Surveys the rise of civilizations and their interactions from prehistoric to modern times. The emphasis is on the understanding of the various styles or characteristics of civilizations within a global context. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 1026 - World History Since 1500

Summer 2010 Registration **HIST 1026**

Surveys the interactions of the world's civilizations in modern times. The emphasis is on understanding the concept of modernization within a global context. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 1111 - Freshman Seminar

Summer 2010 Registration **HIST 1111**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 1211 - Western Civilization I

Summer 2010 Registration **HIST 1211**

Introduces ancient Mediterranean civilization and the birth of Europe. Covers topics on economics and society, political organization, intellectual history, and art from 3000 B.C. to A.D. 1500.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 1212 - Western Civilization II

Summer 2010 Registration **HIST 1212**

Introduces modern European civilization and its spread over the world. Covers topics on economics and society, political organization, intellectual history, and art from A.D. 1500 to the 20th century.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 1361 - U.S. History to 1876

Summer 2010 Registration **HIST 1361**

Provides an introduction to the major forces, events and individuals that shaped the historical development of American society, beginning with the European settlement of America and concluding with the Civil War, reconstruction and the early growth of an industrial order.**Semester Hours:** 3to 3**GT Pathways Category Key:** GT-HI1

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 1362 - U.S. History Since 1876

Summer 2010 Registration **HIST 1362**

Provides an introduction to the major forces, events, and individuals that shaped the historical development of American society from the Civil War to the present.**Semester Hours:** 3to 3**GT Pathways Category Key:** GT-HI1

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 1381 - Paths to the Present I

Summer 2010 Registration **HIST 1381**

Examines several topics of profound interest to historians world wide: nature and technology, secular and religious faiths, and concepts of political union. The experience of the U.S. as it relates to the experiences of other periods and cultures.**Semester**

Hours: 3to 3**GT Pathways Category Key:** GT-HI1

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 1382 - Getting Here: Paths to the Present II

Summer 2010 Registration **HIST 1382**

How do historians work? An evaluation of several significant topics in the history of Europe, the U.S., and the non-Western world.**Semester Hours:** 3to 3**GT Pathways Category Key:** GT-HI1

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 2939 - Internship/Cooperative Education

Summer 2010 Registration **HIST 2939**

Experiences involving application of specific, relevant concepts and skills in supervised employment situations. Prereq: 15 hours of 2.75 GPA.**Semester Hours:** 1to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 3031 - Theory and Practice of History: An Introduction to the Major

Summer 2010 Registration **HIST 3031**

Introduces history majors to the discipline at the outset of their course work. Covers historiographical trends and methodologies, and familiarizes students with the various types of research and writing they are likely to encounter in their classes. Note: This course should be taken as early as possible, and must be taken before HIST 4839.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 3121 - The World at War, 1914-1945

Summer 2010 Registration **HIST 3121**

Examines World Wars I and II as episodes in a protracted conflict among the nations of the capitalist West, the emerging states of Asia and the colonial world, and the USSR. Studies the causes and consequences of the wars.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 3230 - The American Presidency

Summer 2010 Registration **HIST 3230**

Explores the presidency in U.S. History. Topics include: ideological and constitutional foundations; expansion of presidential power in domestic politics and international relations; evolution of presidential campaigns; and dimensions of presidential leadership in politics, society and culture.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 3231 - Famous U.S. Trials

Summer 2010 Registration HIST 3231

History of the origins and development of the American constitution, with the famous trials and landmark Supreme Court decisions. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 3232 - The American Colonies to 1750

Summer 2010 Registration HIST 3232

The maturation of the American colonies within the British Empire, the development of commercial and intellectual centers, the creation of uniquely American politics, and the unfolding of critical differences between North and South. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 3235 - U.S. Labor History, 1800 to the Present

Summer 2010 Registration HIST 3235

Explores the experiences, contributions, and struggles of working-class Americans from the Civil War to the present. Areas of focus include pre-industrial and post-industrial labor, slavery, agricultural labor, gender and working class culture outside of the work place. Particular attention is paid to immigration, ethnicity, race and gender, as they relate to the history of America's laboring class. Prereq: Upper division standing. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 3343 - Women in U.S. History

Summer 2010 Registration HIST 3343

An analysis of women's place in society, in the work place, and in the political arena over the last 300 years. Cross-listed with WGST 3343. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 3345 - Immigration and Ethnicity in American History

Summer 2010 Registration HIST 3345

Explores the personal and collective experience of immigrants to America. Discusses problems of assimilation, urban and rural experiences, and implications for politics, the economy and social attitudes. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 3347 - African-American History, 1619-Present

Summer 2010 Registration **HIST 3347**

Explores the African-American experience, including definitions of citizenship, strategies for protest and resistance, models of leadership, religious life and cultural expression, divisions of class, color and gender. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 3348 - The African-American Protest Tradition, 1865 - Present

Summer 2010 Registration **HIST 3348**

Examines a series of influential African-American activists and considers such themes as intra-racial divisions, Pan-Africanism, black nationalism, the use of the courts and legal efforts, and black conservatism. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 3349 - Social Movements in 20th Century America

Summer 2010 Registration **HIST 3349**

By surveying the major American social movements of the twentieth century, this course will explore how Americans have created categories of race, ethnicity, culture, and sexuality and how elite and marginalized citizens have deployed these categories in politics. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 3350 - Colonial Latin America

Summer 2010 Registration **HIST 3350**

Surveys the creation of colonial empires by Spain and Portugal, 1492-1808. Topics include Native American responses to European incursions, women in colonial society, and slavery in Latin America. Cross-listed with ETST 3350. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 3360 - Denver History

Summer 2010 Registration **HIST 3360**

Introduces the social, political, economic, and cultural life of this mile high metropolis. Founded in the 1858 gold rush, Denver has grown into a five-county metropolis of over two million. Explore this boom and bust history in lectures, slide shows and walking tours. This course offers students a chance to do their own primary source research project, as well as exams and book reports. Note: Open to all students. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 3364 - Native Americans and Spaniards in North America

Summer 2010 Registration **HIST 3364**

Examines the interactions between Native Americans and Spanish invaders beginning in the 16th century. The course explores the impact of colonialism in what is today the American Southwest. Focuses on Native American adaptation and resistance to the European presence. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 3365 - Aztlan in the United States: Chicano History from 1821

Summer 2010 Registration **HIST 3365**

Explores the impact of U.S. rule on the Southwest, paying particular attention to legal, economic, and social changes that created new political and cultural identities in the Southwest. Cross-listed with ETST 3365. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 3366 - Environmental History of North America

Summer 2010 Registration **HIST 3366**

Examines the conversation that the peoples of North America have had with the earth, from Indian prehistory to modern industrial civilization. Out of the people-land dialogue has emerged a variety of cultures, some of which, as we shall see, successfully adapted to their environment, while others failed. Prereq: HIST 1361, 1362, 1381 or 1382. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 3396 - History of the American Indian

Summer 2010 Registration **HIST 3396**

Indigenous nations in North America comprise hundreds of diverse cultures. This course examines U.S. Indian policy and how indigenous nations responded; how they creatively adapted, and resisted cultural change; and how they continue to persist culturally, socially, and politically. Cross-listed with ETST 3396. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 3451 - Introduction to African History

Summer 2010 Registration **HIST 3451**

By looking at specific examples of the cultural, political, and economic experience of African society, this course attempts to introduce and make comprehensive the diverse history of the people of Africa. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 3460 - Introduction to Latin American History

Summer 2010 Registration **HIST 3460**

Surveys the historical development of the modern Latin American countries, beginning with the independence movements of the early 19th century. Emphasizes the 20th century issues and problems that have characterized these countries and affected their relations with the United States. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 3470 - Introduction to Asian History

Summer 2010 Registration **HIST 3470**

Introduces the origin and development of civilization in China, Japan and Korea. Explores the relationship between culture and civilization. Readings are drawn from literature, religion, philosophy, anthropology and history. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 3471 - Islam and Asia

Summer 2010 Registration **HIST 3471**

The course traces patterns of identity construction and compares social, political and cultural practices across regions and through Asia's diverse states and empires. Taking a broad survey of historical processes led by Asian Muslims, the course asks: why did some regions of Asia convert to Islam in large measure and others not? Why has the nineteenth century been called "Islam's Indian century?" What is the difference between creating a Muslim homeland like Pakistan and an Islamic state like Iran? **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 3480 - Introduction to European History

Summer 2010 Registration **HIST 3480**

Students are introduced to the major themes of European history and culture from the Enlightenment to the present. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 3481 - Ancient Greece

Summer 2010 Registration **HIST 3481**

A history of the Greek-speaking world, from the Bronze Age depicted in Homer's epics to Alexander the Great and the Hellenistic Kingdoms. The course addresses the political, intellectual, socioeconomic, and military history of the eastern Mediterranean, with an emphasis on Greece. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 3482 - Rome: City and Empire

Summer 2010 Registration HIST 3482

Pagan Rome from its earliest beginnings to the rise of Christianity. Emphasis is on the military, socio-economic, and political history of Rome, its empire in Italy, and its domination of the Mediterranean World (ca. 800 B.C. to A.D. 300). **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 3483 - Introduction to Modern South Asia

Summer 2010 Registration HIST 3483

Surveys the social, economic, and political processes that shaped modern South Asia. Considers issues in contemporary political debates within their original historical contexts and trace the power of relationships that affected changes, long-term continuities, and revivals. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 3484 - British Isles To 1714

Summer 2010 Registration HIST 3484

A sampler of the rich, diverse, and dramatic history of the peoples of the British Isles. State formation, economic and social change and cultural values are several of the themes threaded through this survey course. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 3485 - British Isles Since 1714

Summer 2010 Registration HIST 3485

This course examines the dramatic rise of the British industrial, commercial, and political empire during the 18th and 19th centuries and its equally dramatic decline in the 20th century. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 3486 - Renaissance and Reformation

Summer 2010 Registration HIST 3486

Explores the late 13th through middle 17th centuries when European art and culture changed dramatically, and when Europe was torn by explosive ideological conflicts and religious upheaval. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 3500 - African History in Novels and Films

Summer 2010 Registration **HIST 3500**

Introduces modern Africa through the eyes of creative artists. Various topics, such as childhood, religion, and colonialism, are presented from various points of view--African and non-African. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 3601 - Colorado History

Summer 2010 Registration **HIST 3601**

Presents the story of the people, society, and culture of Colorado from the earliest Native Americans, through the Spanish influx, the fur traders and mountain men, the gold rush, railroad builders, the cattlemen and farmers, the silver boom, the tourists, and the modern twentieth-century state. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 3606 - Science, Technology, and Society in the Modern World

Summer 2010 Registration **HIST 3606**

Examines the relationships among science, technology, and society from the early 19th century to the present. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 3706 - Age of Revolution

Summer 2010 Registration **HIST 3706**

Examines revolutions in selected societies around the world during the period from 1750 to 1950. The specific revolutions chosen may vary, but representative upheavals in both the Western and non-Western worlds are examined. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 3810 - Topics

Summer 2010 Registration **HIST 3810**

Topics in history with varying subtitles reflecting course content. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 3840 - Independent Study: History

Summer 2010 Registration **HIST 3840**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 3939 - Internship/Cooperative Education

Summer 2010 Registration **HIST 3939**

Designed experiences involving application of specific, relevant concepts and skills in supervised employment situations. Prereq: Junior standing and 2.75 GPA. **Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 3995 - Travel Study Topics

Summer 2010 Registration **HIST 3995**

Created for students doing travel study in a foreign country; register through the Office of International Education. **Semester Hours:** 1to 15

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4020 - Medieval Europe

Summer 2010 Registration **HIST 4020**

Surveys the general history of Europe from the fall of Rome to the opening of modern Europe. Cross-listed with HIST 5020. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4021 - Renaissance Europe

Summer 2010 Registration **HIST 4021**

Explores the late 13th through the early 16th centuries, when European art and culture changed dramatically against a background of economic expansion, social and religious unrest, and when princes ruled in the interests of their dynastic states. Cross-listed with HIST 5021. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4022 - Reformation Europe

Summer 2010 Registration **HIST 4022**

Between the early 16th and the middle 17th centuries, Europe was torn by explosive ideological conflicts, resulting in religious upheaval, political revolution, and civil and international wars, but also underwent important experiments in representative government and economic controls. Cross-listed with HIST 5022, RLST 3080. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4024 - Nineteenth Century Europe

Summer 2010 Registration **HIST 4024**

A general study of the evolution of Europe from 1789 to 1900. Covers the French Revolution, industrialization, romanticism, nationalism, realism, socialism, and

imperialism in the context of European history. Cross-listed with HIST 5024. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4025 - Twentieth Century Europe

Summer 2010 Registration HIST 4025

A general study of the evolution of Europe since 1900. Covers militarism, fascism, communism, and existentialism in the context of European history. Cross-listed with HIST 5025. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4027 - The Enlightenment: Eighteenth Century Intellectual History

Summer 2010 Registration HIST 4027

Studies the transformation of the European and American intellectual world in the late 17th and 18th centuries. Focuses on the novel ideas, institutions and discursive practices of the philosophies in Europe and America. Themes include the popularization of scientific thinking, rationalism, deism and secularization, the public sphere, popular sovereignty and confidence in the future. Cross-listed with HIST 5027. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4028 - After the Revolutions: Nineteenth Century Intellectual History

Summer 2010 Registration HIST 4028

Romanticism and other 19th century reactions to the dislocation engendered by the bourgeois revolutions and industrialization. Focuses on intellectual and cultural responses to social and economic change, ideologies, and social theories. Topics include romanticism, conservatism, liberalism, Marxism, the neo-enlightenment, ideas of progress and Darwinism. Cross-listed with HIST 5028. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4029 - Fin de Siecle: Late Nineteenth and Early Twentieth Century Intellectual History

Summer 2010 Registration HIST 4029

The crisis of confidence in Europe and America in the late 19th and early 20th centuries. Focuses on aesthetic and philosophical disillusionment and attempts to reorient European and American thinking, as well as upon reactions to World War I. Topics include Nietzsche, psychoanalysis, surrealism, and other intellectual and artistic movements. Prereq: Previous introductory history course or other introductory humanities course. Cross-listed with HIST 5029. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4030 - Europe During the World Wars

Summer 2010 Registration **HIST 4030**

Covers the history of the two world wars and their origins, political and social upheaval during the interwar economic crisis, the rise of communism, Italian fascism and Nazism, with an emphasis on cultural production and intellectual life. Cross-listed with HIST 5030. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4031 - Contemporary Europe

Summer 2010 Registration **HIST 4031**

History of Europe since 1945. Students study the economic, social, and political history of Europe since World War II, with a special emphasis on the Cold War and intellectual currents. Cross-listed with HIST 5031. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4032 - Globalization in World History Since 1945

Summer 2010 Registration **HIST 4032**

An interdisciplinary course on contemporary world history and globalization. While the course is historically structured, economic, political, and sociological matters are explored. Cross-listed with HIST 5032. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4034 - Core Themes in European History

Summer 2010 Registration **HIST 4034**

Core themes in modern Europe, 1750 to the present. Cross-listed with HIST 5034. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4045 - Tudor-Stuart England

Summer 2010 Registration **HIST 4045**

England's rise from obscurity in 1487 to the dawn of her age of European and world dominance in the early 18th century. Family life and popular culture as well as Henry VIII, Queen Elizabeth, Parliament, and Cromwell. Cross-listed with HIST 5045. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4046 - Victorians and Victorianism

Summer 2010 Registration **HIST 4046**

Taking an interdisciplinary perspective, this course examines English people and English life during the reign of Queen Victoria, 1837-1901. What were the defining features of the Victorian age? What did it mean to be "Victorian?" When and why did the Victorian paradigm break down? Cross-listed with HIST 5046. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4051 - Great Britain: 1760-1914

Summer 2010 Registration **HIST 4051**

Studies Britain's long 19th century, with a focus on the social consequences of industrialization, state growth and imperialism. Examines who benefited and who lost as a result of the social, economic, political, and cultural changes of the era. Cross-listed with HIST 5051. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4053 - British Empire

Summer 2010 Registration **HIST 4053**

Examines the 19th and 20th century British empire, addressing social, cultural and political themes. Explores the development and collapse of the empire, British imperial identity, relationships between race, gender, class, and the ways in which the colonizers and the colonized experienced empire. Cross-listed with HIST 5053. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4055 - The Atlantic Slave Trade: Africa, Caribbean and U.S.

Summer 2010 Registration **HIST 4055**

Presents a broad overview of the slave trade in the Atlantic World, including discussion of the slave plantation, the creation of Caribbean societies and the consequences of independence from Britain. Cross-listed with HIST 5055. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4061 - French Revolution and Napoleon

Summer 2010 Registration **HIST 4061**

An analysis of the revolutionary movement in France and Europe from the 1780s to the 1820s. Cross-listed with HIST 5061. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4062 - Modern France, 1789 to the Present

Summer 2010 Registration **HIST 4062**

Considers the shaping of modern France from the 18th century Bourbon Monarchy and aristocratic society to today's liberal democracy, in which multiculturalism, globalization and supranational institutions call into question the very nature of French identity. Cross-listed with HIST 5062. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4071 - Modern Germany

Summer 2010 Registration **HIST 4071**

Surveys the major political, institutional, social, economic, and cultural developments that have occurred in Germany since the late 18th century. Cross-listed with HIST 5071. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4074 - Post-War Germany

Summer 2010 Registration **HIST 4074**

Historical survey of Germany since the second world war, with an emphasis on culture and society. Cross-listed with HIST 5074. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4075 - Travel Stories and Origins of Cultural Anthropology

Summer 2010 Registration **HIST 4075**

Examines the early history of cultural anthropology by means of classic travel literature. Cross-listed with HIST 5075. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4076 - History of Modern Science

Summer 2010 Registration **HIST 4076**

Surveys the history of science from the 18th century to the present. Treats all disciplines, from physics to physiology, in an attempt to understand how the natural world came to dominate our sense of ourselves. Cross-listed with HIST 5076. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4082 - Reform and Revolution in Russia: The 1860s to 1917

Summer 2010 Registration **HIST 4082**

Emphasis upon Russia's attempts to modernize, beginning with great reforms of the 1860s and 1870s; increasing polarization of government and opposition groups.

Examines governmental point of view through several monographs and revolutionary theory, including those of Marx, Engels, Lenin and Trotsky. Cross-listed with HIST

5082.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4083 - Russia Since 1917

Summer 2010 Registration **HIST 4083**

Studies the development of the Soviet Union from its formation in the October Revolution, through the Civil War, the new economic policy, industrialization, collectivism, the Stalinist purges, up to the present. Cross-listed with HIST

5083.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4086 - Eastern Europe

Summer 2010 Registration **HIST 4086**

Studies the countries of Eastern Europe from their origins in the Middle Ages to the present. Cross-listed with HIST 5086.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4133 - Management of Material Culture and Museum Collections

Summer 2010 Registration **HIST 4133**

This course provides in-depth knowledge of the rudiments of material culture documentation, preservation and management. While we have designed this class for those interested in working in history museums, this is also appropriate for those students who want to learn the place of artifacts in studying history. Cross-listed with HIST 5133.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4201 - Core Themes in U.S. History

Summer 2010 Registration **HIST 4201**

This course surveys major themes in U.S. history. Cross-listed with HIST

5201.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4210 - The American Revolution

Summer 2010 Registration **HIST 4210**

The crisis of the British Empire in North America from the end of the French and Indian War to the ratification of the American Constitution. Topics include the emerging economy, constitutional arguments against Britain, the conduct of the war, and the definition of a republic. Cross-listed with HIST 5210.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4212 - Civil War and Reconstruction

Summer 2010 Registration HIST 4212

Begins with the causes and outbreak of the American Civil War, describes the military conflict and the social aspects of the war, examines the federal efforts to reconstruct the southern states, and protect the rights of Black citizens after 1865. Cross-listed with HIST 5212. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4213 - The Gilded Age and Early 20th Century Challenges: U.S. History, 1865-1932

Summer 2010 Registration HIST 4213

Topical study of major events in America, including Reconstruction; the rise of industry and the workers' response; westward expansion and the plight of Native Americans; urbanization and immigration; agrarian upheaval; Progressivism; World War I; the challenges of the 1920s and the onset of the Great Depression. Cross-listed with HIST 5213. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4216 - History of American Popular Culture

Summer 2010 Registration HIST 4216

Explores the evolution of film, radio, television, and popular music from the 1940s to the 1980s. The course uses these and other forms of popular art to examine American history in this era. The course focuses on the shifting trends in popular culture, how that culture reflects the larger themes in American history, and how these media have impacted the national experience. Cross-listed with HIST 5216. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4217 - Consumer Culture

Summer 2010 Registration HIST 4217

This interdisciplinary course examines the dynamics of the consumer culture in the context of social, economic, and technological history. The analysis begins with 17th century European origins, and continues through recent world developments, emphasizing the U.S. since 1800. Note: Open to all students. Cross-listed with HIST 5217. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4219 - Depression, Affluence and Anxiety: U.S. History, 1929 to the Present

Summer 2010 Registration HIST 4219

Examines major developments, focusing on the causes of the Depression and efforts to

combat it; World War II and postwar readjustments; the Cold War and challenges of world leadership; unparalleled prosperity; Civil Rights movement; the Vietnam War; and economic uncertainties amidst general prosperity. Cross-listed with HIST

5219.Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4220 - U.S. Foreign Policy Since 1912

Summer 2010 Registration HIST 4220

The main thrust is the emergence of the U.S. from isolation toward full-scale participation in the affairs of Europe and other areas. Special attention is given to U.S. intervention in two world wars, the Cold War, and the over extension of U.S. commitments since 1960. Cross-listed with HIST 5220.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4222 - U.S. Society and Thought to 1860

Summer 2010 Registration HIST 4222

Major topics include the evolution of Protestantism from Puritans to Transcendentalists; humanitarian reforms such as abolition, temperance, and women's rights; European influences on American thought; the effect of industrialization on the development of class society; and American nostalgia for agrarian life. Cross-listed with HIST 5222.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4223 - U.S. Society and Thought Since 1860

Summer 2010 Registration HIST 4223

Topical survey of the main currents of American thought and their impact upon society. Topics include American philosophy, literature (extensively), art, music, immigration and urbanization, technology, extremism of both left and right, and education. Cross-listed with HIST 5223.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4225 - Urban America: Colonial Times to the Present

Summer 2010 Registration HIST 4225

Rise of the American city from colonial times to present. Major emphasis on the process of urbanization since 1840: town promotion, the industrial city, immigration, boss politics and reform, urban technology, transportation systems, minorities, city planning, and the future of urban America. Cross-listed with HIST 5225.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4226 - U.S. Business History

Summer 2010 Registration **HIST 4226**

Surveys the major changes in business practices from colonial times to the present. Primary emphasis is placed on the Industrial Revolution and after. Topics include the emergence of major personalities in the Industrial Revolution; the rise of giant corporations; the response of industrial labor unions; government intervention and regulations and the emergence of the post-industrial society. Cross-listed with HIST 5226. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4227 - American West

Summer 2010 Registration **HIST 4227**

Introduces the diverse peoples, places, and approaches to the development of the trans-Missouri West from prehistoric times to the present. Cross-listed with HIST 5227. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4228 - Western Art and Architecture

Summer 2010 Registration **HIST 4228**

Introduces art and architecture of the American West, emphasizing their historical context. Students are required to do book reports and a research paper. Course includes walking tours and museum visits. Cross-listed with HIST 5228. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4229 - Colorado Historic Places

Summer 2010 Registration **HIST 4229**

Introduces community architecture, folklore, and history for all students. Students learn how to survey, describe, and designate significant historical structures and districts. Cross-listed with HIST 5229. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4230 - Women in the West

Summer 2010 Registration **HIST 4230**

Focuses on ways in which women, from the mid-19th century through the mid-20th century, of different races, classes, and ethnic background, have interacted and been active participants in the development of the Western states. Cross-listed with HIST

5230 and WGST 4230. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4231 - History in Museums

Summer 2010 Registration **HIST 4231**

This core course for the museum studies area of public history introduces students to the theory and practice of museum operations. It covers the basics of museum administration, museum collection and preservation, and museum interpretation from both theoretical and practical points of view. Cross-listed with HIST 5231. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4232 - Historic Preservation

Summer 2010 Registration **HIST 4232**

Introduces the history, methodology, and goals of historic preservation. Guest speakers, field trips, research projects, and book reports. Cross-listed with HIST 5232. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4234 - Introduction to Public History

Summer 2010 Registration **HIST 4234**

An overview of history outside the academic setting. Students have the opportunity to learn about jobs through on-site visits and presentations made by people engaged in a wide variety of occupations in history other than teaching. Cross-listed with HIST 5234. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4235 - Sports and American Society

Summer 2010 Registration **HIST 4235**

Examines American society and culture through the history of recreational and professional sport. Issues include class, race, gender, religion, business and politics. Cross-listed with HIST 5235. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4236 - Colorado Mining and Railroads

Summer 2010 Registration **HIST 4236**

Focuses on the transportation network that shaped the inland West, and its key role in the extractive industry that gave Colorado its start and nourished the highest state

through adolescence. Cross-listed with HIST 5236. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4238 - U.S. History Through Fiction

Summer 2010 Registration **HIST 4238**

Explores American history through novels, based on the idea that fiction offers a superb "window" through which to view the past, especially to understand the texture of American society. Prereq: Upper division standing. Cross-listed with HIST 5238. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4240 - National Parks History

Summer 2010 Registration **HIST 4240**

Introduces how the National Park Service uses history to identify, designate, preserve, and interpret America's most outstanding historic and natural history sites. After tours of NPS sites, students select from a wide range of projects. Note: Open to all students. Cross-listed with HIST 5240. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4242 - Oral History

Summer 2010 Registration **HIST 4242**

Trains public history students in the collection of oral history interviews. Students master core readings on the theory, practice, and ethics of oral history. Cross-listed with HIST 5242. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4243 - Public History Administration

Summer 2010 Registration **HIST 4243**

Introduces students to the skills, practice, and ethics of public history administration. Cross-listed with HIST 5243. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4244 - Interpretation of History in Museums: Exhibits and Education

Summer 2010 Registration **HIST 4244**

This course allows students to gain in-depth knowledge of historical interpretation through exhibits and education in a museum setting. This class is designed for those preparing to work in history museums but is also appropriate for teachers and others who want to learn how museum programs interpret history with artifacts and other

historical materials. Cross-listed with HIST 5244.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4245 - Heritage Tourism

Summer 2010 Registration **HIST 4245**

History and historic sites have become big business in 21st century tourism. The heritage tourism industry is explored in this introductory course for all interested students focusing on how academic history and historians can partner with tourism and recreation interests. Cross-listed with HIST 5245.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4303 - Sex and Gender in Modern Britain

Summer 2010 Registration **HIST 4303**

Examines modern British history by focusing on sex and gender as central aspects in people's lives. Considers the ways gender shapes the realms of politics, economics, society and culture in Britain from the 18th century to the present. Cross-listed with HIST 5303 and WGST 4303.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4306 - Survey of Feminist Thought

Summer 2010 Registration **HIST 4306**

Examines changes and continuities in feminist thought from the 18th century to the present, using historical and literary materials. Explores the ways that women's characteristics, experiences, and capabilities have been understood and challenged. Cross-listed with ENGL 4306, 5306, HIST 5306, WGST 4306, 5306.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4307 - History of Sexuality

Summer 2010 Registration **HIST 4307**

Explores the relationships between gender and norms, sexual practice, and ideas about sexuality in Europe and the United States. Examines how sex and sexuality have changed over time and how those changes relate to social, cultural, political and economic history. Cross-listed with HIST 5307 and WGST 4307.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4308 - Crime, Policing, and Justice in American History

Summer 2010 Registration **HIST 4308**

Focuses on changing legal and cultural definitions of crime, the role of the police, the

evolution of punishment in theory and practice, and the role of mass culture in shaping the social history of crime and justice. Cross-listed with HIST 5308.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4345 - Gender, Science, and Medicine: 1600 to the Present

Summer 2010 Registration HIST 4345

Examines the ways science and medicine have both shaped and been shaped by ideas about gender. Pays particular attention to the relationship between scientific/medical ideas about the sexes and the social organization of gender. Cross-listed with HIST 5345.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4346 - Medicine and Society: the Ancients to the Present

Summer 2010 Registration HIST 4346

Surveys change and continuity in definitions of health and illness, interactions between patients and practitioners, the practice of medical authority, and the relationships between science, clinical medicine, and the provision of health care. Cross-listed with HIST 5346.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4411 - Modern Mexico

Summer 2010 Registration HIST 4411

Designed to familiarize students with the critical issues in Mexican political, economic and social history. Traces the emergence of independence and the difficult consolidation of an independent nation state. Cross-listed with HIST 5411, ETST 4411.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4412 - Mexico and the United States: People and Politics on the Border

Summer 2010 Registration HIST 4412

Examines the convoluted relations between these two republics, focusing on diplomatic, cultural, and social interactions. Cross-listed with HIST 5412.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4414 - Nationalism and State Building in Latin America, 1750-1850

Summer 2010 Registration HIST 4414

Explores the problems of nationalism and post-colonial state building by examining the late colonial and early national periods of Latin American history. The course discusses

the impact of the enlightenment, the events of the Wars of Independence, and the quandaries faced by the new nations. Cross-listed with HIST 5414. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4415 - Social Revolutions in Latin America

Summer 2010 Registration HIST 4415

A theoretical framework and an empirical basis for understanding the large-scale social movements that have influenced the course of Latin American nations. Cross-listed with HIST 5415. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4416 - The Age of Imperialism

Summer 2010 Registration HIST 4416

Examines causes, character, and consequences of imperialism in the industrial era (ca. 1840-1975). Through intense study of selected cases, students gain an understanding of the different dynamics and varieties of imperialist control. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4417 - Commodities and Globalization: Dessert in World History

Summer 2010 Registration HIST 4417

Traces the impact of "dessert commodities" (sugar, cacao, vanilla and coffee) on Latin America during an early period of globalization (nineteenth century). Explores cultural shifts in North Atlantic countries that created the incessant demand for dessert. Prereq: Senior or graduate student standing. Cross-listed with HIST 5417. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4418 - Trade and Premodern World History

Summer 2010 Registration HIST 4418

Explores the interconnections that shaped premodern world history, considering the ways that the production, exchange, and consumption of cloth were tied to specific forms of political power, social and religious organization, and long distance economic relationships. Cross-listed with HIST 5418. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4420 - Traditional China: China to 1600

Summer 2010 Registration HIST 4420

A general introduction to the history of China from the advent of historic civilization to the

point of the great encounter with the West. Cross-listed with HIST 5420. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4421 - Modern China

Summer 2010 Registration HIST 4421

Surveys Chinese history in the modern era. Includes examination of Western domination of China; revolution and internal fragmentation of China; Japanese attacks and World War II; and civil war and the communist revolution. Cross-listed with HIST 5421. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4431 - Modern Japan

Summer 2010 Registration HIST 4431

Course of Japanese history since the Perry expedition. Covers Japanese Westernization and industrialization, the expansion of empire and defeat in World War II, the occupation, and the amazing technological and social transformation since the occupation years. Cross-listed with HIST 5431. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4451 - Southern Africa

Summer 2010 Registration HIST 4451

An in-depth history of the clash of peoples and cultures in Africa south of the Zambezi River. African and Afrikaner political, economic and cultural development in a single land and the consequences of several competing nationalisms existing side by side are examined. Apartheid and African opposition to it are analyzed. Cross-listed with HIST 5451. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4455 - African Struggle for Independence

Summer 2010 Registration HIST 4455

An assessment of African leadership from the colonial era to the present. Cross-listed with HIST 5455. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4460 - The Islamic World's Golden Age

Summer 2010 Registration HIST 4460

The Islamic world's golden age before European expansion was characterized by sophisticated business institutions, scholarship, new technologies, and art. This class

asks: What roles did Islam play in connecting diverse societies across broad regions? What characterized these territories? Cross-listed with HIST 5460. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4461 - The Modern Middle East

Summer 2010 Registration HIST 4461

Cross-listed with HIST 5461. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4471 - The Second World War

Summer 2010 Registration HIST 4471

The War in its totality: causes, military strategies (equal treatment to European and Pacific theaters), campaigns, impact of technology and weapons, political and social upheaval. Cross-listed with HIST 5471. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4472 - The 1950s: Korean War, the Cold War and Social Transformation

Summer 2010 Registration HIST 4472

A critical and methodical exploration of several of the social, cultural, and political events of the 1950s. Investigates the complex interaction between politics and culture during this decade, paying close attention to anti-Communist thought and the Korean War.

Cross-listed with HIST 5472. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4475 - The Vietnam War

Summer 2010 Registration HIST 4475

Covers the conflict in Vietnam, with roots in the period prior to World War II. Main topics include the rise of nationalism in French Indochina, the war against the French, the Northern move to unify Vietnam, American intervention, and eventual victory of the Northern regime. Cross-listed with HIST 5475. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4501 - World History for Educators

Summer 2010 Registration HIST 4501

Introduces world history for candidates for teaching positions. Discussion of themes, problems of research and interpretation, and relevant instructional methods. Prereq: Upper division standing. Cross-listed with HIST 5501. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4503 - Topics in History of Science

Summer 2010 Registration **HIST 4503**

Themes vary from year to year. Possible topics: Darwinism, Nature of Memory, Time and Space, Origins. Cross-listed with HIST 5503. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4504 - Animals in U.S. History

Summer 2010 Registration **HIST 4504**

Human-animal relationships offer powerful and unexpected perspectives on the American past. An eclectic range of readings and viewings, written assignments and contemplative experiences will contextualize contemporary practices, beliefs, and ethics -- vegetarianism, hunting, pet-keeping, and many others -- in historical context. Cross-listed with HIST 5504. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4621 - Explorers and Exploration

Summer 2010 Registration **HIST 4621**

Examines the history of travel and exploration from the 13th century to the present. Readings draw primarily from first-person accounts to understand why people voyage, what they hope to discover, and what happens to them along the way. Cross-listed with HIST 5621. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4645 - Archival Management

Summer 2010 Registration **HIST 4645**

This course studies theory and principles pertaining to the management of current and non-current records, public and private archival materials, as well as the administration of archival manuscript depositories for housing records of historical value. Cross-listed with HIST 5645. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4810 - Special Topics

Summer 2010 Registration **HIST 4810**

Cross-listed with HIST 5810. **Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4839 - History Seminar

Summer 2010 Registration **HIST 4839**

Covers the use of documentary sources and historical criticism, with students utilizing these skills in a historical research paper. Note: Required for history majors. Preferably taken in the senior year. Prereq: HIST 3031. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4840 - Independent Study: HIST

Summer 2010 Registration **HIST 4840**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4849 - Independent Study History Honors Research Paper

Summer 2010 Registration **HIST 4849**

Students competing for history honors must take this course to prepare their honors paper. The course requires students to produce a finished research paper of professional quality under the direction of a history faculty member. Prereq: Open to advanced history majors only. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 4850 - History in the Community: History Day Mentoring

Summer 2010 Registration **HIST 4850**

Under direction of UCD history faculty, students participate in the Denver Public Schools National History Day program. They gain teaching experience by mentoring DPS students in preparation of History Day projects, and may also participate in judging local and state History Day contests. Prereq: Permission of department chair. **Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 5020 - Medieval Europe

Summer 2010 Registration **HIST 5020**

Surveys the general history of Europe from the fall of Rome to the opening of modern Europe. Cross-listed with HIST 4020. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 5021 - Renaissance Europe

Summer 2010 Registration **HIST 5021**

Explores the late 13th through the early 16th centuries, when European art and culture changed dramatically against a background of economic expansion, social and religious unrest, and when princes ruled in the interests of their dynastic states. Cross-listed with

HIST 4021. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 5022 - Reformation Europe

Summer 2010 Registration HIST 5022

Between the early 16th and the middle 17th centuries, Europe was torn by explosive ideological conflicts, resulting in religious upheaval, political revolution, and civil and international wars, but also underwent important experiments in representative government and economic controls. Cross-listed with HIST 4022, RLST 3080. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 5024 - Nineteenth Century Europe

Summer 2010 Registration HIST 5024

A general study of the evolution of Europe from 1789 to 1900. Covers the French Revolution, industrialization, romanticism, nationalism, realism, socialism, and imperialism in the context of European history. Cross-listed with HIST 4024. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 5025 - Twentieth Century Europe

Summer 2010 Registration HIST 5025

A general study of the evolution of Europe since 1900. Covers militarism, fascism, communism, and existentialism in the context of European history. Cross-listed with HIST 4025. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 5027 - The Enlightenment: Eighteenth Century Intellectual History

Summer 2010 Registration HIST 5027

The transformation of the European and American intellectual world in the late 17th and 18th centuries. Focuses on the novel ideas, institutions and discursive practices of the philosophies in Europe and America. Themes include the popularization of scientific thinking, rationalism, deism and secularization, the public sphere, popular sovereignty and confidence in the future. Cross-listed with HIST 4027. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 5028 - After the Revolution: Nineteenth Century Intellectual History

Summer 2010 Registration HIST 5028

Romanticism and other 19th century reactions to the dislocation engendered by the

bourgeois revolutions and industrialization. Focuses on intellectual and cultural responses to social and economic change, ideologies, and social theories. Topics include romanticism, conservatism, liberalism, Marxism, the neo-enlightenment, ideas of progress, and Darwinism. Cross-listed with HIST 4028. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 5029 - Fin de Siecle: Late Nineteenth and Early Twentieth Century Intellectual History

Summer 2010 Registration HIST 5029

The crisis of confidence in Europe and America in the late 19th and early 20th centuries. Focuses on aesthetic and philosophical disillusionment and attempts to reorient European and American thinking, as well as upon reactions to World War I. Topics include Nietzsche, psychoanalysis, surrealism, and other intellectual and artistic movements. Prereq: Previous introductory history course or other introductory humanities course. Cross-listed with HIST 4029. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 5030 - Europe During the World Wars

Summer 2010 Registration HIST 5030

Covers the history of the two world wars and their origins, political and social upheaval during the interwar economic crisis, the rise of communism, Italian fascism and Nazism, with an emphasis on cultural production and intellectual life. Cross-listed with HIST 4030. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 5031 - Contemporary Europe

Summer 2010 Registration HIST 5031

History of Europe since 1945. Students study the economic, social, and political history of Europe since World War II, with a special emphasis on the Cold War and intellectual currents. Cross-listed with HIST 4031. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 5032 - Globalization in World History Since 1945

Summer 2010 Registration HIST 5032

An interdisciplinary course on contemporary world history and globalization. While the course is historically structured, economic, political, and sociological matters are explored. Cross-listed with HIST 4032. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 5034 - Core Themes in European History

Summer 2010 Registration HIST 5034

Core themes in modern Europe, 1750 to the present. Cross-listed with HIST 4034. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 5045 - Tudor-Stuart England

Summer 2010 Registration HIST 5045

England's rise from obscurity in 1487 to the dawn of her age of European and world dominance in the early 18th century. Family life and popular culture as well as Henry VIII, Queen Elizabeth, Parliament, and Cromwell. Cross-listed with HIST 4045. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 5046 - Victorians and Victorianism

Summer 2010 Registration HIST 5046

Taking an interdisciplinary perspective, this course examines English people and English life during the reign of Queen Victoria, 1837-1901. What were the defining features of the Victorian age? What did it mean to be "Victorian?" When and why did the Victorian paradigm break down? Cross-listed with HIST 4046. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 5051 - Great Britain: 1760-1914

Summer 2010 Registration HIST 5051

Studies Britain's long 19th century, with a focus on the social consequences of industrialization, state growth and imperialism. Examines who benefited and who lost as a result of the social, economic, political, and cultural changes of the era. Cross-listed with HIST 4051. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 5053 - British Empire

Summer 2010 Registration HIST 5053

Examines the 19th and 20th century British empire, addressing social, cultural, and political themes. Explores the development and collapse of the empire, British imperial identity, relationships between race, gender, and class, and the ways in which the colonizers and colonized experienced empire. Cross-listed with HIST 4053. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 5055 - The Atlantic Slave Trade: Africa, Caribbean and U.S.

Summer 2010 Registration HIST 5055

Presents a broad overview of the slave trade in the Atlantic World, including discussion of the slave plantation, the creation of Caribbean societies and the consequences of independence from Britain. Cross-listed with HIST 4055. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 5061 - French Revolution and Napoleon

Summer 2010 Registration HIST 5061

An analysis of the revolutionary movement in France and Europe from the 1780s to the 1820s. Cross-listed with HIST 4061. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 5062 - Modern France: 1789 to the Present

Summer 2010 Registration HIST 5062

Considers the shaping of modern France from the 18th century Bourbon Monarchy and aristocratic society to today's liberal democracy, in which multiculturalism, globalization and supranational institutions call into question the very nature of French identity. Cross-listed with HIST 4062. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 5071 - Modern Germany

Summer 2010 Registration HIST 5071

Surveys the major political, institutional, social, economic, and cultural developments that have occurred in Germany since the late 18th century. Cross-listed with HIST 4071. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 5074 - Post-War Germany

Summer 2010 Registration HIST 5074

Historical survey of Germany since the second world war, with an emphasis on culture and society. Cross-listed with HIST 4074. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 5075 - Travel Stories and Origins of Cultural Anthropology

Summer 2010 Registration HIST 5075

Examines the early history of cultural anthropology by means of classic travel literature.

Cross-listed with HIST 4075. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 5076 - History of Modern Science

Summer 2010 Registration **HIST 5076**

Surveys the history of science from the 18th century to the present. Treats all disciplines, from physics to physiology, in an attempt to understand how the natural world came to dominate our sense of ourselves. Cross-listed with HIST 4076. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 5082 - Reform and Revolution in Russia: The 1860s to 1917

Summer 2010 Registration **HIST 5082**

Emphasis upon Russia's attempts to modernize, beginning with great reforms of the 1860s and 1870s; increasing polarization of government and opposition groups. Examines governmental point of view through several monographs and revolutionary theory, including those of Marx, Engels, Lenin and Trotsky. Cross-listed with HIST 4082. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 5083 - Russia Since 1917

Summer 2010 Registration **HIST 5083**

Studies the development of the Soviet Union from its formation in the October Revolution, through the Civil War, the new economic policy, industrialization, collectivism, the Stalinist purges, up to the present. Cross-listed with HIST 4083. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 5086 - Eastern Europe

Summer 2010 Registration **HIST 5086**

Studies the countries of Eastern Europe from their origins in the Middle Ages to the present. Cross-listed with HIST 4086. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 5133 - Management of Material Culture and Museum Collections

Summer 2010 Registration **HIST 5133**

This course provides in-depth knowledge of the rudiments of material culture documentation, preservation and management. While we have designed this class for those interested in working in history museums, this is also appropriate for those students who want to learn the place of artifacts in studying history. Cross-listed with

HIST 4133.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 5201 - Core Themes in U.S. History

Summer 2010 Registration **HIST 5201**

This course surveys major themes in U.S. history. Cross-listed with HIST

4201.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 5210 - The American Revolution

Summer 2010 Registration **HIST 5210**

The crisis of the British Empire in North America from the end of the French and Indian War to the ratification of the American Constitution. Topics include the emerging economy, constitutional arguments against Britain, the conduct of the war, and the definition of a republic. Cross-listed with HIST 4210.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 5212 - Civil War and Reconstruction

Summer 2010 Registration **HIST 5212**

Begins with the causes and outbreak of the American Civil War, describes the military conflict and the social aspects of the war, and examines the federal efforts to reconstruct the southern states and protect the rights of Black citizens after 1865. Cross-listed with HIST 4212.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 5213 - The Gilded Age and Early 20th Century Challenges: U.S. History, 1865-1932

Summer 2010 Registration **HIST 5213**

Topical study of major events in America, including Reconstruction; the rise of industry and the workers' response; westward expansion and the plight of Native Americans; urbanization and immigration; agrarian upheaval; Progressivism; World War I; the challenges of the 1920s and the onset of the Great Depression. Cross-listed with HIST 4213.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 5216 - History of American Popular Culture

Summer 2010 Registration **HIST 5216**

Explores the evolution of film, radio, television, and popular music from the 1940s to the 1980s. The course uses these and other forms of popular art to examine American

history in this era. The course focuses on the shifting trends in popular culture, how that culture reflects the larger themes in American history, and how these media have impacted the national experience. Cross-listed with HIST 4216. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 5217 - Consumer Culture

Summer 2010 Registration HIST 5217

This interdisciplinary course examines the dynamics of the consumer culture in the context of social, economic, and technological history. The analysis begins with 17th century European origins, and continue through recent world developments, emphasizing the U.S. since 1800. Note: Open to all students. Cross-listed with HIST 4217. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 5219 - Depression, Affluence and Anxiety: U.S. History, 1929 to the Present

Summer 2010 Registration HIST 5219

Examines major developments, focusing on the causes of the Depression and efforts to combat it; World War II and postwar readjustments; the Cold War and challenges of world leadership; unparalleled prosperity; Civil Rights movement; the Vietnam War; and economic uncertainties amid general prosperity. Cross-listed with HIST 4219. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 5220 - U.S. Foreign Policy Since 1912

Summer 2010 Registration HIST 5220

The main thrust is the emergence of the U.S. from isolation toward full-scale participation in the affairs of Europe and other areas. Special attention is given to U.S. intervention in two world wars, the Cold War, and the overextension of U.S. commitments since 1960. Cross-listed with HIST 4220. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 5222 - U.S. Society and Thought to 1860

Summer 2010 Registration HIST 5222

Major topics include the evolution of Protestantism from Puritans to Transcendentalists; humanitarian reforms such as abolition, temperance, and women's rights; European influences on American thought; the effect of industrialization on the development of class society; and American nostalgia for agrarian life. Cross-listed with HIST 4222. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 5223 - U.S. Society and Thought Since 1860

Summer 2010 Registration **HIST 5223**

Topical survey of the main currents of American thought and their impact upon society. Topics include American philosophy, literature (extensively), art, music, immigration and urbanization, technology, extremism of both left and right, and education. Cross-listed with HIST 4223. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 5225 - Urban America: Colonial Times to the Present

Summer 2010 Registration **HIST 5225**

Rise of the American city from colonial times to present. Major emphasis on the process of urbanization since 1840: town promotion, the industrial city, immigration, boss politics and reform, urban technology, transportation systems, minorities, city planning, and the future of urban America. Cross-listed with HIST 4225. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 5226 - U.S. Business History

Summer 2010 Registration **HIST 5226**

Surveys the major changes in business practices from colonial times to the present. Primary emphasis is placed on the Industrial Revolution and after. Topics include the emergence of major personalities in the Industrial Revolution; the rise of giant corporations; the response of industrial labor unions; government intervention and regulation; and the emergence of the post-industrial society. Cross-listed with HIST 4226. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 5227 - American West

Summer 2010 Registration **HIST 5227**

Introduces the diverse peoples, places, and approaches to the development of the trans-Missouri West from prehistoric times to the present. Cross-listed with HIST 4227. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 5228 - Western Art and Architecture

Summer 2010 Registration **HIST 5228**

Introduces Western art and architecture, emphasizing their historical context. Students are required to do book reports and a major research paper. Course includes walking

tours and museum visits. Cross-listed with HIST 4228. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 5229 - Colorado Historic Places

Summer 2010 Registration **HIST 5229**

Introduces community architecture, folklore, and history for all students. Students learn how to survey, describe, and designate significant historical structures and districts.

Cross-listed with HIST 4229. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 5230 - Women in the West

Summer 2010 Registration **HIST 5230**

Focuses on ways in which women, from the mid-19th century through the mid-20th century, of different races, classes, and ethnic background, have interacted and been active participants in the development of the Western states. Cross-listed with HIST 4230 and WGST 4230. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 5231 - History in Museums

Summer 2010 Registration **HIST 5231**

This core course for the museum studies area of public history introduces students to the theory and practice of museum operations. It covers the basics of museum administration, museum collection and preservation, and museum interpretation from both theoretical and practical points of view. Cross-listed with HIST 4231. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 5232 - Historic Preservation

Summer 2010 Registration **HIST 5232**

Introduces the history, methodology, and goals of historic preservation. Guest speakers, field trips, research projects, and book reports. Cross-listed with HIST 4232. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 5234 - Introduction to Public History

Summer 2010 Registration **HIST 5234**

An overview of history outside the academic setting. Students have the opportunity to learn about jobs through on-site visits and presentations made by people engaged in a wide variety of occupations in history other than teaching. Cross-listed with HIST

4234.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 5235 - Sports and American Society

Summer 2010 Registration **HIST 5235**

Examines American society and culture through the history of recreational and professional sport. Issues include class, race, gender, religion, business and politics.

Cross-listed with HIST 4235.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 5236 - Colorado Mining and Railroads

Summer 2010 Registration **HIST 5236**

Focuses on the transportation network that shaped the inland West, and its key role in the extractive industry that gave Colorado its start and nourished the highest state through adolescence. Cross-listed with HIST 4236.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 5238 - U.S. History Through Fiction

Summer 2010 Registration **HIST 5238**

Explores American history through novels, based on the idea that fiction offers a superb "window" through which to view the past, especially to understand the texture of American society. Cross-listed with HIST 4238.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 5240 - National Parks History

Summer 2010 Registration **HIST 5240**

Introduces how the National Park Service uses history to identify, designate, preserve, and interpret America's most outstanding historic and natural history sites. After tours of NPS sites, students select from a wide range of projects. Note: Open to all students.

Cross-listed with HIST 4240.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 5242 - Oral History

Summer 2010 Registration **HIST 5242**

Trains public history students in the collection of oral history interviews. Students master core readings on the theory, practice, and ethics of oral history. Cross-listed with HIST 4242.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 5243 - Public History Administration

Summer 2010 Registration HIST 5243

Introduces students to the skills, practice, and ethics of public history administration.

Cross-listed with HIST 4243.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 5244 - Interpretation of History in Museums: Exhibits and Education

Summer 2010 Registration HIST 5244

This course allows students to gain in-depth knowledge of historical interpretation through exhibits and education in a museum setting. This class is designed for those preparing to work in history museums but is also appropriate for teachers and others who want to learn how museum programs interpret history with artifacts and other historical materials. Cross-listed with HIST 4244.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 5245 - Heritage Tourism

Summer 2010 Registration HIST 5245

History and historic sites have become big business in 21st century tourism. The heritage tourism industry is explored in this introductory course for all interested students focusing on how academic history and historians can partner with tourism and recreation interests. Cross-listed with HIST 4245.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 5303 - Sex and Gender in Modern Britain

Summer 2010 Registration HIST 5303

Examines modern British history by focusing on sex and gender as central aspects in people's lives. Considers the ways gender shapes the realms of politics, economics, society and culture in Britain from the 18th century to the present. Cross-listed with HIST 4303 and WGST 4303.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 5306 - Survey of Feminist Thought

Summer 2010 Registration HIST 5306

Examines changes and continuities in feminist thought from the 18th century to the present, using historical and literary materials. Explores the ways that women's characteristics, experiences, and capabilities have been understood and challenged. Cross-listed with ENGL 4306, 5306, HIST 4306, WGST 4306, 5306.**Semester Hours:**

3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 5307 - History of Sexuality

Summer 2010 Registration HIST 5307

Explores the relationships between gender and norms, sexual practice, and ideas about sexuality in Europe and the United States. Examines how sex and sexuality have changed over time and how those changes relate to social, cultural, political and economic history. Cross-listed with HIST 4307 and WGST 4307. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 5308 - Crime, Policing, and Justice in American History

Summer 2010 Registration HIST 5308

Focuses on changing legal and cultural definitions of crime, the role of the police, the evolution of punishment in theory and practice, and the role of mass culture in shaping the social history of crime and justice. Cross-listed with HIST 4308. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 5345 - Gender, Science, and Medicine: 1600 to the Present

Summer 2010 Registration HIST 5345

Examines the ways science and medicine have both shaped and been shaped by ideas about gender. Pays particular attention to the relationship between scientific/medical ideas about the sexes and the social organization of gender. Cross-listed with HIST 4345. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 5346 - Medicine and Society: the Ancients to the Present

Summer 2010 Registration HIST 5346

Surveys change and continuity in definitions of health and illness, interactions between patients and practitioners, the practice of medical authority, and the relationships between science, clinical medicine, and the provision of health care. Cross-listed with HIST 4346. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 5411 - Modern Mexico

Summer 2010 Registration HIST 5411

Designed to familiarize students with the critical issues in Mexican political, economic and social history. Traces the emergence of independence and the difficult consolidation

of an independent nation state. Cross-listed with HIST 4411, ETST 4411. **Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 5412 - Mexico and the United States: People and Politics on the Border

Summer 2010 Registration HIST 5412

Examines the convoluted relations between these two republics, focusing on diplomatic, cultural and social interactions. Cross-listed with HIST 4412. **Semester Hours: 3to 3**
Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 5414 - Nationalism and State Building in Latin America, 1750-1850

Summer 2010 Registration HIST 5414

Explores the problems of nationalism and post-colonial state building by examining the late colonial and early national periods of Latin American history. The course discusses the impact of the enlightenment, the events of the Wars of Independence, and the quandaries faced by the new nations. Cross-listed with HIST 4414. **Semester Hours: 3to 3**
Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 5415 - Social Revolutions in Latin America

Summer 2010 Registration HIST 5415

A theoretical framework and an empirical basis for understanding the large-scale social movements that have influenced the course of Latin American nations. Cross-listed with HIST 4415. **Semester Hours: 3to 3**
Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 5417 - Commodities and Globalization: Dessert in World History

Summer 2010 Registration HIST 5417

Traces the impact of "dessert commodities" (sugar, cacao, vanilla and coffee) on Latin America during an early period of globalization (nineteenth century). Explores cultural shifts in North Atlantic countries that created the incessant demand for dessert. Prereq: Senior or graduate student standing. Cross-listed with HIST 4417. **Semester Hours: 3to 3**
Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 5418 - Trade and Premodern Wrld Hstry

Summer 2010 Registration HIST 5418

Explores the interconnections that shaped premodern world history, considering the ways that the production, exchange, and consumption of cloth were tied to specific forms

of political power, social and religious organization, and long distance economic relationships. Cross-listed with HIST 4418. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 5420 - Traditional China: China to 1600

Summer 2010 Registration HIST 5420

A general introduction to the history of China from the advent of historic civilization to the point of the great encounter with the West. Cross-listed with HIST 4420. **Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 5421 - Modern China

Summer 2010 Registration HIST 5421

Surveys Chinese history in the modern era. Includes examination of Western domination of China, revolution, and internal fragmentation of China; Japanese attacks and World War II; and civil war and the communist revolution. Cross-listed with HIST

4421. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 5431 - Modern Japan

Summer 2010 Registration HIST 5431

Course of Japanese history since the Perry expedition. Covers Japanese Westernization and industrialization, the expansion of empire and defeat in World War II, the occupation, and the amazing technological and social transformation since the occupation years. Cross-listed with HIST 4431. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 5451 - Southern Africa

Summer 2010 Registration HIST 5451

An in-depth history of the clash of peoples and cultures in Africa south of the Zambezi River. African and Afrikaner political, economic and cultural development in a single land and the consequences of several competing nationalisms existing side by side are examined. Apartheid and African opposition to it are analyzed. Cross-listed with HIST

4451. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 5455 - African Struggle for Independence

Summer 2010 Registration HIST 5455

An assessment of African leadership from the colonial era to the present. Cross-listed

with HIST 4455. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 5460 - The Islamic World's Golden Age

Summer 2010 Registration HIST 5460

The Islamic world's golden age before European expansion was characterized by sophisticated business institutions, scholarship, new technologies, and art. This class asks: What roles did Islam play in connecting diverse societies across broad regions? What characterized these territories? Cross-listed with HIST 4460. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 5461 - The Modern Middle East

Summer 2010 Registration HIST 5461

Cross-listed with HIST 4461. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 5464 - Problems and Methods in Teaching History and Social Studies I

Summer 2010 Registration HIST 5464

Introduces students to problems and methods in secondary education history and social studies teaching. This course focuses primarily on the teaching of history. Note: Open to students in the Initial Professional Teacher Education program or a relevant graduate program, and to practicing teachers. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 5465 - Problems and Methods in Teaching History and Social Studies II

Summer 2010 Registration HIST 5465

Introduces students to problems and methods in secondary education history and social studies teaching. This course focuses broadly on the teaching of all the social studies fields, including history, economics, government, and geography. Note: Open to students in the Initial Professional Teacher Education program or a relevant graduate program, and to practicing teachers. Prereq: HIST 5464. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 5466 - Teaching About Ethnicity, Race, and Prejudice

Summer 2010 Registration HIST 5466

Examines the history of ethnic identity and race relations in North America and applies that knowledge to teaching practices. Questions how teachers should approach the topics of race, ethnicity, and discrimination in our collective history and

society. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 5471 - The Second World War

Summer 2010 Registration HIST 5471

The war in its totality: causes, military strategies (equal treatment to European and Pacific theaters), campaigns, impact of technology and weapons, political and social upheaval. Cross-listed with HIST 4471. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 5472 - The 1950s: Korean War, the Cold War and Social Transformation

Summer 2010 Registration HIST 5472

A critical and methodical exploration of several of the social, cultural, and political events of the 1950s. Investigates the complex interaction between politics and culture during this decade, paying close attention to anti-Communist thought and the Korean War.

Cross-listed with HIST 4472. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 5475 - The Vietnam War

Summer 2010 Registration HIST 5475

Covers the conflict in Vietnam, with roots in the period prior to World War II. Main topics include the rise of nationalism in French Indochina, the war against the French, the Northern moves to unify Vietnam, American intervention, and eventual victory of the Northern regime. Cross-listed with HIST 4475. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 5501 - World History for Educators

Summer 2010 Registration HIST 5501

Introduces world history for candidates for teaching positions. Discussion of themes, problems of research and interpretation, and relevant instructional methods. Prereq:

Upper division standing. Cross-listed with HIST 4501. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 5502 - World History For Educators Workshops

Summer 2010 Registration HIST 5502

Designed for world history teachers who wish to enhance their knowledge of world history content and pedagogy. If taken in total, the course is comparable to a college survey course in world history plus teaching guides. **Semester Hours:** 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 5503 - Topics in History of Science

Summer 2010 Registration HIST 5503

Themes vary from year to year. Possible topics: Darwinism, Nature of Memory, Time and Space, Origins. Cross-listed with HIST 4503. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 5504 - Animals in U.S. History

Summer 2010 Registration HIST 5504

Human-animal relationships offer powerful and unexpected perspectives on the American past. An eclectic range of readings and viewings, written assignments and contemplative experiences will contextualize contemporary practices, beliefs, and ethics -- vegetarianism, hunting, pet-keeping, and many others -- in historical context. Cross-listed with HIST 4504. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 5621 - Explorers and Exploration

Summer 2010 Registration HIST 5621

Examines the history of travel and exploration from the 13th century to the present. Readings draw primarily from first-person accounts to understand why people voyage, what they hope to discover, and what happens to them along the way. Cross-listed with HIST 4621. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 5645 - Archival Management

Summer 2010 Registration HIST 5645

This course studies theory and principles pertaining to the management of current and non-current records, public and private archival materials, as well as the administration of archival manuscript depositories for housing records of historical value. Cross-listed with HIST 4645. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 5810 - Special Topics

Summer 2010 Registration HIST 5810

Cross-listed with HIST 4810. **Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 5840 - Independent Study: History

Summer 2010 Registration **HIST 5840**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 5939 - Internship/Cooperative Education

Summer 2010 Registration **HIST 5939**

Semester Hours: 1to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 5995 - Travel Study Topics

Summer 2010 Registration **HIST 5995**

Created for students doing travel study in a foreign country; register through the Office of International Education. **Semester Hours:** 1to 15

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 6013 - Introduction to the Professional Study of History

Summer 2010 Registration **HIST 6013**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 6840 - Independent Study: HIST

Summer 2010 Registration **HIST 6840**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 6920 - Readings in European History

Summer 2010 Registration **HIST 6920**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 6925 - Readings in Early U.S. History

Summer 2010 Registration **HIST 6925**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 6926 - Readings in Later U.S. History, 1865-1932

Summer 2010 Registration **HIST 6926**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 6927 - Readings in Public History

Summer 2010 Registration **HIST 6927**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 6929 - Readings in Later U.S. History, 1929 to the Present

Summer 2010 Registration **HIST 6929**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 6931 - Readings: Special Subjects in History

Summer 2010 Registration **HIST 6931**

Readings in topics in history with varying subtitles reflecting course content. Prereq:

Graduate standing.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 6939 - Cooperative Education

Summer 2010 Registration **HIST 6939**

Semester Hours: 1to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 6950 - Master's Thesis

Summer 2010 Registration **HIST 6950**

Semester Hours: 1to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 6951 - Masters Project: Advanced History Curriculum Development

Summer 2010 Registration **HIST 6951**

Students develop curricula for secondary-level history courses; must demonstrate thorough knowledge of subjects; understanding of historiographic and methodological problems; command of primary sources and their uses in teaching; and describe teaching strategies, methods, and assessments to be used in the curricula. Prereq:

Permission of instructor.**Semester Hours:** 1to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 6952 - Master's Project: Public History

Summer 2010 Registration **HIST 6952**

Public history majors may use three credits to complete a public history project. Projects can entail creating an exhibit, organizing a museum or archival collection, conducting a preservation survey, or similar activities. Students are required to prepare a paper describing the process and results of their project. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 6980 - Seminar in European History

Summer 2010 Registration **HIST 6980**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 6981 - Seminar in British History

Summer 2010 Registration **HIST 6981**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 6986 - Seminar in Later U.S. History

Summer 2010 Registration **HIST 6986**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 6989 - Seminar: Special Subjects in History

Summer 2010 Registration **HIST 6989**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 6992 - Seminar: Colorado Studies

Summer 2010 Registration **HIST 6992**

This advanced interdisciplinary seminar on Colorado starts with a survey of the published literature. Students then select a research topic of their own and complete a publishable paper using primary sources. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HIST 6993 - Seminar: History of Technology

Summer 2010 Registration **HIST 6993**

Explores American and worldwide cases, modern and pre-modern, of technological development through seminar readings and individual research. Considers how technologies evolve within historical contexts and how societies demonstrate values and beliefs as they manipulate nature, building lifestyles and social orders. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HLTH 6010 - Health Care Systems

Summer 2010 Registration **HLTH 6010**

Introduces the structure and function of the medical care delivery system. Includes basic concepts and measures of health, disease, quality, values, needs and utilization; issues in health care manpower, institutions and system organization; general issues in policy, reimbursement and regulation; broad community, and organizational considerations in medical care organizations. The student is introduced to the principles of epidemiology and environmental health and demonstrates the application of epidemiology concepts to planning for the healthcare service needs of a population. **Semester Hours:** 3to 3 **When Offered:** FALL

Registration is changing. Visit our website for details ucdenver.edu/registration.

HLTH 6040 - Health Care Financial Management

Summer 2010 Registration **HLTH 6040**

Theory of insurance applied to healthcare, including benefits design and co-payments. Existing and proposed competition in insurance markets, including rating methodologies and selection issues. Managed care and medical spending accounts as responses to problems with traditional insurance. Managerial accounting methods useful for analyzing contracts and managing profitability are presented. Prereq: BUSN 6550 and 6621 or permission of instructor. **Semester Hours:** 3to 3 **When Offered:** FALL

Registration is changing. Visit our website for details ucdenver.edu/registration.

HLTH 6055 - Transformational Leadership/Metaphysical Management

Summer 2010 Registration **HLTH 6055**

Focuses on the manager's ability to generate transformational changes within the organization. In order to heal the organization, the manager must become a transformational leader, skilled in metaphysical as well as traditional management skills. Transformation means to change the structure of the organization - to move it to a higher form. In this course, we focus on characteristics of transformational leaders and metaphysical management, a spiritual process that expands the awareness of everyone in the organization. **Semester Hours:** 3to 3 **When Offered:** FALL

Registration is changing. Visit our website for details ucdenver.edu/registration.

HLTH 6070 - International Health Policy and Management

Summer 2010 Registration **HLTH 6070**

A framework for understanding national health reform policy and management issues in the U.S. and other nations, including industrialized, developing, and transforming nations. This course combines classroom and on-line teaching. **Semester Hours:** 3to 3**When Offered:** *FALL*

Registration is changing. Visit our website for details ucdenver.edu/registration.

HLTH 6071 - Introduction To Health Information Technology

Summer 2010 Registration **HLTH 6071**

Examines what needs transforming in healthcare to improve value, safety, and appropriateness of care, and what the role of IT is in that transformation. IT also examines the challenges of cultural change and IT strategy in succeeding with clinical information projects. Differences between installation, implementation, transition and actual transformation are suggested, and methods for managing subcultures in healthcare (IT, clinical, administrative) are reviewed. Cross-listed with ISMG 6071. **Semester Hours:** 3to 3**When Offered:** *SPRING*

Registration is changing. Visit our website for details ucdenver.edu/registration.

HLTH 6072 - Fundamentals of Health Information Technology Management

Summer 2010 Registration **HLTH 6072**

Provides an introduction to the management of information technology in healthcare. A description of information processing, the origin, content, evolution of healthcare information systems, and the methodologies deployed to acquire and manage information requirements are discussed. Cross-listed with ISMG 6072. **Semester Hours:** 3to 3**When Offered:** *FALL*

Registration is changing. Visit our website for details ucdenver.edu/registration.

HLTH 6075 - International Health Travel Study

Summer 2010 Registration **HLTH 6075**

Experiential course, which is designed to open students up to innovative health delivery practices in an international location. Students learn how health issues such as reproductive health, infectious diseases, mental health, health and economy, and chronic diseases are handled in community and public health settings. Class trips are usually 14-18 days to an Asian country during the month of January. Prereq: HLTH 6010 or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HLTH 6740 - Profiles in Health Care

Summer 2010 Registration **HLTH 6740**

This colloquium provides a rare opportunity for students to interact with top CEOs from health care organizations around the country. Students learn about HMOs, hospitals, medical group practices, consulting, managing careers, how to get jobs, and how to be successful in a job. **Semester Hours:** 3to 3 **When Offered:** *SPRING*

Registration is changing. Visit our website for details ucdenver.edu/registration.

HLTH 6800 - Special Topics

Summer 2010 Registration **HLTH 6800**

Offered irregularly. Current interests in the health management field. Topics recently offered include: international health, ethics, general systems theory, and key issues for health systems. Consult the current 'Schedule Planner' for semester offerings.

Prerequisites vary according to topics and instructor requirements. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HLTH 6840 - Independent Study: HLTH

Summer 2010 Registration **HLTH 6840**

Instructor approval required. Allowed only under special and unusual circumstances.

Regularly scheduled courses cannot be taken as independent study. **Semester Hours:** 1to 8

Registration is changing. Visit our website for details ucdenver.edu/registration.

HLTH 6911 - Health Field Studies

Summer 2010 Registration **HLTH 6911**

The objective of this course is to expose students to health care organizations with which they are not familiar. Each student is assigned to a health care organization and given a specific problem or project to complete. Prereq: HLTH 6010 or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HUMN 1012 - The Humanistic Tradition: Modes of Expression

Summer 2010 Registration **HUM 1012**

Familiarizes students with humanistic modes of expression through the study of history, literature, philosophy, music, and the visual and dramatic arts. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HUMN 3250 - Introduction to Law Studies

Summer 2010 Registration **HUM 3250**

Introduces students to the materials and methods of law studies. Students learn how to read case law, brief a case, make a course outline, analyze fact patterns, and perform legal research and writing projects. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HUMN 5000 - 19th Century Philosophy

Summer 2010 Registration **HUM 5000**

Covers the systematic work of such German idealists as Hegel, Fichte, and Shelling, as well as responses to those systems by such authors as Marx, Kierkegaard, and Nietzsche. Prereq: PHIL 3002 or 3022. Cross-listed with PHIL 4000/5000 and SSCI 5000. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HUMN 5013 - Philosophical Problems in the Social Sciences and the Humanities

Summer 2010 Registration **HUM 5013**

Presents an overview of key theoretical issues currently emerging across academic disciplines. Examines questions about reality, knowledge, ethics that affect social research and writing in the humanities. Readings explore how contemporary philosophical and cultural discourses have altered theory and method. Assignments include influential theoretical pieces by key historical and contemporary thinkers, examples of application in social research, and interpretations of thought and affect in cultural contexts. Cross-listed with PHIL/SSCI 5013. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HUMN 5020 - Elements of Social Thought

Summer 2010 Registration **HUM 5020**

Introduces students to the disciplines that comprise the social sciences (classical anthropology, sociology, sociology of religion, philosophy of history, political theory, classical psychology, etc.). Provides necessary tools for interdisciplinary students to understand the social infrastructure of contemporary society. Cross-listed with SSCI 5020 and PHIL 5020. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HUMN 5025 - Methods and Texts of the Humanities

Summer 2010 Registration **HUM 5025**

Exposes the beginning graduate student to exemplary works and methodologies of select humanistically oriented disciplines, such as philosophy, fine arts, literature, history, communication, music, and theatre. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HUMN 5101 - Pragmatism: Classical American Philosophy

Summer 2010 Registration HUM 5101

The most significant philosophical tradition born in the United States is pragmatism. Examines several of the most important classical works of this tradition, the influence of thinkers who have helped pragmatism, and the contemporary relevance of this tradition. Figures who may be included in this course are: Emerson, Pierce, Royce, James, Dewey, Mead, Rorty. Prereq: An introductory course in philosophy. Cross-listed with PHIL 4101, 5101, SSCI 5101. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HUMN 5220 - Aesthetics and the Philosophy of Art

Summer 2010 Registration HUM 5220

Introduction to major theories of aesthetics and contemporary discussions of problems in aesthetics and the philosophy of art, including topics such as: the nature of art, interpretation and evaluation in art. Cross-listed with PHIL 4220/5220. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HUMN 5242 - Bioethics

Summer 2010 Registration HUM 5242

Examines some of the major moral issues confronting the nation's health care system. The class will search for solutions to such problems as financing health care for those unable to do so on their own, determining the extent of a patient's right to both refuse and demand certain types of medical treatment, and allocating scarce medical resources such as life-saving vital organs. The springboard for examining these issues will be the doctor or patient relationship framed by the moral principles of respect for persons and beneficence. Cross-listed with PHIL 4242, PHIL 5242, SSCI 5242. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HUMN 5250 - Environmental Ethics

Summer 2010 Registration HUM 5250

While human industry/technology creates enormous material prosperity, it can result in devastating environmental damage. This course analyzes the moral values, consequences and duties implied in relationships between human beings, animals and ecological systems, while seeking out new and ethical approaches. Cross-listed with PHIL 4250/5250 and SSCI 5250. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HUMN 5520 - The City Beautiful: Art, Architecture and Theory in Urban History

Summer 2010 Registration **HUM 5520**

How did cities develop and what were the buildings that filled these spaces? Posing this question initially, this course takes a case-study approach to surveying the concerns confronting different cultures as they developed their urban environments sociologically, anthropologically, architecturally and spatially. Cross-listed with SSCI 5520. **Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HUMN 5550 - Paris 1910: Art, Philosophy and Psychology

Summer 2010 Registration **HUM 5550**

Traces the influences of philosophy, psychology, and art in the English, French, and German-speaking worlds in the early twentieth century. This intellectual history is extended to broader cultural and political contexts. Key period is between 1910 and 1968, when modernity's key aspirations and tensions became explicit. Cross-listed with PHIL 5550 and SSCI 5550. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HUMN 5600 - Philosophy of Religion

Summer 2010 Registration **HUM 5600**

Nature of religion and methods of studying it. Cross-listed with PHIL 4600, 5600, RLST 4060, 5060, and SSCI 5600. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HUMN 5650 - Reflections on Modernity

Summer 2010 Registration **HUM 5650**

Explores modernity as a historical epoch and a theoretical space, looking at the commentaries and reflections of influential 20th century thinkers including Adorno, Arendt, Levinas, Merleau-Ponty, Habermas and Foucault. Examines how the theoretical inclinations of modernity were influenced by politics, art, literature and culture. Cross-listed with PHIL 5650 and SSCI 5650. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HUMN 5660 - Visual Arts: Interpretations and Contexts

Summer 2010 Registration **HUM 5660**

Provides graduate-level interdisciplinary study in the historiography, methodologies, and theories used to understand how visual arts, including painting, sculpture, photography, film and performance art influence the making of culture. Students gain critical skills for analyzing a variety of visual and aesthetic products of culture. Prereq: Upper-division

undergraduate or graduate standing. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HUMN 5720 - Sexuality, Gender and Their Visual Representation

Summer 2010 Registration **HUM 5720**

Studies sexuality, gender and identity representation from classical antiquity through the present in the visual arts. Uses the literature of visibility, feminism, race and queer theory. Explores representations of femininity, masculinity and androgyny and their reinforcement and challenge to gender-identity norms. Cross-listed with SSCI 5720. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HUMN 5750 - Philosophical Psychology

Summer 2010 Registration **HUM 5750**

Explores debates about psyche and body, mind and world, self and others, and consciousness and nature. Examines the philosophical questions related to those debates that arise within theories of perception, affect and cognition offered by influential psychological models. Cross-listed with PHIL 5755, SSCI 5750. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HUMN 5833 - Existentialism

Summer 2010 Registration **HUM 5833**

Examines one of the most influential movements in recent European thought, beginning with existentialism's 19th century roots, and continuing on to the existentialist philosophers of the 20th century. Figures covered may include Dostoyevsky, Kierkegaard, Nietzsche, Heidegger, Sartre and de Beauvoir. Cross-listed with PHIL 4833/5833 and SSCI 5833. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HUMN 5840 - Independent Study: HUMN

Summer 2010 Registration **HUM 5840**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

HUMN 5920 - Philosophy of Media and Technology

Summer 2010 Registration **HUM 5920**

A philosophical examination of interrelationships between contemporary media, technology, and their impacts upon character of contemporary life and values. Topics may include ethics, epistemology, democracy, advertising, media literacy and criticism.

Cross-listed with PHIL 4920, 5920, SSCI 5920. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HUMN 5924 - Directed Research and Reading in Interdisciplinary Humanities

Summer 2010 Registration HUM 5924

Provides background reading, theory and research approaches for students to develop a thesis, project, or an individualized theme for the oral exam based on their interdisciplinary focus. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HUMN 5933 - Philosophy of Eros

Summer 2010 Registration HUM 5933

Why is philosophy an erotic activity, and what are the implications of this insight? We will explore these issues, first, by reading Plato's erotic dialogues: Lysis, Symposium and Phaedrus. Then we will focus on Freud's influential (and controversial) appropriation of Plato's thought in the writings that span his career, from *The Interpretation of Dreams* (1900) to *Civilization and its Discontents* (1930) and beyond. Finally, we will survey post-Freudian theories of Eros, such as Michel Foucault's *History of Sexuality*, as well as the more recent contributions of thinkers such as Jonathan Lear, Thomas Nagel, Martha Nussbaum and Slavoj Zizek. Cross-listed with PHIL 4933, PHIL 5933, SSCI 5933, and WGST 5933. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

HUMN 5939 - Internship/Cooperative Education

Summer 2010 Registration HUM 5939

Semester Hours: 1to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

HUMN 5950 - Master's Thesis

Summer 2010 Registration HUM 5950

Semester Hours: 1to 8

Registration is changing. Visit our website for details ucdenver.edu/registration.

HUMN 5960 - Master's Project

Summer 2010 Registration HUM 5960

Semester Hours: 1to 8

Registration is changing. Visit our website for details ucdenver.edu/registration.

HUMN 5984 - Topics: Interdisciplinary Humanities

Summer 2010 Registration HUM 5984

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

INTB 2939 - Internshp/Cooperative Education

Summer 2010 Registration INTB 2939

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

INTB 3000 - Global Perspectives

Summer 2010 Registration INTB 3000

Globalization brings both opportunities and anxieties that need to be fully explored, discussed and understood both by the business and non-business student. This interdisciplinary course is designed to stimulate thought, perspective, discussion and debate for business and non-business students on issues ranging from globalization; political economy and geopolitics; the environment; cultures; finances; economic integration; trade; global regions; emerging markets; human rights; terrorism and conflict; leadership, ethics and values; entrepreneurship, to future trends in global issues. The Global Perspective course is designed (1) to increase and promote both business and non-business students' capacity for international understanding and international enterprise through the study and discussion of global business environment-related issues from multiple points of views in a neutral forum. (2) It is to provide students with the awareness that global issues cannot be viewed in isolation, that they are all interrelated. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

INTB 3901 - The Construction of the European Union

Summer 2010 Registration INTB 3901

An overview of past and future development in Europe, including economic, political, and social aspects from the point of view of EU members, bordering countries, and world powers. The single market and its repercussions for businesses and the impact of the creation of a single market are studied. Offered through the ACI Semester in Paris program. Prereq: Acceptance to the ACI program. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

INTB 3902 - Intercultural Management: European Values and Behavior

Summer 2010 Registration INTB 3902

An in-depth study of European cultural differences and what unites the European

nations. Histories and cultures of European countries are used to understand differences in communication, management, and organizational development. Case studies provide a synthesis of European and U.S. management practices. Offered through the ACI Semester in Paris program. Prereq: Acceptance to the ACI program. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

INTB 3903 - International Business Law

Summer 2010 Registration **INTB 3903**

Provides a legal framework necessary for international business transactions and judicial risks. Combining theory and case studies, the course covers contract law, dispute settlement, and international business specific operations: international sales, distribution and exclusive concession contracts, franchise contracts, commercial agency contracts, and technology transfer contracts. Offered through the ACI Semester in Paris program. Prereq: BLAW 3000 and acceptance to the ACI program. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

INTB 3904 - International Negotiation

Summer 2010 Registration **INTB 3904**

Studies the position of the company in the international marketing process; general knowledge of negotiators' external environments; preparation of a negotiation and the negotiating process; and expression of each party within the context of a contract. Offered through the ACI Semester in Paris program. Prereq: Acceptance to the ACI program. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

INTB 3905 - International Marketing and Distribution

Summer 2010 Registration **INTB 3905**

A practical view of the development of foreign markets, emphasizing strategic decisions of international development and analysis of company expertise regarding preferences and entrance into the marketplace. Problems pertaining to implementation of international sales policies and evolution of product distribution are also studied. Offered through the ACI Semester in Paris program. Prereq: MKTG 3000 and acceptance to the ACI program. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

INTB 3906 - International Communication and Consumer Behavior

Summer 2010 Registration **INTB 3906**

Examines the influence of culture on purchasing and consuming as well as the

importance of cultural values in consumer behavior. Provides the necessary framework to understand the current global market situation (product development, global market structures, global marketing strategies). An analysis of communication and advertising in an international context. Prereq: MKTG 3000 and acceptance to the ACI program.

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

INTB 3907 - European Marketing and Management of a Product Line

Summer 2010 Registration **INTB 3907**

Trains students to analyze the main characteristics and trends of the European marketing environment and business development. With extensive use of case studies, it examines such issues as European product launches. Prereq: MKTG 3000 and acceptance to the ACI program.

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

INTB 3908 - Organizations and Culture

Summer 2010 Registration **INTB 3908**

Introduces a range of ideas about organizations and how they work. Issues of internationalization in the context of organizational structure and culture, covering such topics as the global-local dilemma, the "transnational" approach and structural criteria. Modern organizational challenges assessed: innovation and technology. Prereq: MGMT 3000 and acceptance to ACI program.

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

INTB 3909 - Single Market, European Law and Euroland

Summer 2010 Registration **INTB 3909**

Overview of past and future steps in the development of Europe, economics, political and social aspects from the point of view of EU members, bordering countries (Central Europe) and world powers (United States, Japan and Asia). The single market and its repercussions for business (free access to the market, common rules, single currency) and the impact of the single market on their strategies. Prereq: Acceptance to the ACI program.

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

INTB 3910 - International Corporate Finance

Summer 2010 Registration **INTB 3910**

The objective of this seminar is to provide an overview of international corporate finance, understand the main differences in accounting standards, interpret and critically analyze the financial reports issued by international firms, and have a working knowledge of cost accounting principles. Prereq: FNCE 3100 and acceptance to the ACI

program. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

INTB 3911 - The United States Of Europe

Summer 2010 Registration **INTB 3911**

The objectives of this seminar are to allow students to obtain a practical knowledge of and develop a thorough understanding of the integrative process taking place among several European countries, and to give them a unique chance to become familiar with the various political, economical, legal, cultural, and human aspects of the European community being developed and institutionalized, on a brand new, historical, and transnational level. Prereq: Acceptance to the ACI program. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

INTB 3912 - Global Marketing-Communication

Summer 2010 Registration **INTB 3912**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

INTB 3939 - Internship/Cooperative Education

Summer 2010 Registration **INTB 3939**

Supervised experiences involving the application of concepts and skills in an employment situation. Prereq: Senior standing and a 3.5 GPA. **Semester Hours:** 1to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

INTB 4028 - Travel Study Topics

Summer 2010 Registration **INTB 4028**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

INTB 4400 - Environments of International Business

Summer 2010 Registration **INTB 4400**

An overview of the environmental complexities that arise when business activities and firms cross national borders. Key international business environmental complexities associated with country differences, cross-border trade and investment, and global monetary system are examined. Prereq: MGMT 3000 and junior standing. Cross-listed with MGMT 4400. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

INTB 4410 - Operations of International Business

Summer 2010 Registration **INTB 4410**

Focuses on the impact of environmental factors on international business operations and the identification and analysis of complex strategic and operational issues facing business firms in global markets. The strategies and structures of international businesses, alternative foreign market entry modes, and the unique roles of various business functions at international business firms are explained and assessed. Prereq: INTB 4400 or MGMT 4400. Cross-listed with MGMT 4410. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

INTB 4950 - Special Topics in International Business

Summer 2010 Registration **INTB 4950**

Current topics in international business are occasionally offered. Consult the 'Schedule Planner' for specific course offerings or contact an advisor for information. Prereq: Topics vary depending on the topic and the instructor requirements. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

INTB 5800 - Special Topics in International Business

Summer 2010 Registration **INTB 5800**

Current topics in international business are occasionally offered. Consult 'Schedule Planner' for specific course offerings or contact an advisor for information. Prereq: Topics vary depending on the topic and the instructor requirements. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

INTB 5939 - Internship/Cooperative Education

Summer 2010 Registration **INTB 5939**

Supervised experiences involving the application of concepts and skills in an employment situation. Prereq: 21 semester hours and a 3.5 grade-point average. **Semester Hours:** 1to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

INTB 6000 - Introduction to International Business

Summer 2010 Registration **INTB 6000**

An overview of the international business environment, the impact of environmental factors on international business operations, and the identification of current and complex managerial issues facing organizations engaged in international business. Prereq: Completion or waiver of CBK or completion of nine graduate credit

hours. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

INTB 6020 - Cross-Cultural Management

Summer 2010 Registration **INTB 6020**

Focuses on the management of diverse socio-cultural and political norms and values in the global marketplace. The goal of this course is to develop skills in managing impacts of such values and norms on the effectiveness of international business operations and managerial activities. Prereq: INTB 6000 or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

INTB 6022 - International Business Negotiations

Summer 2010 Registration **INTB 6022**

Examines the international dimensions of business negotiations. It addresses the impact of the cultural, legal, political environments in the negotiation process, and examines similarities and differences in negotiation styles and approaches across borders. (This course qualifies as an international elective for the MS in International Business program.) **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

INTB 6024 - International Trade Finance and Management

Summer 2010 Registration **INTB 6024**

Provides an overview of international trade finance and trade management. It examines the roles played by various parties involved in international trade, addresses key methods of international payment and related financing, and provides practical experiences on how to manage the import and export trade management process. (This course qualifies as an international elective for the MS in International Business program.) **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

INTB 6026 - International Marketing

Summer 2010 Registration **INTB 6026**

Explores problems, practices, and strategies involved in marketing goods and services internationally. Emphasizes analysis of uncontrollable environments, legal systems, and economic conditions, as they affect international marketing planning. (This course qualifies as an international elective for the MS in International Business program.)

Prereq: BUSN 6560. Note: Students cannot receive credit for both MKTG 6020 and INTB 6026. Cross-listed with MKTG 6020. **Semester Hours:** 3to 3 **When Offered:** FALL

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Registration is changing. Visit our website for details ucdenver.edu/registration.

INTB 6028 - Travel Study Topics

Summer 2010 Registration **INTB 6028**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

INTB 6040 - International Human Resources Management

Summer 2010 Registration **INTB 6040**

This course has two objectives: (1) to understand the impact of cultural differences in the management of people in multinational firms; and (2) to compare and contrast critical human resource issues in the contexts of domestic and international operations. Topics include recruitment, staffing, training, performance appraisal, compensation, and labor and management relations in markets around the world. (This course qualifies as an international elective for the MS in International Business program.) Prereq: MGMT 6380 or BUSN 6520 (or equivalent). Cross-listed with MGMT 6040. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

INTB 6060 - The Legal Aspects of International Business

Summer 2010 Registration **INTB 6060**

Analyzes the legal aspects of international business transactions and considers risk-reducing mechanisms such as letters of credit and arbitration. The course examines NAFTA, the European union, and other international trading structures and rules, giving the background for export or import activities. (This course qualifies as an international elective for the MS in International Business program.) **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

INTB 6080 - Global Competition

Summer 2010 Registration **INTB 6080**

Focuses on the dynamics of the interface between international business operations and their market environments. It addresses the changing structure of international competitive environments and its implications for companies engaged in international business. It examines various approaches to and issues in structuring international business deals in dynamic global competitive environments. (This course qualifies as an international elective for the MS in International Business program.) Prereq: INTB 6000 or permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

INTB 6082 - Marketing in Emerging Markets

Summer 2010 Registration **INTB 6082**

Explores problems, practices, and strategies involved in marketing goods and services in emerging markets. Emphasizes analysis of uncontrollable environmental forces, including cultures, governments, legal systems, and economic conditions, as they affect the marketing plan. (This course qualifies as an international elective for the MS in International Business program.) Prereq: BUSN 6560. Note: Students cannot receive credit for both MKTG 6080 and INTB 6082. Cross-listed with MKTG 6080. **Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

INTB 6094 - Marketing Issues in the Chinese Environment

Summer 2010 Registration **INTB 6094**

This course assesses numerous marketing and marketing related topics in the Chinese environment with the objective of helping the graduate student develop managerial and marketing expertise. In specific, the course pinpoints key developments in the Chinese business environment, develops expertise in conducting market opportunity analysis, assesses market entry conditions and strategies and applies marketing mix strategies in the context of the Chinese environment. Note: It is recommended for students to take BUSN 6560 or INTB 6000 prior to this course. Cross-listed with MKTG 6094. **Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

INTB 6200 - International Business Policy

Summer 2010 Registration **INTB 6200**

The objective of this course is to develop competence relevant to strategy formulation and implementation in a multi-national enterprise, and in an international context. Provides theoretical knowledge, skills, and sensitivities that help deal effectively with the strategic and managerial problems of managing in a global environment. Prereq: INTB 6000 and 18 graduate credit hours. **Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

INTB 6370 - International Accounting

Summer 2010 Registration **INTB 6370**

Designed to expose students to the international aspects of accounting and financial management. Includes discussion of some of the different financial accounting practices across countries; financial statement analysis in a global context. IFRS's are reviewed and compared with the requirements of US GAAP. Note: Students cannot receive credit for both ACCT 6370 and INTB 6370. Prereq: BUSN 6550 or equivalent. Cross-listed with

ACCT 6370 and ACCT 4370. **Semester Hours:** 3 to 3 **When Offered:** *SPRING*
Registration is changing. Visit our website for details ucdenver.edu/registration.

INTB 6372 - International Financial Management

Summer 2010 Registration **INTB 6372**

Addresses financial management in an international context that considers international capital movements and foreign exchange problems, and international operations as they affect financial functions. It reviews foreign and international institutions and the foreign exchange process and considers financial requirements, problems, sources, and policies of firms doing business internationally. Meets concurrently with FNCE 6370. Prereq: BUSN 6640. Cross-listed with FNCE 6370. **Semester Hours:** 3 to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

INTB 6411 - International Corporate Governance

Summer 2010 Registration **INTB 6411**

Discusses the structure and goals of the modern corporation, the primary governance mechanisms used to help companies achieve these goals, how and why these roles, goals, and mechanisms vary across nations. The topics to be covered in the course include how share ownership, particularly by institutional shareholders, managerial compensation and board of director activities are being used to improve corporate governance systems. The class compares the Codes of Best Governance Practices from several countries as well as recent innovations in individual company governance rating systems. (This course qualifies as an international elective for the MS in International Business program.) Prereq: BUSN 6640. Note: Students cannot receive credit for both FNCE 6411 and INTB 6411. Cross-listed with FNCE 6411. **Semester Hours:** 3 to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

INTB 6750 - Research Methods in International Business

Summer 2010 Registration **INTB 6750**

Focuses on three major issues: (1) research design from an international management perspective (e.g., qualitative, quantitative and ethnographic); (2) topical issues (e.g., culture, international negotiations, mergers and alliances); (3) trends in international business research (e.g., cross-national project teams, emerging theoretical perspectives). This course qualifies as an international elective for the MS in International Business program. Prereq: INTB 6000 and BUSN 6530 or equivalent. **Semester Hours:** 3 to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

INTB 6800 - Special Topics in International Business

Summer 2010 Registration **INTB 6800**

Current topics in international business are occasionally offered. This includes international field study courses. Consult the 'Schedule Planner' for specific course offerings or contact an advisor for information. (This course qualifies as an international elective for the MS in International Business program.) Prereq: Topics vary depending on topic and instructor requirements. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

INTB 6840 - Independent Study

Summer 2010 Registration **INTB 6840**

Instructor approval required. Allowed only under special and unusual circumstances. Regularly scheduled courses cannot be taken as independent study. (This course qualifies as an international elective for the MS in International Business program.) **Semester Hours:** 1to 8
Registration is changing. Visit our website for details ucdenver.edu/registration.

INTB 6950 - Master's Thesis

Summer 2010 Registration **INTB 6950**

Prereq: INTB 6750. **Semester Hours:** 1to 8
Registration is changing. Visit our website for details ucdenver.edu/registration.

INTE 5110 - Instructional Development and Production

Summer 2010 Registration **I T 5110**

Systematic analysis, design, development, production, and evaluation of instructional units and materials. Apply systems design model and instructional theories to the development of learning resources. Topics include needs assessment; learner, content, goal and environment analyses; instructional strategies; and formative evaluation. **Semester Hours:** 2to 4
Registration is changing. Visit our website for details ucdenver.edu/registration.

INTE 5120 - Instructional Models, Strategies and Tactics

Summer 2010 Registration **I T 5120**

Instructional development principles and procedures for developing instructional sequences for facts, concepts, procedures and principles. Application of different instructional and development models. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

INTE 5140 - Performance Technology

Summer 2010 Registration I T 5140

Analysis to determine whether human performance problems are problems that can be solved by instruction or by other means, such as organizational redesign, incentives, or performance support systems. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

INTE 5160 - Managing Information and Learning Technology Programs

Summer 2010 Registration I T 5160

Problems in the organization and administration of information learning and technology programs and projects. Topics include project management, personnel administration, budget development, resource planning, and team collaboration. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

INTE 5310 - Producing Educational Materials

Summer 2010 Registration I T 5310

Design and production of materials such as videos, multimedia, presentations and websites to support learning goals. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

INTE 5330 - Digital Storytelling

Summer 2010 Registration I T 5330

Introduction to methods and strategies for design and production of digital stories. Topics include principles of design, procedures of the development process, use of stories for education and personal development and introduction to multimedia tools for storytelling. Review of historical significance and future significance of digital storytelling within a variety of professional contexts. **Semester Hours:** 2to 2

Registration is changing. Visit our website for details ucdenver.edu/registration.

INTE 5340 - Digital Storytelling in the Curriculum

Summer 2010 Registration I T 5340

Integration of digital stories in the curriculum. Review of settings and purposes for educational uses of digital stories. Methods re-using and presenting stories for instruction; facilitating student creation of stories; developing instructional units; preparing an implementation plan for adoption of digital storytelling in a school or organization. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

INTE 5350 - Leadership for Digital Storytelling

Summer 2010 Registration I T 5350

Train the trainer workshop for digital storytelling. Includes practice and training in facilitation methods in narrative/group workshop methods as well as technical software instruction. Additional activities include review of storytelling principles and values; additional practice in digital story design and production; presentation and sharing of digital stories; and review of uses in different settings. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

INTE 5370 - Digital Video For Interactivity

Summer 2010 Registration I T 5370

Digital video design and production for online and multimedia instruction. Topics include needs assessment and media selection; scripting and design; shooting; lighting; sound; editing; formats and conversion; and multimedia integration. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

INTE 5410 - Designing Text and Graphics for Instruction

Summer 2010 Registration I T 5410

Instructional, structural, and typographic principles and techniques for designing text and illustration-based instructional materials, including programmed instruction, job aids, diagrams, documents, user manuals and online text. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

INTE 5510 - Integrating Technology In The Curriculum

Summer 2010 Registration I T 5510

Principles and practices of technology integration in K12 classrooms and schools. Topics include: support for standards-based curriculum; evaluation and selection of resources; roles of technology in support of learning; teacher and learner roles; adapting to constraints; communications and information sharing; and social, ethical, legal and human issues such as equity, access, gender and culture. **Semester Hours:** 2to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

INTE 5520 - Technologies for Learning and Productivity

Summer 2010 Registration I T 5520

Using a wide variety of technological tools, including word processing, database, spreadsheet, graphics, presentation, and communications software, facilitate learning and manage the instructional process. **Semester Hours:** 1to 4
Registration is changing. Visit our website for details ucdenver.edu/registration.

INTE 5600 - Multimedia Authoring

Summer 2010 Registration I T 5600

Teaches the use of multimedia authoring tools to develop multimedia instruction or World Wide Web resources. Skills include: producing programs to meet educational needs; integrating digital content into office applications and multimedia resources.

Prereq: Basic computer experience with word processing, database or spreadsheet programs. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

INTE 5610 - Principles for Designing Multimedia

Summer 2010 Registration I T 5610

Theory and practice of designing effective instruction for World Wide Web and multimedia delivery. Prereq: INTE 5600. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

INTE 5640 - Technology of Student-Centered Learning Environments

Summer 2010 Registration I T 5640

Theory and principles behind complex learning environments aimed at developing student responsibility, collaborative learning, and higher order thinking methods for technology support are examined. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

INTE 5650 - Policies and Planning for eLearning Programs

Summer 2010 Registration I T 5650

Methods and strategies for planning, implementing and evaluating distance-learning programs. Review of trends and issues currently affecting distance- learning programs and delivery of online education. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

INTE 5660 - Designing and Teaching in eLearning Environments

Summer 2010 Registration I T 5660

In this hands-on course, students will learn to use tools and strategies to design and teach in eLearning environments. The course covers critical aspects of designing and teaching an online course, such as planning a successful online learning experience (both group-paced and self-paced instruction); designing eLearning materials and resources; being an effective online teacher, including leading, managing and assessing online discussions (both asynchronous and synchronous); getting the most out of a course management system; and assessing course effectiveness. **Semester Hours:** 6to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

INTE 5670 - Developing eLearning Instruction

Summer 2010 Registration I T 5670

In this applied course, students will build an online learning course (as planned during INTE 5660) while developing basic skills with XHTML, CSS and Web and multimedia eLearning authoring tools. Students will learn how to enhance online courses by incorporating interactivity, content management and multimedia design strategies.

Prereq: INTE 5660 or permission of instructor. **Semester Hours:** 6to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

INTE 5680 - Integrating Media in eLearning Environments

Summer 2010 Registration I T 5680

Students develop and integrate media resources into eLearning environments, applying principles of media selection and multimedia learning. Students survey and sample a variety of tools for production of audio, video, and multimedia content and examine ways to enhance eLearning courses through multimedia presentation and engagement resources. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

INTE 5690 - Enhancing Web-based Learning Environments with JavaScript and PHP Programming

Summer 2010 Registration I T 5690

Using JavaScript and PHP, this course teaches the technologies behind Web design that turn static HTML pages into interactive Web applications. Issues to consider with each technology are explored so intelligent decisions can be made when adopting a particular technology for use in a Web site. Prereq: INTE 5660, 5670 and 5680 or permission of instructor. **Semester Hours:** 4to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

INTE 5710 - Telecommunications and Networking in Education

Summer 2010 Registration I T 5710

Overview of computer-mediated communications (CMC) and networking and applications to education. Topics include: operating systems; hardware/software troubleshooting; networking in education and classroom and lab management. Prereq: Basic computer experience with word processing, database or spreadsheet programs. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

INTE 5830 - Information and Learning Technologies Workshop

Summer 2010 Registration I T 5830

Specific titles vary depending upon the specific skill areas within information and learning technologies. **Semester Hours:** 0.5to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

INTE 5840 - Independent Study: INTE

Summer 2010 Registration I T 5840

Semester Hours: 1to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

INTE 5990 - Special Topics in Instructional Technology

Summer 2010 Registration I T 5990

Semester Hours: 1to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

INTE 5998 - Professional Development Activities

Summer 2010 Registration I T 5998

Provides guidance for professional development through participation in appropriate state, regional, and national conferences for meeting leaders and colleagues while upgrading professional knowledge and skills in the field. Prereq: Enrollment in a graduate INTE program or a professional in a field related to the conference. **Semester Hours:** 1to 2

Registration is changing. Visit our website for details ucdenver.edu/registration.

INTE 6110 - Managing Instructional Development

Summer 2010 Registration I T 6110

Organization, supervision and budgeting of instructional development projects in training and education. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

INTE 6120 - Design Studio For Project Management and Collaboration

Summer 2010 Registration I T 6120

Collaborative management of instructional-design projects meeting demonstrated needs in real-life settings. Skills include: management of time, personnel and resources; meeting client needs and expectations; communication with team and client; information design; interaction design and project problem solving. Prereq: INTE 5110 and 5120 or permission of instructor. **Semester Hours:** 2to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

INTE 6130 - Implementing and Evaluating Instruction

Summer 2010 Registration I T 6130

Methods for implementing instructional materials in field settings; evaluating materials for learning impact and program revision. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

INTE 6515 - Leadership for Learning Technologies Integration

Summer 2010 Registration I T 6515

Leadership for integrating technology into a standards-based curriculum. Through mentoring, service, or training, model and assist teachers and administrators in adopting technologies and information resources to support learning and assessment activities. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

INTE 6530 - Development Projects in Information and Learning Technologies

Summer 2010 Registration I T 6530

The creation and application of instructional systems combining unique instructional advantages of technologies to emphasize high levels of interactivity. Advanced projects must meet specific objectives to cover program design and development, hardware and software configurations, delivery systems and learners. Project topics vary. Prereq: INTE 5110 and 5600. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

INTE 6710 - Creative Designs for Instructional Materials

Summer 2010 Registration I T 6710

This course is a project-based exploration of instructional-materials design theories, principles, and best practices used to communicate complex information to a diverse audience for the purpose of teaching and learning. You will apply unique design approaches and formats to the creation of print- and presentation-based instructional materials. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

INTE 6720 - Research in Information and Learning Technologies

Summer 2010 Registration I T 6720

Analysis, evaluation, and production of research in instructional technology. Develop recommendations for action based on research findings. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

INTE 6730 - Comparative Models of Instructional Design

Summer 2010 Registration I T 6730

Advanced seminar in analyzing the theoretical foundations and the instructional implications of different models and theories of instructional design. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

INTE 6740 - Learning Processes Applied to Instructional Technology

Summer 2010 Registration I T 6740

Principles of learning and instruction for technology-mediated learning. Topics include case-based and project-based teaching and other inquiry-learning strategies; tutorial and direct-instruction; and self-directed learning. **Semester Hours:** 2to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

INTE 6750 - Current Trends and Issues in Instructional Technology

Summer 2010 Registration I T 6750

Seminar examining definitions, history and current trends and issues in the practice of instructional technology. (Topics vary.) **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

INTE 6760 - Advanced Seminar in Instructional Design and Development

Summer 2010 Registration I T 6760

Topical seminars to investigate issues, new models, or techniques in the field of instructional design and development. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

INTE 6840 - Independent Study: INTE

Summer 2010 Registration I T 6840

Semester Hours: 1to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

INTE 6930 - Internship in Information and Learning Technologies

Summer 2010 Registration I T 6930

Placement in a business, school or field setting where professional skills are applied to assess needs and design, develop and evaluate an instructional system. **Semester Hours:** 1to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

INTE 6950 - Master's Thesis

Summer 2010 Registration I T 6950

A master's thesis is part of the degree track options for use in conjunction with, or in lieu of, comprehensive exams. Credit hours, topic, and workload are determined by the student's advisor. Prereq: Completion of all other course requirements and permission of advisor. **Semester Hours:** 4to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

INTE 6960 - Master's Project

Summer 2010 Registration I T 6960

Credit hours, topic, and work load are determined by the student's advisor. Prereq: Completion of all other course requirements and permission of advisor. **Semester Hours:** 1to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

INTE 6999 - Leadership and Practice in Information and Learning Technologies

Summer 2010 Registration I T 6999

Reflective examination of the adoption and use of information and learning technologies in applied settings. Topics include change strategies, system analysis, planning and evaluating technology use, and roles of technology specialists. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

IPTE 4000 - Elementary Literacy Instruction and Assessment

Summer 2010 Registration IPTE 4000

Designed to prepare teacher candidates to develop an appreciation, understanding, and application of literacy assessment and instruction in the elementary classroom. Teachers learn how to use the results of various types of assessment to create a reading and writing program that addresses the literacy needs of all children. The course assist teachers in learning how to integrate the teaching of reading and writing across content areas. Prereq: Concurrent enrollment in an internship or permission of instructor is required. Admission into the IPTE Program. Cross-listed with IPTE 5000. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

IPTE 4001 - Elementary Literacy Assessment and Instruction Teaching Lab

Summer 2010 Registration IPTE 4001

Designed to support novice and experienced teachers in examining student reading and writing performance data and using the data to plan instruction that assist students meeting reading and writing standards. Conducted by teacher experts in literacy; labs

utilize classroom data from the elementary students the lab participants are teaching. Prereq: Concurrent enrollment in an internship or IPTE 4000 or IPTE 5000 or permission of instructor is required. Admission into the IPTE Program. Cross-listed with IPTE 5001.**Semester Hours:** 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

IPTE 4002 - Math Instruction and Assessment

Summer 2010 Registration IPTE 4002

Designed to prepare elementary teachers to teach mathematics in elementary school and to apply the six principles of the National Council of Teachers of Mathematics (NCTM) (equity, curriculum, teaching, learning, assessment and technology) to the four areas of mathematical learning (number sense, statistics and probability, geometry and measurement, and mathematical functions). Teachers explore ways to help all elementary students become flexible and resourceful problem solvers in mathematics.

Prereq: MATH 3040. Concurrent enrollment in an internship or permission of an instructor is required. Admission into the IPTE Program. Cross-listed with IPTE 5002.**Semester Hours:** 2to 2

Registration is changing. Visit our website for details ucdenver.edu/registration.

IPTE 4004 - Science in the Elementary Curriculum

Summer 2010 Registration IPTE 4004

Designed to support elementary teachers in developing an understanding and appreciation of active science explorations in elementary classrooms, learning various methods of teaching and assessing science that prepare students to meet science content standards, developing authentic applications of science, and integrating science with other elementary content areas, including literacy and math, to support more holistic learning. Cross-listed with IPTE 5004.**Semester Hours:** 2to 2

Registration is changing. Visit our website for details ucdenver.edu/registration.

IPTE 4005 - Social Studies in the Elementary Curriculum

Summer 2010 Registration IPTE 4005

Designed to prepare elementary teachers to support students' learning related to the Colorado social studies standards. The course includes attention to social studies curriculum and teaching resources, approaches and strategies for effective teaching and assessment of social studies content, and to the teaching of literacy and math within social studies content. The course also helps teachers understand how to model democratic ideals in a classroom. Cross-listed with IPTE 5005.**Semester Hours:** 2to 2

Registration is changing. Visit our website for details ucdenver.edu/registration.

IPTE 4006 - Integrated Science and Social Studies in the Elementary Curriculum

Summer 2010 Registration **IPTE 4006**

Designed to support elementary teachers in developing an understanding and appreciation of active science and social studies explorations in elementary classrooms, learning various methods of teaching and assessing science and social studies that prepare students to meet content standards, developing authentic applications and integrating with other elementary content areas, including literacy and math, to support more holistic learning. Cross-listed with IPTE 5006. **Semester Hours:** 4to 4
Registration is changing. Visit our website for details ucdenver.edu/registration.

IPTE 4020 - Exploring Diversity in Content and Pedagogy I

Summer 2010 Registration **IPTE 4020**

An essential feature of standards-based curriculum design and instruction is the ability of teachers to draw from students' previous experience, help students make connections between new information and previous knowledge and skills, and support students in transferring new information to real-life contexts and environments. The purpose of the year-long two-part workshop is to guide teacher candidates through a process for achieving these outcomes for all students utilizing curriculum that integrates reading, writing, math, science, social students, movement, and the expressive arts. Prereq: Concurrent enrollment in an internship. Admission into the IPTE Program. Cross-listed with IPTE 5020. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

IPTE 4025 - Secondary Literacy Instruction and Assessment

Summer 2010 Registration **IPTE 4025**

Provides knowledge and practice in using specific literacy methods to enhance students' content learning and literacy development in middle schools and high schools. Various methods of literacy assessment are emphasized as is the use of assessment information to guide instruction for students. Instructional strategies for special populations, especially speakers of English as a second language, are also addressed. Prereq: Concurrent enrollment in an internship or permission of instructor required. Admission into the IPTE Program. Cross-listed with IPTE 5025. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

IPTE 4026 - Content Literacy Assessment and Instruction Teaching Lab

Summer 2010 Registration **IPTE 4026**

The secondary literacy teaching lab is designed to support novice and experienced teachers from all content areas in examining students' reading and writing performance data and using the data to plan instruction that assist secondary students in meeting reading and writing standards through work in content area classes. Conducted by teacher experts who possess knowledge of literacy strategies useful in content area teaching, labs utilize the data from the students that the lab participants are teaching.

Prereq: IPTE 4025 and IPTE 4910 or teaching experience. Concurrent enrollment in an internship or permission of instructor required. Admission into the IPTE Program. Cross-listed with IPTE 5026. **Semester Hours:** 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

IPTE 4050 - Planning for the First Year of Teaching

Summer 2010 Registration **IPTE 4050**

Designed to assist those who are about to enter into their first year of teaching in planning for the first year, with a focus on: 1) creating community; 2) professional learning; and 3) curriculum and instruction. Cross-listed with IPTE 5050. **Semester Hours:** 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

IPTE 4120 - Negotiating the Classroom Culture with Children

Summer 2010 Registration **IPTE 4120**

A central purpose of classroom management is to establish and maintain a learning environment that fosters both effective and efficient instruction in the context of a positive social culture that models democratic ideals for students. This course focuses on the dimensions of classroom life as they are directly influenced by the social and cultural background of elementary students. Prereq: Concurrent enrollment in an internship. Admission into the IPTE Program. Cross-listed with IPTE 5120. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

IPTE 4121 - Negotiating the Classroom Culture with Adolescents

Summer 2010 Registration **IPTE 4121**

A central purpose of classroom management is to establish and maintain a learning environment that fosters both effective and efficient instruction in the context of a positive social culture that models democratic ideals for students. This course focuses on the dimensions of classroom life as they are directly influenced by the social and cultural background of middle and high school students. Prereq: Concurrent enrollment in an internship is required. Admission into the IPTE Program. Cross-listed with IPTE 5121. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

IPTE 4130 - Democratic Schooling: Issues of Laws and Ethics

Summer 2010 Registration **IPTE 4130**

Designed to provide an understanding of the legal, social, ethical, and democratic context of schools, the teacher's legal and ethical role in schools, and to examine the related issues that currently face teachers, parents, students, legislators and

administrators. The aim is to facilitate the clarification of a personal value system through readings and discussions of the foundations of schooling in America. Cross-listed with IPTE 5130. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

IPTE 4300 - Curriculum and Methods in Secondary Math

Summer 2010 Registration **IPTE 4300**

Investigates curriculum in middle and high school mathematics, development, history and trends, and pertinent research. Participants construct and share curriculum relevant to their interest. Cross-listed with IPTE 5300. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

IPTE 4350 - Modern Trends in Science Education

Summer 2010 Registration **IPTE 4350**

Recent developments in theory, curriculum, methods, politics, and materials in secondary science are examined for their contribution to the objectives of science education. Prereq: Concurrent enrollment in an internship or permission of instructor is required. Admission into the IPTE Program. Cross-listed with IPTE 5350. **Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

IPTE 4351 - Inquiry Science Methods

Summer 2010 Registration **IPTE 4351**

Designed to provide an in-depth study of inquiry science methods and how inquiry science supports standards-based education. The course provides a review of research on the pedagogy that supports student understanding, problem solving and creativity through the use of inquiry science. Participants learn a variety of methods, techniques and resources for teaching inquiry science, understand the processes of "doing" science, and develop lessons that actively engage students in science in their own classrooms. Prereq: Concurrent enrollment in an internship or permission of instructor is required. Admission into the IPTE Program. Cross-listed with IPTE 5351. **Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

IPTE 4401 - Assessment In Math Education

Summer 2010 Registration **IPTE 4401**

Applied examination of traditional and alternative assessment techniques and practices in mathematics. Primary focus of the course is the questions teachers ask to probe mastery and understanding of standards-based mathematics and what to look for in student responses to those questions. Topics including the history of assessment of

mathematical understanding, types of mathematical knowledge, performance, authentic assessment, traditional assessment techniques, interactive interviews, CSAP math tests, language and culture as factors in mathematics, recent research, and the influence of technology on assessment. Prereq: Concurrent enrollment in an internship or permission of instructor required. Admission into the IPTE Program. Cross-listed with IPTE

5401.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

IPTE 4460 - Thoughtful Inquiry in Teaching Social Studies: Culture, People and Change

Summer 2010 Registration **IPTE 4460**

Focuses on the themes of culture, people, and change, this course equips secondary teachers with the skills and knowledge needed to plan and implement secondary social studies curriculum using integrated methodology. Additionally, this course increases teachers' understanding regarding the role of social studies education in the school curriculum and familiarizes teachers with problems, issues, and trends associated with social studies curricula. Prereq: Concurrent enrollment in an internship or permission of instructor required. Cross-listed with IPTE 5460.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

IPTE 4465 - Thoughtful Inquiry in Teaching Social Studies: Power, Technology and Society

Summer 2010 Registration **IPTE 4465**

Focuses on the themes of power, technology, and society, this course equips secondary teachers with the knowledge and skills needed to plan and implement secondary social studies curriculum using integrated methodology. Additionally, this course increases teachers' understanding regarding the role of social studies education in the school curriculum and familiarizes teachers with problems, issues, and trends associated with social studies curricula. Prereq: Concurrent enrollment in an internship or permission of instructor required. Cross-listed with IPTE 5465.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

IPTE 4740 - Adolescent Literature

Summer 2010 Registration **IPTE 4740**

Reading and evaluation of fiction and non-fiction appropriate for students in middle and senior high school. Emphasis is on modern literature written for students from a variety of ethnic backgrounds. Course is also appropriate for teachers working with adults to improve their reading. Prereq: Concurrent enrollment in an internship or permission of instructor required. Admission into the IPTE Program. Cross-listed with IPTE

5740.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

IPTE 4760 - Theory and Methods of Teaching Secondary English

Summer 2010 Registration **IPTE 4760**

Focuses on teaching/learning theories and practical classroom strategies for teaching English Language Arts to adolescent learners in middle school, junior high school and high school classes. Prereq: Concurrent enrollment in an internship or permission of instructor is required. Admission in to the IPTE Program. Cross-listed with IPTE

5760.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

IPTE 4910 - Internship and Site Seminar I

Summer 2010 Registration **IPTE 4910**

Teacher candidates engage in systematic observation of, participation in, design of, and reflection on curricular, instructional, and management practices across the full range of educational programs within a school (e.g., general and special education, bilingual education, Title I services, etc.). Cross-listed with IPTE 5910.**Semester Hours:** 2to 2

Registration is changing. Visit our website for details ucdenver.edu/registration.

IPTE 4911 - Internship and Site Seminar II

Summer 2010 Registration **IPTE 4911**

Teacher candidates engage in systematic observation of, participation in, design of, and reflection on curricular, instructional, and management practices across the full range of educational programs within a school (e.g., general and special education, bilingual education, Title I services, etc.). Additionally, teacher candidates participate in the activities of a school community (the school, its classrooms and the community in which the school exists). Graduated learning activities for each internship and time requirements are specified in the School Internship Handbook. In partner schools, the partner school site coordinator and the site professor are responsible for coaching and supervising teacher candidates and for supporting the clinical teachers in their work with teacher candidates. Site coordinators and professor conduct site seminars focused on providing teacher candidates with information about the partner school context and support for success within that context. In internships outside of partner school settings, cooperating teachers, district coordinators, and/or university professors work with teacher candidates in the classroom and in seminars. Prereq: IPTE 4910 with a B or better. Admission into the IPTE Program. Cross-listed with IPTE 5911.**Semester Hours:** 2to 2

Registration is changing. Visit our website for details ucdenver.edu/registration.

IPTE 4912 - Internship and Site Seminar III

Summer 2010 Registration **IPTE 4912**

Teacher candidates engage in systematic observation of, participation in, design of, and

reflection on curricular, instructional, and management practices across the full range of educational programs within a school (e.g., general and special education, bilingual education, Title I services, etc.). Additionally, teacher candidates participate in the activities of a school community (the school, its classrooms and the community in which the school exists). Graduated learning activities for each internship and time requirements are specified in the School Internship Handbook. In partner schools, the partner school site coordinator and the site professor are responsible for coaching and supervising teacher candidates and for supporting the clinical teachers in their work with teacher candidates. Site coordinators and professor conduct site seminars focused on providing teacher candidates with information about the partner school context and support for success within that context. In internships outside of partner school settings, cooperating teachers, district coordinators, and/or university professors work with teacher candidates in the classroom and in seminars. Prereq: IPTE 4911 with a B or better. Admission into the IPTE Program. Cross-listed with IPTE 5912. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

IPTE 4913 - Internship and Site Seminar IV

Summer 2010 Registration **IPTE 4913**

Teacher candidates engage in systematic observation of, participation in, design of, and reflection on curricular, instructional, and management practices across the full range of educational programs within a school (e.g., general and special education, bilingual education, Title I services, etc.). Additionally, teacher candidates participate in the activities of a school community (the school, its classrooms and the community in which the school exists). Graduated learning activities for each internship and time requirements are specified in the School Internship Handbook. In partner schools, the partner school site coordinator and the site professor are responsible for coaching and supervising teacher candidates and for supporting the clinical teachers in their work with teacher candidates. Site coordinators and professor conduct site seminars focused on providing teacher candidates with information about the partner school context and support for success within that context. In internships outside of partner school settings, cooperating teachers, district coordinators, and/or university professors work with teacher candidates in the classroom and in seminars. Prereq: IPTE 4912, with a B or better, passing score on the Place/Praxis content exam and satisfactory progress in the program. Cross-listed with IPTE 5913. **Semester Hours:** 6to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

IPTE 4915 - Internship and Seminar I

Summer 2010 Registration **IPTE 4915**

Teachers working in their own classrooms while earning an initial teaching license engage in assessment, instruction, management, and collaborate with their colleagues across the full range of educational programs in their school (e.g., general and special

education, bilingual education, Title I services, etc.). They also participate in the activities of a school community (the school and the community in which the school exist). Supervision and coaching of the teacher is negotiated by the employing district and the university but is likely to be a joint responsibility of district or school and university personnel. Teachers attend monthly seminars focused on current challenges and/or performance-based assessments. Prereq: Continuing contract as a teacher, satisfactory completion of the preceding internship, and concurrent enrollment in scheduled IPTE coursework. **Semester Hours:** 4to 4
Registration is changing. Visit our website for details ucdenver.edu/registration.

IPTE 4916 - Internship and Seminar II

Summer 2010 Registration **IPTE 4916**

Teachers working in their own classrooms while earning an initial teaching license engage in assessment, instruction and management and collaborate with their colleagues across the full range of educational programs in their school (e.g., general and special education, bilingual education, Title I services, etc.). They also participate in the activities of a school community (the school and the community in which the school exist). Supervision and coaching of the teacher is negotiated by the employing district and the university but is likely to be a joint responsibility of district or school and university personnel. Teachers attend monthly seminars focused on current challenges and/or on performance-based assessments. Prereq: IPTE 4915 and continuing contract as a teacher. **Semester Hours:** 4to 4
Registration is changing. Visit our website for details ucdenver.edu/registration.

IPTE 4917 - Internship and Seminar III

Summer 2010 Registration **IPTE 4917**

Teachers working in their own classrooms while earning an initial teaching license engage in assessment, instruction and management and collaborate with their colleagues across the full range of educational programs in their school (e.g., general and special education, bilingual education, Title I services, etc.). They also participate in the activities of a school community (the school and the community in which the school exist). Supervision and coaching of the teacher is negotiated by the employing district and the university but is likely to be a joint responsibility of district or school and university personnel. Teachers attend monthly seminars focused on current challenges and/or on performance-based assessments. Prereq: Continuing contract as a teacher, satisfactory completion of the preceding internship, and concurrent enrollment in scheduled IPTE coursework. **Semester Hours:** 4to 4
Registration is changing. Visit our website for details ucdenver.edu/registration.

IPTE 4918 - Internship and Seminar IV

Summer 2010 Registration **IPTE 4918**

Teachers working in their own classrooms while earning in initial teaching license engage in assessment, instruction and management and collaborate with their colleagues across the full range of educational programs in their school (i.e., general and special education, bilingual education, Title I services, etc.). They also participate in the activities of a school community (the school and the community in which the school exist). Supervision and coaching of the teacher is negotiated by the employing district and the university but is likely to be a joint responsibility of district or school and university personnel. Teachers attend monthly seminars focused on current challenges and/or on performance-base assessments. Prereq: A continuing teaching contract; satisfactory completion of the preceding internships and coursework and concurrent enrollment in scheduled coursework or permission of instructor. **Semester Hours:** 4to 4
Registration is changing. Visit our website for details ucdenver.edu/registration.

IPTE 5000 - Elementary Literacy Instruction and Assessment

Summer 2010 Registration **IPTE 5000**

Designed to prepare teacher candidates to develop an appreciation, understanding, and application of literacy assessment and instruction in the elementary classroom. Teachers learn how to use the results of various types of assessment to create a reading and writing program that addresses the literacy needs of all children. The course assist teachers in learning how to integrate the teaching of reading and writing across content areas. Prereq: Concurrent enrollment in an internship or permission of instructor is required. Cross-listed with IPTE 4000. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

IPTE 5001 - Elementary Literacy Assessment and Instruction Teaching Lab

Summer 2010 Registration **IPTE 5001**

Designed to support novice and experienced teachers in examining student reading and writing performance data and using the data to plan instruction assist students in meeting reading and writing standards. Conducted by teacher experts in literacy; labs utilize classroom data from the elementary students the lab participants are teaching. Prereq: Concurrent enrollment in an internship or IPTE 5000 or IPTE 4000 or permission of an instructor is required. Cross-listed with IPTE 4001. **Semester Hours:** 1to 1
Registration is changing. Visit our website for details ucdenver.edu/registration.

IPTE 5002 - Math Instruction and Assessment

Summer 2010 Registration **IPTE 5002**

Designed to prepare elementary teachers to teach mathematics in elementary school and to apply the six principles of the National Council of Teachers of Mathematics (NCTM) (equity, curriculum, teaching, learning, assessment and technology) to the four areas of mathematical learning (number sense, statistics and probability, geometry and

measurement, and mathematical functions). Teachers explore ways to help all elementary students become flexible and resourceful problem solvers in mathematics. Prereq: MATH 3040. Concurrent enrollment in an internship or permission of an instructor is required. Cross-listed with IPTE 4002.**Semester Hours:** 2to 2
Registration is changing. Visit our website for details ucdenver.edu/registration.

IPTE 5004 - Science in the Elementary Curriculum

Summer 2010 Registration IPTE 5004

Designed to support elementary teachers in developing an understanding and appreciation of active science explorations in elementary classrooms, learning various methods of teaching and assessing science that prepare students to meet science content standards, developing authentic applications of science, and integrating science with other elementary content areas, including literacy and math, to support more holistic learning. Cross-listed with IPTE 4004.**Semester Hours:** 2to 2
Registration is changing. Visit our website for details ucdenver.edu/registration.

IPTE 5005 - Social Studies in the Elementary Curriculum

Summer 2010 Registration IPTE 5005

Designed to prepare elementary teachers to support students' learning related to the Colorado social studies standards. The course includes attention to social studies curriculum and teaching resources, approaches and strategies for effective teaching and assessment of social studies content, and to the teaching of literacy and math within social studies content. The course also helps teachers understand how to model democratic ideals in a classroom. Cross-listed with IPTE 4005.**Semester Hours:** 2to 2
Registration is changing. Visit our website for details ucdenver.edu/registration.

IPTE 5006 - Integrated Science and Social Studies in the Elementary Curriculum

Summer 2010 Registration IPTE 5006

Designed to support elementary teachers in developing an understanding and appreciation of active science and social studies explorations in elementary classrooms, learning various methods of teaching and assessing science and social studies that prepare students to meet content standards, developing authentic applications and integrating with other elementary content areas, including literacy and math, to support more holistic learning. Cross-listed with IPTE 4006.**Semester Hours:** 1to 4
Registration is changing. Visit our website for details ucdenver.edu/registration.

IPTE 5020 - Exploring Diversity in Content and Pedagogy I

Summer 2010 Registration IPTE 5020

An essential feature of standards-based curriculum design and instruction is the ability of teachers to draw from students' previous experience, help students make connections

between new information and previous knowledge and skills, and support students in transferring new information to real-life contexts and environments. The purpose of the year-long two-part workshop is to guide teacher candidates through a process for achieving these outcomes for all students utilizing curriculum that integrates reading, writing, math, science, social students, movement, and the expressive arts. Prereq: Concurrent enrollment in an internship. Cross-listed with IPTE 4020.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

IPTE 5025 - Secondary Literacy Instruction and Assessment

Summer 2010 Registration **IPTE 5025**

Provides knowledge and practice in using specific literacy methods to enhance students' content learning and literacy development in middle schools and high schools. Various methods of literacy assessment are emphasized as is the use of assessment information to guide instruction for students. Instructional strategies for special populations, especially speakers of English as a second language, are also addressed. Prereq: Concurrent enrollment in an internship or permission of instructor required. Cross-listed with IPTE 4025.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

IPTE 5026 - Content Literacy Assessment and Instruction Teaching Lab

Summer 2010 Registration **IPTE 5026**

The secondary literacy teaching lab is designed to support novice and experienced teachers from all content areas in examining students' reading and writing performance data and using the data to plan instruction that assist secondary students in meeting reading and writing standards through work in content area classes. Conducted by teacher experts who possess knowledge of literacy strategies useful in content area teaching, labs utilize the data from the students that the lab participants are teaching. Prereq: IPTE 5025 and 5910 or teaching experience. Concurrent enrollment in an internship or permission of instructor required. Cross-listed with IPTE 4026.**Semester Hours:** 1to 1
Registration is changing. Visit our website for details ucdenver.edu/registration.

IPTE 5050 - Planning for the First Year of Teaching

Summer 2010 Registration **IPTE 5050**

Designed to assist those who are about to enter into their first year of teaching in planning for the first year, with a focus on: 1) creating community; 2) professional learning; and 3) curriculum and instruction. Prereq: IPTE 5913 with a grade of "B" or better. Cross-listed with IPTE 4050.**Semester Hours:** 1to 1
Registration is changing. Visit our website for details ucdenver.edu/registration.

IPTE 5070 - Teacher Inquiry I

Summer 2010 Registration **IPTE 5070**

The teachers develop a greater understanding of strategies and methods for conducting classroom and beyond-the-classroom inquiry that help them explore important questions about teaching and learning. Prereq: IPTE 5913 with a grade of "B" or better. **Semester Hours: 2to 2**

Registration is changing. Visit our website for details ucdenver.edu/registration.

IPTE 5071 - Teacher Inquiry II

Summer 2010 Registration **IPTE 5071**

Part II: Teachers conduct school and/or community-based inquiries in collaboration with each other and/or with their mentor teachers. Teachers share their clinical findings with their new school colleagues. Prereq: IPTE 5070. **Semester Hours: 1to 1**

Registration is changing. Visit our website for details ucdenver.edu/registration.

IPTE 5080 - Principles and Practice of Change

Summer 2010 Registration **IPTE 5080**

Teachers read widely from the literature on the societal, institutional, managerial, and political contexts of change in schooling. They examine their roles as instructional leaders, reflective practitioners and change agents as they use scholarly treatment of these topics in their daily work. Prereq: IPTE 5912 with a grade of "B" or better. **Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

IPTE 5120 - Negotiating the Classroom Culture with Children

Summer 2010 Registration **IPTE 5120**

A central purpose of classroom management is to establish and maintain a learning environment that fosters both effective and efficient instruction in the context of a positive social culture that models democratic ideals for students. This course focuses on the dimensions of classroom life as they are directly influenced by the social and cultural background of elementary students. Prereq: Concurrent enrollment in an internship. Cross-listed with IPTE 4120. **Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

IPTE 5121 - Negotiating the Classroom Culture with Adolescents

Summer 2010 Registration **IPTE 5121**

A central purpose of classroom management is to establish and maintain a learning environment that fosters both effective and efficient instruction in the context of a positive social culture that models democratic ideals for students. This course focuses

on the dimensions of classroom life as they are directly influenced by the social and cultural background of middle and high school students. Prereq: Concurrent enrollment in an internship. Cross-listed with IPTE 4121. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

IPTE 5130 - Democratic Schooling: Issues of Laws and Ethics

Summer 2010 Registration **IPTE 5130**

Designed to provide an understanding of the legal, social, ethical, and democratic context of schools, the teacher's legal and ethical role in schools, and to examine the related issues that currently face teachers, parents, students, legislators and administrators. The aim is to facilitate the clarification of a personal value system through readings and discussions of the foundations of schooling in America. Cross-listed with IPTE 4130. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

IPTE 5220 - Teach for America Content Professional Learning Communities

Summer 2010 Registration **IPTE 5220**

This seminar is designed to be a critical forum for Teach for America candidates to collaborate in content groups and facilitate their learning regarding best practices in assessment, instruction, and data-driven decision making. Note: Reserved for Teach America candidates involved in TFA/UCD Partnership. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

IPTE 5300 - Curriculum and Methods in Secondary Math

Summer 2010 Registration **IPTE 5300**

Investigates curriculum in middle and high school mathematics, development, history and trends, and pertinent research. Participants construct and share curriculum relevant to their interest. Cross-listed with IPTE 4300. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

IPTE 5350 - Modern Trends in Science Education

Summer 2010 Registration **IPTE 5350**

Recent developments in theory, curriculum, methods, politics, and materials in secondary science are examined for their contribution to the objectives of science education. Prereq: Concurrent enrollment in an internship or permission of instructor is required. Cross-listed with IPTE 4350. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

IPTE 5351 - Inquiry Science Methods

Summer 2010 Registration **IPTE 5351**

Designed to provide an in-depth study of inquiry science methods and how inquiry science supports standards-based education. The course provides a review of research on the pedagogy that supports student understanding, problem solving and creativity through the use of inquiry science. Participants learn a variety of methods, techniques and resources for teaching inquiry science, understand the processes of "doing" science, and develop lessons that actively engage students in science in their own classrooms. Prereq: Concurrent enrollment in an internship or permission of instructor is required. Cross-listed with IPTE 4351. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

IPTE 5401 - Assessment In Math Education

Summer 2010 Registration **IPTE 5401**

Applied examination of traditional and alternative assessment techniques and practices in mathematics. A primary focus of the course is the questions teachers ask to probe mastery and understanding of standards-based mathematics and what to look for in student responses to those questions. Topics including the history of assessment of mathematical understanding, types of mathematical knowledge, performance, authentic assessment, traditional assessment techniques, interactive interviews, CSAP math tests, language and culture as factors in mathematics, recent research, and the influence of technology on assessment. Prereq: Concurrent enrollment in an internship or permission of instructor required. Cross-listed with IPTE 4401. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

IPTE 5460 - Thoughtful Inquiry in Teaching Social Studies: Culture, People and Change

Summer 2010 Registration **IPTE 5460**

Focuses on the themes of culture, people, and change, this course equips secondary teachers with the skills and knowledge needed to plan and implement secondary social studies curriculum using integrated methodology. Additionally, this course increases teachers' understanding regarding the role of social studies education in the school curriculum and familiarizes teachers with problems, issues, and trends associated with social studies curricula. Prereq: Concurrent enrollment in an internship or permission of instructor required. Cross-listed with IPTE 4460. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

IPTE 5465 - Thoughtful Inquiry in Teaching Social Studies: Power, Technology and Society

Summer 2010 Registration **IPTE 5465**

Focuses on the themes of power, technology, and society, this course equips secondary teachers with the knowledge and skills needed to plan and implement secondary social

studies curriculum using integrated methodology. Additionally, this course increases teachers' understanding regarding the role of social studies education in the school curriculum and familiarizes teachers with problems, issues, and trends associated with social studies curricula. Prereq: Concurrent enrollment in an internship or permission of instructor required. Cross-listed with IPTE 4465. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

IPTE 5690 - Curriculum and Methods in Foreign Language

Summer 2010 Registration **IPTE 5690**

Methodology to teaching French, German, and Spanish in an urban setting. Prereq: Concurrent enrollment in an internship required. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

IPTE 5691 - Curriculum and Methods in Foreign Language II

Summer 2010 Registration **IPTE 5691**

Methodology to teaching French, German, and Spanish in an urban setting. Prereq: Concurrent enrollment in an internship required. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

IPTE 5740 - Adolescent Literature

Summer 2010 Registration **IPTE 5740**

Reading and evaluation of fiction and non-fiction appropriate for students in middle and senior high school. Emphasis is on modern literature written for students from a variety of ethnic backgrounds. Course is also appropriate for teachers working with adults to improve their reading. Prereq: Concurrent enrollment in an internship or permission of instructor required. Cross-listed with IPTE 4740. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

IPTE 5760 - Theory and Methods of Teaching Secondary English

Summer 2010 Registration **IPTE 5760**

Focuses on teaching/learning theories and practical classroom strategies for teaching English Language Arts to adolescent learners in middle school, junior high school and high school classes. Prereq: Concurrent enrollment in an internship or permission of instructor is required. Cross-listed with IPTE 4760. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

IPTE 5800 - Special Topics

Summer 2010 Registration **IPTE 5800**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

IPTE 5840 - Independent Study: IPTE

Summer 2010 Registration **IPTE 5840**

Semester Hours: 1to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

IPTE 5910 - Internship and Site Seminar I

Summer 2010 Registration **IPTE 5910**

Teacher candidates engage in systematic observation of, participation in, design of, and reflection on curricular, instructional, and management practices across the full range of educational programs within a school (e.g., general and special education, bilingual education, Title I services, etc.). Additionally, teacher candidates participate in the activities of a school community (the school, its classrooms and the community in which the school exists). Graduated learning activities for each internship and time requirements are specified in the School Internship Handbook. In partner schools, the partner school site coordinator and the site professor are responsible for coaching and supervising teacher candidates, and for supporting the clinical teachers in their work with teacher candidates. Site coordinators and professor conduct site seminars focused on providing teacher candidates with information about the partner school context and support for success within that context. In internships outside of partner school settings, cooperating teachers, district coordinators, and/or university professors work with teacher candidates in the classroom and in seminars. Cross-listed with IPTE

4910.**Semester Hours:** 2to 2

Registration is changing. Visit our website for details ucdenver.edu/registration.

IPTE 5911 - Internship and Site Seminar II

Summer 2010 Registration **IPTE 5911**

Teacher candidates engage in systematic observation of, participation in, design of, and reflection on curricular, instructional, and management practices across the full range of educational programs within a school (e.g., general and special education, bilingual education, Title I services, etc.). Additionally, teacher candidates participate in the activities of a school community (the school, its classrooms and the community in which the school exists). Graduated learning activities for each internship and time requirements are specified in the School Internship Handbook. In partner schools, the partner school site coordinator and the site professor are responsible for coaching and supervising teacher candidates and for supporting the clinical teachers in their work with teacher candidates. Site coordinators and professor conduct site seminars focused on providing teacher candidates with information about the partner school context and

support for success within that context. In internships outside of partner school settings, cooperating teachers, district coordinators, and/or university professors work with teacher candidates in the classroom and in seminars. Prereq: IPTE 5910 with a B or better. Cross-listed with IPTE 4911. **Semester Hours:** 2to 2
Registration is changing. Visit our website for details ucdenver.edu/registration.

IPTE 5912 - Internship and Site Seminar III

Summer 2010 Registration **IPTE 5912**

Teacher candidates engage in systematic observation of, participation in, design of, and reflection on curricular, instructional, and management practices across the full range of educational programs within a school (e.g., general and special education, bilingual education, Title I services, etc.). Additionally, teacher candidates participate in the activities of a school community (the school, its classrooms and the community in which the school exists). Graduated learning activities for each internship and time requirements are specified in the School Internship Handbook. In partner schools, the partner school site coordinator and the site professor are responsible for coaching and supervising teacher candidates and for supporting the clinical teachers in their work with teacher candidates. Site coordinators and professor conduct site seminars focused on providing teacher candidates with information about the partner school context and support for success within that context. In internships outside of partner school settings, cooperating teachers, district coordinators, and/or university professors work with teacher candidates in the classroom and in seminars. Prereq: IPTE 5911 with a B or better. Cross-listed with IPTE 4912. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

IPTE 5913 - Internship and Site Seminar IV

Summer 2010 Registration **IPTE 5913**

Teacher candidates engage in systematic observation of, participation in, design of, and reflection on curricular, instructional, and management practices across the full range of educational programs within a school (e.g., general and special education, bilingual education, Title I services, etc.). Additionally, teacher candidates participate in the activities of a school community (the school, its classrooms and the community in which the school exists). Graduated learning activities for each internship and time requirements are specified in the School Internship Handbook. In partner schools, the partner school site coordinator and the site professor are responsible for coaching and supervising teacher candidates and for supporting the clinical teachers in their work with teacher candidates. Site coordinators and professor conduct site seminars focused on providing teacher candidates with information about the partner school context and support for success within that context. In internships outside of partner school settings, cooperating teachers, district coordinators, and/or university professors work with teacher candidates in the classroom and in seminars. Prereq: IPTE 5912, with a B or better, passing score on the Place/Praxis content exam and satisfactory progress in the

program. Cross-listed with IPTE 4913. **Semester Hours:** 6to 6
Registration is changing. Visit our website for details ucdenver.edu/registration.

IPTE 5915 - Internship and Seminar I

Summer 2010 Registration **IPTE 5915**

Teachers working in their own classrooms while earning an initial teaching license engage in assessment, instruction, management, and collaborate with their colleagues across the full range of educational programs in their school (e.g., general and special education, bilingual education, Title I services, etc.). They also participate in the activities of a school community (the school and the community in which the school exist). Supervision and coaching of the teacher is negotiated by the employing district and the university but is likely to be a joint responsibility of district or school and university personnel. Teachers attend monthly seminars focused on current challenges and/or performance-based assessments. Prereq: Continuing contract as a teacher, satisfactory completion of the preceding internship, and concurrent enrollment in scheduled IPTE coursework. **Semester Hours:** 4to 4
Registration is changing. Visit our website for details ucdenver.edu/registration.

IPTE 5916 - Internship and Seminar II

Summer 2010 Registration **IPTE 5916**

Teachers working in their own classrooms while earning an initial teaching license engage in assessment, instruction and management and collaborate with their colleagues across the full range of educational programs in their school (e.g., general and special education, bilingual education, Title I services, etc.). They also participate in the activities of a school community (the school and the community in which the school exist). Supervision and coaching of the teacher is negotiated by the employing district and the university but is likely to be a joint responsibility of district or school and university personnel. Teachers attend monthly seminars focused on current challenges and/or on performance-based assessments. Prereq: IPTE 5915 and continuing contract as a teacher. **Semester Hours:** 4to 4
Registration is changing. Visit our website for details ucdenver.edu/registration.

IPTE 5917 - Internship and Seminar III

Summer 2010 Registration **IPTE 5917**

Teachers working in their own classrooms while earning an initial teaching license engage in assessment, instruction and management and collaborate with their colleagues across the full range of educational programs in their school (e.g., general and special education, bilingual education, Title I services, etc.). They also participate in the activities of a school community (the school and the community in which the school exist). Supervision and coaching of the teacher is negotiated by the employing district and the university but is likely to be a joint responsibility of district or school and

university personnel. Teachers attend monthly seminars focused on current challenges and/or on performance-based assessments. Prereq: Continuing contract as a teacher, satisfactory completion of the preceding internship, and concurrent enrollment in scheduled IPTE coursework. **Semester Hours:** 4to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

IPTE 5918 - Internship and Seminar IV

Summer 2010 Registration **IPTE 5918**

Teachers working in their own classrooms while earning in initial teaching license engage in assessment, instruction and management and collaborate with their colleagues across the full range of educational programs in their school (i.e., general and special education, bilingual education, Title I services, etc.). They also participate in the activities of a school community (the school and the community in which the school exist). Supervision and coaching of the teacher is negotiated by the employing district and the university but is likely to be a joint responsibility of district or school and university personnel. Teachers attend monthly seminars focused on current challenges and/or on performance-base assessments. Prereq: A continuing teaching contract; satisfactory completion of the preceding internships and coursework and concurrent enrollment in scheduled coursework or permission of instructor. **Semester Hours:** 4to 4
Registration is changing. Visit our website for details ucdenver.edu/registration.

IPTE 5919 - Second Endorsement Internship or Guest Student Teaching

Summer 2010 Registration **IPTE 5919**

A specially arranged internship for those seeking a second endorsement in an area in which they are already teaching or wish to teach and/or for those from another state who wish to do their student teaching in Colorado and transfer credits back to their home institution. The number of credits and possible fee is arranged according to circumstances. Prereq: Letter from employing district certifying employment in teaching field for which licensure is sought or a letter from home institution certifying readiness to student teach. **Semester Hours:** 4to 12

Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 2050 - Introduction to Business Problem Solving

Summer 2010 Registration **ISMG 2050**

Focuses on the technology and problem solving skills necessary for students to succeed both at school and in the business world. Focuses on business decision making using spreadsheets, database and web tools. Students solve problems in statistics, accounting, finance, marketing, management and information systems. The objective is to provide problem solving methods necessary for students to succeed in the business community. This is a business core course therefore a grade of a 'C' or better must be earned to satisfy Business graduation and prerequisites for other business

courses. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 2075 - Introduction to Microsoft Access

Summer 2010 Registration **ISMG 2075**

Introduction to Microsoft Access prepares students to use data bases to analyze data and solve real-life business problems. It challenges students to use critical thinking and analysis to find efficient and effective solutions to real-life business situations. Students will use databases to solve problems in accounting, finance, and information systems.

Prereq: Computer Competency. **Semester Hours:** 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 2200 - Introduction to Business Programming

Summer 2010 Registration **ISMG 2200**

Examines how business applications are developed. Emphasis is placed on developing complete and user-friendly programming solutions to business problems. Students are introduced to an object-oriented programming language for implementing event-driven business problem solutions. Prereq: ISMG 2050. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 2800 - Designing for the Web

Summer 2010 Registration **ISMG 2800**

Students examine how the Web is evolving to support a variety of business needs. The course covers the design and usability principals necessary for improving online interactions via traditional websites as well as using technologies promoting collaboration and information sharing (e.g. social networks, blogs, wikis, forms). Topics include: the principles of web page and web site design; hypertext markup language, cascading style sheets, streaming video, online collaboration technologies; client and server scripting; and the process of testing and publishing web sites. Prereq: ISMG 2050 or taken concurrently with ISMG 2050. **Semester Hours:** 3to 3 **When Offered:** *SPRING*

Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 3000 - Principles of Information Systems

Summer 2010 Registration **ISMG 3000**

Covers the role of information technology in business organizations. It exposes students to innovative and interesting technologies and illustrates how those technologies are changing the way businesses operate. It highlights the importance of IT in organizations, including the relationship between technology & competitiveness, the alignment of business and IT strategy, the development and management of an effective IT infrastructure and the use of IT strategy, the development and management of an

effective IT infrastructure and the use of IT-enabled organizational processes. Topics include: coping with information intensity, web sites, social networks and blogs; business intelligence at each level of management; IT based reports and data; collaboration and the impact of technology on organizational interaction; the use of IT for controlling and enhancing business processes; security, privacy & disaster recovery; and emerging technologies. Note: Business core course therefore a grade of a "C" or better must be earned to satisfy graduation requirements. **Semester Hours:** 3to 3**When Offered:** FALL SPR

Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 3100 - Information Technology Hardware and Software

Summer 2010 Registration **ISMG 3100**

Provides the hardware/software technology background to enable systems development personnel to understand tradeoffs in computer architecture for effective use in business environment. System architecture for single user, central, and networked computing systems; single and multi-user operating systems. Prereq: ISMG 3000. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 3200 - Programming, Data, File and Object Structures

Summer 2010 Registration **ISMG 3200**

Provides an understanding of algorithm development, programming, computer concepts, and the design and application of data and file structures. Includes an understanding of the logical and physical structure of both programs and data. The "JAVA" programming language will be used as the vehicle for investigating a variety of data structure topics. Topics include: data structures and representation; characters, records, files and multimedia; precision of data; information representation, organization and storage; algorithm development; object representation compared to conventional data flow notation; programming control structures; program correctness, verification, and validation; file structures and representation. Prereq: ISMG 2200. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 3500 - Enterprise Data and Content Management

Summer 2010 Registration **ISMG 3500**

The success of today's business often hinges on the ability to turn mountains of data into critical information to make right decisions quickly and efficiently. This course introduces students to data, content and multimedia management using current enterprise data management tools. Topics include: Oracle SQL for relational database and for multimedia content; Oracle forms and reports, XML, and content management. Prereq: ISMG 2050 or equivalent, transfer credit VALIDATION (may need ISMG 2075 - 1

credit). **Semester Hours:** 3to 3**When Offered:** *FALL*

Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 3600 - System Strategy, Architecture and Design

Summer 2010 Registration **ISMG 3600**

This course is designed to provide the understanding of current concepts related to information systems development in an organizational context. It emphasizes the interactive nature of the analysis and design process. Topics include: requirements analysis, model based analysis and design; evaluating outsourcing, COTS and other systems acquisition options; and quality, six-sigma, and ethics in design. New concepts such as agile modeling and extreme programming are covered. Prereq: ISMG 2050 or equivalent, transfer credit VALIDATION (may need ISMG 2075 - 1 credit). **Semester Hours:** 3to 3**When Offered:** *SPRING*

Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 3939 - Internship/Cooperative Education

Summer 2010 Registration **ISMG 3939**

Supervised experiences involving the application of concepts and skills in an employment situation. Prereq: Senior standing and 3.5 GPA. **Semester Hours:** 1to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 4200 - Building Business Applications

Summer 2010 Registration **ISMG 4200**

Examines how business technologies are designed and implemented. Usability, logic, and platform selection issues are highlighted through the development of simple business systems. Includes Windows interface design; storing, retrieving, and manipulating information; real time decision making; task automation through iteration; platform selection (mobile, desktop or web); and web programming. Prereq: ISMG 2800. **Semester Hours:** 3to 3**When Offered:** *FALL*

Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 4300 - Information Security and Compliance

Summer 2010 Registration **ISMG 4300**

This course covers information security threats and various mechanisms available to organizations to defend against information compromise. It offers thorough analysis of state, national, and international information security regulations with which businesses must comply, including the Sarbanes-Oxley, Gramm-Leach-Bliley and Hippa Acts. The regulatory compliance analysis will include measures the organizations must and should perform to be in compliance. **Semester Hours:** 3to 3**When Offered:** *SPRING*

Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 4500 - Database Management and Applications

Summer 2010 Registration **ISMG 4500**

The success of today's business often hinges on the ability to turn mountains of data into critical information and to utilize the critical information to make the right decisions quickly and efficiently. This course introduces students to the basic principles of data management and utilization. Topics include data modeling, normalization and database design, query formulation using SQL and QBE and interface design. Actual database management systems products (e.g. Oracle and Access) are utilized to demonstrate the design of database applications in management, marketing, finance, accounting and other business areas. Each student will also design a working database system as a project. Prereq: ISMG 3000. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 4600 - Systems Analysis and Design

Summer 2010 Registration **ISMG 4600**

Provides an understanding of the system development and maintenance process. It enables students to evaluate and choose a system development methodology. Topics include: systems development life cycle phases, structured analysis and design, object-oriented analysis and design; prototyping, joint application development (JAD) and structured walk-through; communication, interviewing, interpersonal and presentation skills; risk and feasibility analysis, project management, systems operations and support. Prereq: ISMG 3000. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 4700 - Business Data Communications and Networking

Summer 2010 Registration **ISMG 4700**

Provides an in-depth knowledge of data communications and networking requirements including: networking and telecommunications technologies, hardware, and software. Emphasis is upon the analysis and design of networking applications in organizations. Management of telecommunications networks, cost-benefit analysis, and evaluation of connectivity options are also covered. Students learn to evaluate, select, and implement different communication options within an organization. Topics include: network hardware and software; network configuration; network applications; distributed versus centralized systems; network architectures, topologies and protocols; network performance analysis; privacy, security, reliability; management of telecommunications, and communications standards. Prereq: Jr. Standing. **Semester Hours:** 3to 3 **When**

Offered: *SPRING*

Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 4750 - Business Intelligence and Financial Modeling

Summer 2010 Registration **ISMG 4750**

In this course, the student learns to analyze and solve financial problems with spreadsheet models, apply Oracle Financial and Business Intelligence software that is widely used in corporate financial operations and model risk and uncertainty with Monte Carlo software. Prereq: ISMG 2050, FNCE 3000 and ISMG 3000 (or ACCT 3054) with a grade of 'C' or better. Cross-listed with FNCE 4750. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 4760 - Customer Relationship Management

Summer 2010 Registration **ISMG 4760**

This marketing-theory driven course examines customer relationship management (CRM) as a key strategic process for organizations. Composed of people, technology and processes, effective CRM optimizes the selection or identification, acquisition, growth and retention of desired customers to maximize profit. Besides presenting an overview of the CRM process, its strategic role in the organization and its place in marketing, students have an opportunity to create simulated CRM database using popular software package that help to illustrate what CRM can do, its advantages and limitations. Prereq: MKTG 3000 and ISMG 3000. Cross-listed with MKTG 4760. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 4780 - Accounting and Information Systems Processes and Controls

Summer 2010 Registration **ISMG 4780**

The course is designed to develop knowledge and skills used to understand and evaluate corporate accounting processes and systems. It focuses on financial and information system internal controls and the flow of corporate information through accounting system. A financial system objective and risk assessment approach is used to present concepts and techniques for evaluating the adequacy of system processes and controls. Prereq: Completion of ACCT 2200 and 2220 with a grade of 'C' or better. Strictly enforced. Cross-listed with ACCT 4780, 6510 and ISMG 6510. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 4800 - eBusiness Systems Development

Summer 2010 Registration **ISMG 4800**

Students analyze business problems and develop data-driven eBusiness applications to solve them. Development skills include presenting and receiving information through a web site, validating entered information and storing entered information in text files or databases. Students develop an understanding of the principles of web page and web site design; standard object models, Hypertext Markup Language, client scripting and server programs for database and file access; testing, software quality assurance; and

the process of publishing Web pages. Prereq: ISMG 2200. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 4840 - Independent Study

Summer 2010 Registration ISMG 4840

Semester Hours: 1to 8

Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 4900 - Project Management and Practice

Summer 2010 Registration ISMG 4900

Covers the factors necessary for successful management of enhancement projects. Both technical and behavioral aspects of project management are discussed. The focus is on management of development for enterprise-level systems. Topics include: managing the system lifecycle; requirements determination, logical design, physical design, testing, implementation; metrics for project management; managing expectations: superiors, users, team members and others related to the project; determining skill requirement and staffing the project; cost-effectiveness analysis; reporting and presentation techniques; effective management of both behavioral and technical aspects of the project; change management. Note: Successful completion of this course meets the educational requirements to sit for both the PMP and CAPM exams. Prereq: ISMG 2200. Cross-listed with CSCI 4900 and MGMT 4900. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 4950 - Special Topics

Summer 2010 Registration ISMG 4950

Seldom offered. This course varies from offering to offering. Typically, it is a research-oriented course exploring new developments in information systems. Prerequisites vary according to topic. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 5939 - Internship/Cooperative Education

Summer 2010 Registration ISMG 5939

Supervised experiences involving the application of concepts and skills in an employment situation. **Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 6020 - .Net Programming Fundamentals

Summer 2010 Registration **ISMG 6020**

This course is designed to provide a thorough introduction to the .Net programming environment. C# is studied as the target object-oriented programming language. Principles of object-oriented programming are demonstrated using programming constructs taken from the business domain. Students are required to apply this knowledge through a series of C# programming exercises, which includes developing Windows Forms applications for the desktop and mobile platforms. Prereq: Basic knowledge of a programming language such as JAVA, C, or Basic. **Semester Hours:** 3to 3**When Offered:** *SPRING*

Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 6040 - Business Process Management

Summer 2010 Registration **ISMG 6040**

Designing effective information systems for business requires an awareness of the organization(s) business processes and how to manage and streamline them. The objectives of the course are for students to understand the importance of business processes; the main types of business processes; and the evolution of business process management; business process outsourcing; business process re-engineering; business process redesign; technology enabled business processes; and automated workflow. An important activity is graphically mapping business processes, which are transformed into an application or set of applications. The organization needs to manage the electronic workflow to monitor that the work gets done and allow changes to the workflow. Case studies of organizations are studied for most topics to enhance understanding. The group projects let students apply their knowledge of the course to a specific organization. By the end of this course students should have an appreciation of the important process-centric issues in business systems design. **Semester Hours:** 3to 3**When Offered:** *SPRING*

Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 6060 - Analysis, Modeling and Design

Summer 2010 Registration **ISMG 6060**

Spring. Provides an understanding and application of systems analysis and design processes. Students are exposed to system development life cycle (SDLC), structured systems analysis and design methods, object-oriented analysis and design methods, prototyping and commercial off-the-shelf package software approaches, and joint and rapid application development. Emphasizes the skills required for system analysts such as analytical, interpersonal, technical, fact-finding, and project management skills. Topics include data, process and object modeling, input-output and user interface design, and systems implementation and support. To provide an opportunity to develop these skills, an information system project is completed by a group of students. Students use a Case tool for their group project. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 6071 - Introduction to Health Information Technology

Summer 2010 Registration **ISMG 6071**

Examines what needs transforming in healthcare to improve value, safety and appropriateness of care, and what the role of IT is in that transformation. It also examines the challenges of cultural change and IT strategy in succeeding with clinical information projects. Differences between installation, implementation, transition and actual transformation are suggested and methods for managing subcultures in healthcare (IT, clinical, administrative) are reviewed. Cross-listed with HLTH 6071. **Semester Hours:** 3to 3**When Offered:** *SPRING*

Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 6072 - Fundamentals of Health Information Technology Management

Summer 2010 Registration **ISMG 6072**

Provides an introduction to the management of information technology in healthcare. A description of information processing, the origin, content, evolution of healthcare information systems and the methodologies deployed to acquire and manage information requirements are discussed. Cross-listed with HLTH 6072. **Semester Hours:** 3to 3**When Offered:** *FALL*

Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 6080 - Database Management Systems

Summer 2010 Registration **ISMG 6080**

The success of today's business often hinges on the ability to utilize critical information to make the right decisions quickly and efficiently. Transforming mountains of data into critical information to improve decision making is a skill every business decision maker must possess. This focus course covers the database design topics with a focus on enabling business decision making. Detailed topics include collecting, capturing, querying and manipulating data (using SQL and QBE) for simple to medium complex business applications. Commercial database products (e.g. ORACLE and ACCESS) are utilized to demonstrate the design of database applications in management, marketing, finance, accounting, and other business areas. Students will be able to design and implement simple to medium complex database applications after successful completion of this course. **Semester Hours:** 3to 3**When Offered:** *FALL*

Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 6120 - Internet and Mobile Technologies

Summer 2010 Registration **ISMG 6120**

Communication, knowledge sharing, and information acquisition within and between businesses are critical for long term strategic business success. Technological advancements are radically changing the way business communication and knowledge

sharing is performed. This course will briefly examine traditional concepts of wired local area networks for reference purposes, but then will focus on how newer mobile technologies are changing the way business communication and knowledge transfer are conducted. Mobile technologies that will be examined in this course include: WiFi wide area networks, wireless local area networks, cellular telephones, smart phones, and other portable computing devices. **Semester Hours:** 3to 3**When Offered:** FALL
Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 6180 - Information Systems Management and Strategy

Summer 2010 Registration **ISMG 6180**

The effective use of information technology requires the alignment of competitive strategies, business processes, and It applications. In this course, we take a top management perspective to the development of policies and plans that maximize the contribution of IT to organizational goals. We begin by examining the systems that support the operational, administrative, and strategic needs of organizations. We then investigate the approaches used to manage the IT function, taking into account legacy and emerging technologies. The vital role of the CIO and project champions are explored. Note: Students cannot receive credit for both ISMG 6180 and BUSN 6610. Cross-listed with BUSN 6610. **Semester Hours:** 3to 3**When Offered:** FASPRSUM
Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 6200 - Global Information Systems

Summer 2010 Registration **ISMG 6200**

Will focus on managing information technology globally and the new organizational and information technology designs that firms are establishing to meet the ever-growing global requirements. The course will cover such issues as how information is used and how information technology is deployed by multinationals in different countries, the state of information technology and telecommunication industries in countries around the world, how global firms gain strategic benefits from information technology, and how firms manage and use global virtual teams. Prereq: ISMG 6040 or 6120 or BUSN 6610. **Semester Hours:** 3to 3**When Offered:** FALL
Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 6220 - Business Intelligence Systems

Summer 2010 Registration **ISMG 6220**

This course covers technical and managerial issues associated with the development and use of decision support systems, expert systems, executive information systems, and advanced intelligent systems. The DSS component covers decision theory, model management, and business intelligence with an emphasis on how decision-making can be supported using data warehouses, OLAP, and data mining and visualization tools. The ES component focuses on knowledge acquisition, representation, reasoning, and

using advanced intelligent systems, over the web. In addition, collaboration, communication, enterprise decision support system integration, impacts, and the future of MSS are discussed. The use of DSS and online analytical processing (OLAP) and the selection of decision support applications and tools are important learning objectives for this course. Critical to the success of DSS is the use of data warehouses. The basics of data warehousing are covered through a variety of companies' experiences. The course also covers Business Performance Management (BPM) and the use of digital dashboards and balanced scorecards as evolution of EIS. Hands-on experience is provided through the use of leading-edge technologies including MicroStrategy business intelligence tool. Prereqs: ISMG 6080. **Semester Hours:** 3to 3**When Offered:** SPR SUM Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 6240 - Website Development Practice and Technologies

Summer 2010 Registration **ISMG 6240**

Presents a broad coverage of design principles and techniques to develop effective web sites. The course emphasizes: (1) understanding the principles of web page and web site design and the process of publishing web pages, (2) developing client-side scripts for use in web sites, (3) using server-side programs or scripts to develop dynamic web sites using databases, and (4) understanding technologies for managing large web sites including XML schemas, content management systems and web services. Prereq: ISMG 6080. **Semester Hours:** 3to 3**When Offered:** FALL Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 6280 - Service Oriented Architecture

Summer 2010 Registration **ISMG 6280**

Explores "Service Oriented Architecture" (SOA), which refers to a design pattern made up of components and interconnections that stress interoperability and location transparency. Covers the latest heterogeneous models for carrying out large scale distributed computing using Web services. The fundamentals of defining, designing, building, testing and rolling-out a SOA system are explored using tools from major Web service vendors. Also, looks at the impact of SOA on software quality, efficiency, performance and flexibility. Prereq: ISMG 6060. **Semester Hours:** 3to 3**When Offered:** FALL Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 6420 - Global Enterprise Systems

Summer 2010 Registration **ISMG 6420**

Examines the evolution of global enterprise systems - from internally focused enterprise resource planning (ERP) client or server systems to externally focused eBusiness. Studies the types of issues managers need to consider in implementing cross-functional integrated enterprise systems. Examines the general nature of global enterprise

computing, re-engineering principles and the technical foundations of client or server systems and enterprise information architectures. Students learn about the global enterprise systems marketplace. Topics include the tools and methodology, modules, processes and industry initiatives. Finally, the course looks into the future and predicts enterprise system trends. The objective of the course is to make students aware of the potential and limitations of global enterprise systems. The objective will be reached through case studies, lectures, guest speakers and a group project. Prereq: ISMG 6180 or BUSN 6610 (6810). **Semester Hours:** 3to 3**When Offered:** FALL
Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 6430 - Information Systems Security and Privacy

Summer 2010 Registration **ISMG 6430**

Designed to develop knowledge and skills for security of information and information systems within organizations. Focuses on concepts and methods associated with planning, designing, implementing, managing, and auditing security at all levels and on all systems platforms, including enterprise systems. This course presents techniques for assessing risk associated with accidental and intentional breaches of security as well as disaster recovery planning. Prereq: ISMG 6180 or BUSN 6610 (6810). **Semester Hours:** 3to 3**When Offered:** SPRING

Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 6450 - IT Project Management

Summer 2010 Registration **ISMG 6450**

Focuses on how firms successfully manage the adoption of It. Projects and program management principles are the primary focus of this course. Topics covered include approaches to prioritizing projects, estimating cost and time-to-market, build vs. buy decision, planning, monitoring and controlling implementation, measurement, total cost of ownership, effective management of both behavioral and technical aspects of the project and change management. Prereq: ISMG 6180 or BUSN 6610 (6810). **Semester Hours:** 3to 3**When Offered:** FALL

Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 6460 - Emerging Technologies

Summer 2010 Registration **ISMG 6460**

Provides an introduction to the expansive array of information technologies that form the infrastructure of a modern business enterprise. Emphasis is placed on learning conceptual technological foundations and understanding the business value of the various technologies. The purpose of the course is to develop the student's ability to discuss recent technological advancements with other It professionals and management. Technology assessment is emphasized. Prereq: ISMG 6180 or BUSN 6610 (6810).

Cross-listed with BUSN 6800. **Semester Hours:** 3to 3**When Offered:** FALL
Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 6480 - Data Warehouse and Administration

Summer 2010 Registration **ISMG 6480**

Management of large, complex data warehouses and operational databases involves technical skills and background needed by information systems professionals as well as tactical and strategic issues faced by information technology managers. This course provides conceptual knowledge, practical skills, and policy background for prospective information systems professionals and information technology managers. The course covers business aspects, conceptual background, and product material about management of data warehouses and operational databases. Assignments and projects involve Oracle skills for database administration and tactical or strategic issues faced by information technology management. Prereq: ISMG 6080. **Semester Hours:** 3to 3**When Offered:** SPRING

Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 6510 - Accounting and Information Systems Processes and Controls

Summer 2010 Registration **ISMG 6510**

Designed to develop knowledge and skills used to understand and evaluate corporate accounting processes and systems. Focuses on financial and information system internal controls and the flow of corporate information through an accounting system. A financial system objective and risk assessment approach issued to present concepts and techniques for evaluating the adequacy of system processes and controls. Cross-listed with ACCT 6510, 4780 and ISMG 4780. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 6800 - Special Topics

Summer 2010 Registration **ISMG 6800**

A variety of advanced topics are offered in this course. Past topics include the human-computer interface, software engineering, artificial intelligence, graphical user interface, project management and electronic commerce. Consult the current 'Schedule Planner' for semester offerings. Note: Seldom offered. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 6810 - Business Intelligence in Healthcare

Summer 2010 Registration **ISMG 6810**

Provides students with an overview of how business intelligence is used in the healthcare industry. Students study the evolution of It in healthcare including enterprise systems and systems integration. Next the course looks at the evolution of business

intelligence in general. Using case studies and hands on exercises, students learn about different aspects of business intelligence in various subsets of the healthcare industry. **Semester Hours:** 3to 3**When Offered:** FALL
Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 6820 - Business Intelligence and Financial Modeling

Summer 2010 Registration **ISMG 6820**

This course will introduce students to the application of business intelligence in a corporate finance setting. Financial data intelligence is essential for effective decision making throughout the firm, in finance directly and in other functions supported by the finance department. Strategy setting, budgeting, and new product development are just a few decision areas where finance personnel play an active role. In this course, we learn how to apply Oracle e-Business Suite, a finance and business intelligence software tool that provides modules for financial reporting, analysis, budgeting, and planning. These tools enable finance personnel to access and analyze corporate data in support of critical decision making across the enterprise. Students will also analyze data through the use of financial models built in Microsoft Excel. The development of complex financial models will provide students with valuable hands-on experience with a software tool used widely incorporate finance departments. **Semester Hours:** 3to 3**When Offered:** SPRING

Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 6840 - Independent Study: ISMG

Summer 2010 Registration **ISMG 6840**

Instructor approval required. Allowed only under special and unusual circumstances. Regularly scheduled courses cannot be taken as independent study. **Semester Hours:** 1to 8

Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 6950 - Master's Thesis

Summer 2010 Registration **ISMG 6950**

Semester Hours: 1to 8

Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 7001 - AI-Based Decision Making

Summer 2010 Registration **ISMG 7001**

Introduces decision making concepts. It covers a range of approaches, techniques and tools for decision aiding and describes how they can be used to support decision processes. The topics include human decision making, decision support systems, knowledge-based systems, and AI methods that support decision making, like machine

learning, Bayesian networks and association rules. Prereq: MS in C.S.E. or I.S.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 7002 - Computer Security

Summer 2010 Registration **ISMG 7002**

A broad overview of computer security, roughly divided into three unequal components: a) the history of codes and ciphers; b) basic cryptographic techniques, for example, symmetric cryptography, authentication techniques, and asymmetric cryptosystems, and: c) applications to current and future computer-related technologies, for example, network security, wireless communication, quantum cryptography, and more. Prereq: CSCI 5451. Cross-listed with CSCI 7002.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 7200 - Advances In Management Information Systems

Summer 2010 Registration **ISMG 7200**

Provides an introduction to research methodologies engaged in Management Information System Research, including measurement, sampling, survey research, experiments, quasi-experiments and some qualitative research methods. Prereq: admission into the CSIS Ph.D. program and knowledge of basic statistics. Cross-listed with CSCI 7200.**Semester Hours:** 3to 3**When Offered:** FALL
Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 7210 - Topics In Analytical Research In Management Information Systems

Summer 2010 Registration **ISMG 7210**

Provides a detailed coverage of selected analytical research in information systems. Prereq: admission to the CSIS Ph.D. program. Cross-listed with CSCI 7210.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 7211 - Topics In Behavioral and Organizational Research In Management Information Systems

Summer 2010 Registration **ISMG 7211**

Provides a detailed coverage of selected behavioral and organizational research in information systems. Prereq: admission to the CSIS Ph.D. program. Cross-listed with CSCI 7211.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 7220 - Research methods: Design and Analysis

Summer 2010 Registration **ISMG 7220**

Research methods: Design and Analysis. Topics include: research design, approaches to gathering data; sampling methods; linear multivariate analysis methods emphasizing structural equations models; and a brief survey of other methods such as cluster analysis, multidimensional scaling, methods such as neural nets, CART and/or genetic algorithms. While much of the material is of general interest, the course emphasizes methods and situations to prepare students in the CS/IS Ph.D. program for research in their field(s). The course includes student projects involving the analysis of data using appropriate software, whose results are presented to the class. Prereq: BUSN 6530 (or equivalent) and either Ph.D. student status or permission of instructor. Cross-listed with DSCI 6220. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 7551 - Parallel and Distributed Systems

Summer 2010 Registration **ISMG 7551**

Examines a range of topics involving parallel and distributed systems to improve computational performance. Topics include parallel and distributed programming languages, architectures, networks, algorithms and applications. Prereqs: Graduate Standing. Cross-listed with CSCI 7551. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 7552 - Advanced Topics in Parallel Processing

Summer 2010 Registration **ISMG 7552**

Examines the advances of sequential computers for gaining speed and application of these techniques to high-speed supercomputers of today. Programming methodologies of distributed and shared memory multiprocessors, vector processors and systolic arrays are compared. Performance analysis methods for architectures and programs are described. Cross-listed with CSCI 7552. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 7574 - Advanced Topics in Operating Systems

Summer 2010 Registration **ISMG 7574**

Covers the advanced topics in operating systems by examining functionality and performance issues in CPU Scheduling, communications, distributed file systems, distributed operating systems, shared-memory multiprocessors and real-time operating systems. In addition to studying papers, reviews, and presentations, students carry out a semester long team project within the scope of one of the above topics. Prereqs: CSCI 3453 or CSCI 5573. Cross-listed with CSCI 7574. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 7582 - Artificial Intelligence

Summer 2010 Registration **ISMG 7582**

Approaches to design of systems for solving problems usually solved by humans, especially those related to intelligent decision making. Emphasis on various types of knowledge representation. Cross-listed with CSCI 7582. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 7654 - Algorithms For Communication Networks

Summer 2010 Registration **ISMG 7654**

Algorithmic and mathematical underpinnings of communication networks. A taxonomy of data-packet networks depending on modes of communication: Fixed-Interconnection networks, radio networks and multiple-access channel. Algorithms to implement packet routing, broadcasting and conflict resolution. Prereq: CSCI 5451. Cross-listed with CSCI 7654. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 7765 - Computer Networks

Summer 2010 Registration **ISMG 7765**

An in-depth study of active research topics in computer networks. Topics include: Internet protocols, TCP/UDP, congestion and flow control, IP routings, mobile IP, P2P overlay networks, network security, performance, and other current research topics. Prereq: Graduate Standing. Cross-listed with CSCI 7765. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 7799 - Topics in Network Computing

Summer 2010 Registration **ISMG 7799**

Studies the active research topics in network based computing such as Cluster, Grid computing, P2P Computing, Pervasive Computing. Workflow system and Cloud Computing. Students will study key papers in the literature, and submit a research term project. Prereq: Graduate Standing. Cross-listed with CSCI 7799. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 7800 - Special Topics

Summer 2010 Registration **ISMG 7800**

A variety of advanced topics are offered at the Ph.D. level in this course. Consult the current 'Schedule Planner' for semester offering. **Semester Hours:** 3to 3 **When Offered:**

SPRING

Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 7840 - Independent Study: Pre-Dissertation Research

Summer 2010 Registration ISMG 7840

Conduct pre-dissertation research under the supervision of a faculty member. Prereq: BUSN 6530. **Semester Hours:** 1to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

ISMG 8990 - Dissertation Development

Summer 2010 Registration ISMG 8990

Supports development of a dissertation in conjunction with a student's advisor. Prereq: Completion of first year and second year papers (ISMG 7840). **Semester Hours:** 1to 15

Registration is changing. Visit our website for details ucdenver.edu/registration.

ITED 4700 - Instructional Teamwork Academy

Summer 2010 Registration ITE 4700

The academy consists of four modules of varying length for a total of 15 clock hours of instructional time. The course consists of introductory material regarding teamwork, delineation of roles and responsibilities, classroom instruction, and behavior management. **Semester Hours:** 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

ITED 4710 - Student Supervision Academy

Summer 2010 Registration ITE 4710

The focus of the 15 clock hour academy is the effective management of large groups of students on playgrounds, in lunchrooms, halls, locker rooms, parking lots where buses are loading, on buses and in other instructional settings. **Semester Hours:** 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

ITED 4720 - Interpersonal Skills Academy

Summer 2010 Registration ITE 4720

The focus of this 15 hour academy is on developing effective interpersonal skills that are necessary for working as part of a team. Throughout this academy importance of issues of diversity based on culture, experience and gender in communication and conflict resolution processes is highlighted. **Semester Hours:** 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

ITED 4730 - Personal Growth and Development Academy

Summer 2010 Registration ITE 4730

This 15 contact hour academy covers self-appraisals, participation in the evaluation process and plan for continued professional growth and development, stress-management strategies and using creativity in dealing with problematic situations. **Semester Hours:** 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

ITED 4740 - Behavior Management

Summer 2010 Registration ITE 4740

This academy gives the paraeducator knowledge and skill in instructional methods that support students who have challenging behaviors in inclusive classrooms, resource rooms, self-contained classrooms, domestic settings, and in the community. These modules focus on the interactions that paraeducators have with students whose behaviors are challenging and on the role they play in assisting the professional members of their team with behavior challenges. **Semester Hours:** 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

ITED 4750 - Instructional Strategies Academy

Summer 2010 Registration ITE 4750

This academy gives the paraeducator knowledge and skills in analyzing the teaching environment and individual student needs for the particular level of support, degree of adaptation or accommodation or modification and instructional method that would best facilitate learning. **Semester Hours:** 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

ITED 4760 - Instructional Technology Academy

Summer 2010 Registration ITE 4760

This 15 contact hour academy is intended to provide paraeducators with skills in operating typical school-wide technologies. The focus is on examining the types of technology used daily, as well as those types that they may not currently have skills in using but which can broaden their repertoire of available skills. **Semester Hours:** 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

ITED 4770 - Vocabulary and Comprehension

Summer 2010 Registration ITE 4770

Paraeducators are provided with the skills needed to assist classroom teachers in meeting literacy needs of students in the areas of vocabulary and comprehension. Skills applicable to assisting diverse populations such as special education, Title 1, ELA, and

General Education. **Semester Hours:** 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

ITED 4780 - Assisting with Phonemic Awareness and Phonics in the Classroom

Summer 2010 Registration ITE 4780

This academy provides the paraeducator with skills and techniques needed to assist literacy needs of diverse populations of students with phonemic awareness and phonics as it relates to the early, emergent and fluent reader. **Semester Hours:** 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

ITED 4790 - Assisting with Reading Fluency in the Classroom

Summer 2010 Registration ITE 4790

This academy provides the paraeducator with skills needed to assist literacy needs of diverse populations of students in the area of reading fluency. It covers important fluency concepts and terms and the use of a variety of research-based instructional techniques that improve fluency at the word, phrase, sentence and connected text levels. **Semester Hours:** 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

ITED 4800 - Grades K-4 Mathematics

Summer 2010 Registration ITE 4800

This academy is designed to provide paraeducators with the skills and knowledge needed to assist students, grades K through four, with mathematics skills taught in the classroom. The course content is designed and adapted from standards recommended by the National Council of Teachers of Mathematics. It includes the specific skill building area of number sense, computational techniques, algebraic thinking, geometry, measurement, data and probability as they apply to grades K-4 learners. **Semester Hours:** 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

ITED 4810 - Number Theory and Rational Numbers

Summer 2010 Registration ITE 4810

This academy provides paraeducators with the skills and knowledge needed to assist students with specific mathematics skills typically taught in grades five through eight. This academy solidifies the concepts learned in assisting with K-4 math and provides a base for assisting with high school mathematics. It includes the specific skill building areas of number sense; computational techniques for fractions, decimals and percents and their related applications as they apply to intermediate and middle school learners. The course content is designed and adapted from the standards recommended by the

National Council of Teachers of Mathematics. **Semester Hours:** 1to 1
Registration is changing. Visit our website for details ucdenver.edu/registration.

ITED 4820 - Algebraic Concepts and Spatial Reasoning

Summer 2010 Registration ITE 4820

This academy provides paraeducators with the skills and knowledge needed to assist students, grades 5-8, with the mathematics skills taught in the classroom. The course content is designed and adapted from standards recommended by the National Council of Teachers of Mathematics. It includes the specific skill building areas of real number building properties; graphical representations; algebraic concepts and problem solving; data and probability; and spatial reasoning skills as they apply to intermediate and middle school learners. **Semester Hours:** 1to 1
Registration is changing. Visit our website for details ucdenver.edu/registration.

ITED 5022 - Learning and Classroom Management Strategies for Secondary Schools

Summer 2010 Registration ITE 5022

Provides knowledge to create and manage classrooms conducive to the well-being and learning of a diverse student population. Included are instructional strategies for addressing content standards, managing curriculum, instruction, assessments, classrooms, and individual behaviors. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ITED 5023 - Literacy Strategies for Secondary Schools

Summer 2010 Registration ITE 5023

Provides knowledge and practice using specific literacy methods and assessment, to enhance content learning, and meet reading and writing standards. Instructional strategies for special needs and language-minority students are also emphasized. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ITED 5025 - Reading Instruction and Assessment K-5

Summer 2010 Registration ITE 5025

Using and expanding upon background knowledge from prerequisites, participants learn about specific reading instruction and assessment routines and techniques. Through guided in-school placements, student's link course readings, discussion and practice, focus on improving their instruction, and the assessment or instruction cycle. Prereq: ITED 5000, 5010 and 5020. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

ITED 5800 - Special Topics in Education

Summer 2010 Registration ITE 5800

Addresses a specific topic that is current and relevant to the needs of a specific group of educators and/or an educational context. **Semester Hours:** 1to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

ITED 5801 - Special Topics in Education

Summer 2010 Registration ITE 5801

Semester Hours: 1to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

ITED 5802 - Special Topics in Education

Summer 2010 Registration ITE 5802

Semester Hours: 1to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

ITED 5803 - Special Topics in Education

Summer 2010 Registration ITE 5803

Semester Hours: 1to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

ITED 5804 - Special Topics in Education

Summer 2010 Registration ITE 5804

Semester Hours: 1to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

ITED 5805 - Special Topics in Education

Summer 2010 Registration ITE 5805

Semester Hours: 1to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

ITED 5840 - Independent Study

Summer 2010 Registration ITE 5840

Semester Hours: 1to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

LALC 1111 - Introduction to College Literacy for Migrant Populations

Summer 2010 Registration **LLC 1111**

An introductory course designed to provide a college-level reading/writing and artistic experience for high school aged migrant student populations. Students are apprenticed in philosophic, social scientific and legal modes of reasoning and writing in concert with the fundamentals of drawing and painting. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

LALC 4810 - Orientation to Bilingual Education

Summer 2010 Registration **LLC 4810**

This academy provides a basic introduction to bilingual education programs. The content consists of introductory material regarding the legal and historical foundations of bilingual education, bilingual and ESL program model overviews, materials to address cultural issues in the classroom, and introductory information regarding human growth and development. **Semester Hours:** 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

LALC 4820 - Language Development and Acquisition

Summer 2010 Registration **LLC 4820**

This academy provides a basic introduction to bilingual and English as a second language education programs. The content consists of introductory material regarding second language acquisition theories and stages, factors that influence learning a second language in schools and informal assessment among other. **Semester Hours:** 1to 5

Registration is changing. Visit our website for details ucdenver.edu/registration.

LALC 4825 - Techniques in Teaching English as a Second Language

Summer 2010 Registration **LLC 4825**

Develops skills in using a variety of classroom techniques to teach English as a second language. The course is a practical presentation of ESL methods and techniques. Examples of classroom practices are taken from the full educational spectrum, from public schools to pre-university intensive courses on adult education. Cross-listed with LALC 5820. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

LALC 4830 - Instructional Delivery Methods for Second Language Learners

Summer 2010 Registration **LLC 4830**

This academy provides more in-depth information on different instructional methods and how to apply them in working with English language learners. It looks into practical

strategies for modifying lessons using sheltered instruction in order to accommodate the students' linguistic and academic needs (dominance vs. proficiency). **Semester Hours:** 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

LALC 4910 - CO-TOP Practicum

Summer 2010 Registration **LLC 4910**

The CO-TOP Paraeducator Certification requires 2 credit hours of field experience, each credit hour representing at least 90 hours in the field. Field experiences should balance out a person's previous experience to create a more marketable set of skills and a range of skills across ages, disabilities, grade levels and types of programs or philosophical bases. Each practicum participant is provided a practicum handbook. The handbook outlines all components of the practicum experience. The handbook is made available to each participant at the time of registration for the experience. Prereq: students need to have taken at least 10 CO-TOP academies before they are eligible to take the practicum course. **Semester Hours:** 2to 2

Registration is changing. Visit our website for details ucdenver.edu/registration.

LALC 5020 - Workshop in Literacy and Language Teaching

Summer 2010 Registration **LLC 5020**

This course involves critical examination of reading process and instruction. Teachers develop an understanding of the principles of sociopsycholinguistic theory in learning and teaching. Organization options for reading instruction for native and non-native speakers of English at all ages and ability levels will be examined. Teachers become familiar with materials and methods used for reading and reading instruction in schools, including multicultural materials, students' interaction with and response to materials; and techniques to assess and evaluate students reading. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

LALC 5028 - Adolescent Literacy, Part I

Summer 2010 Registration **LLC 5028**

Focuses on supporting adolescents' developing literacy understandings across content areas in the upper elementary grades through high school. Importance is placed on putting new teaching practices in place. Attention is given to both reading and writing with emphasis on before and during strategies and supports. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

LALC 5029 - Adolescent Literacy, Part II

Summer 2010 Registration **LLC 5029**

The second in a sequence of courses focusing on adolescents' developing literacy

understandings across content areas in upper elementary grades through high school. Attention is given to comprehension and critical thinking including revision and editing strategies, assessment, unit planning, the research cycle, using technology, and putting new teaching practices in place. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

LALC 5030 - Language/Literacy Acquisition Part I

Summer 2010 Registration LLC 5030

This course is designed to help teachers understand the relationship between language and literacy acquisition. The focus is on both first and second language acquisition and the interaction of two languages and its impact on the acquisition of literacy in young children. The course lays the foundation for an understanding of the nature of the relationship between cognition and language; language acquisition from the perspective of the individuals within their respective linguistic communities and how literacy is acquired within increasingly broader sociolinguistic contexts. Students explore areas of literacy (reading and writing) and responsive teaching, particularly in diverse school settings with the understanding that diversity of culture, language, gender orientation, abilities and economics is the growing norm in our schools. Topics of interest to the lab are literacy development, language acquisition, assessment, culturally responsive teaching practices, professional development and school reform. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

LALC 5035 - Language and Literacy: Acquisition, Processes, and Cognition, Part II

Summer 2010 Registration LLC 5035

This course is the second of a two-part sequence in language and literacy. Students examine research and develop practices relating to language and literacy acquisition, in particular by linguistically diverse learners in community and classroom contexts. Focuses on learners' development of academic literacy and participation in a second language and culture. Prereq: LALC 5030. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

LALC 5050 - Linguistic and Cultural Issues in Linking Assessment and Instruction

Summer 2010 Registration LLC 5050

This course provides general orientation to the assessment of linguistically and culturally diverse students. Focus is on using assessment to guide and instruction and includes examination of assessment of oral and written language, attitude and classroom arrangements. Includes analysis of assessment tools used to assess gifted and talented students and those used with students during the special education testing procedure. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

LALC 5055 - Linking Assessment and Instruction in Language and Literacy, Part I

Summer 2010 Registration **LLC 5055**

This is the first of a two-part sequence on linking assessment to curriculum and instruction. Focus is on both monolingual speakers of English and second language learners. Assessments include both oral and written language (reading and writing) as well as attitudinal measures and classroom arrangements. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

LALC 5060 - Linking Assessment and Instruction in Language and Literacy, Part II

Summer 2010 Registration **LLC 5060**

This is the second of a two-part sequence on linking assessment to curriculum development and instruction. The focus is on both monolingual speakers of English and second language learners. Prereq: LALC 5030, 5055 and 5140. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

LALC 5070 - Linguistic Analysis of English: Implications for Teaching

Summer 2010 Registration **LLC 5070**

A descriptive linguistic approach to English grammar with a functionalist view of language and discourse processing. The course examines the historical evolution of English from its origins and the impact this has had on its grammar and syntax. A sociolinguistic perspective is included focusing on language variation and status. Provides a framework for understanding, identifying and describing the major features of English (in particular) and language (in general). Students gain a working knowledge of English grammar, including grammatical terms, categories, patterns and rules - especially those forms and functions that are important and/or problematic for second language learners of English. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

LALC 5080 - Teachers as Readers and Writers

Summer 2010 Registration **LLC 5080**

Teachers engage in experiences designed to expand and improve their own literacy interests, abilities, and attitudes. Literacy experiences include readers' workshop, writers' workshop, literature studies, and authors' circles. In addition, teachers reflect on their own and classmates' experiences as a basis for planning literacy experiences in school classrooms. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

LALC 5100 - Theories and Methods of Second Language Teaching

Summer 2010 Registration **LLC 5100**

Provides an overview of approaches to second language teaching. Emphasis is on development of a personal philosophy of second language teaching. Topics covered include first and second language acquisition, contributions of psychology and linguistics, and current practices and trends in language teaching. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

LALC 5140 - Multicultural Education

Summer 2010 Registration **LLC 5140**

Develops an understanding of the pluralistic nature of U.S. society and the role of the school within this social context. Examines the legal and cultural history of language education in Colorado and the U.S. as well as the impact of changing demographics on schools. Participants study themselves and their students as cultural beings and develop an understanding of how their own cultural identity affects their teaching. This course fulfills the culture requirement for SEHD "core courses". It also fulfills the culture requirement for the Colorado LDE Endorsement and the LDE Master's Concentration. It may also serve as an elective in the LDE Master's concentration. Note: LALC 5140, 5150, 5160. Each of these three courses satisfies the requirements for the Colorado Endorsement in Linguistically Diverse Education and the LDE Master's concentration. The content of the courses are related, but the focus of each course is sufficiently different that students in the Master's program may use a second or third course in the sequence as an elective. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

LALC 5150 - Culture of the Classroom

Summer 2010 Registration **LLC 5150**

Provides a classroom-focused examination on linguistic and cultural diversity. The legal history of language and literacy education in the U.S., Colorado and local school districts is studied with a focus on implications for instructional practice. Participants become familiar with research and theory on the roles of cultures in the classroom and gain skills that support differentiated instruction for diverse students. This course fulfills the culture requirement for the Colorado LDE Endorsement and the BESL Master's concentration. It may also serve as an elective in the BESL Master's concentration. Note: LALC 5140, 5150, 5160. Each of these three courses satisfies the requirements for the Colorado Endorsement in Linguistically Diverse Education and the BESL Master's concentration. The content of the courses are related, but the focus of each course is sufficiently different that students in the Master's program may use a second or third course in the sequence as an elective. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

LALC 5160 - Historical and Legal Foundations of Bilingual Education

Summer 2010 Registration **LLC 5160**

Comprehensive survey of education programs for language minority students. Includes an overview of U.S. and Colorado history and legislation related to bilingual education and second language education. Presents various models, philosophies and theoretical underpinnings of education for language minority students. Develops skills in critical comparison of approaches to second language education in relation to student populations. This course fulfills the culture requirement for the Colorado LDE Endorsement and the LDE Master's concentration. It may also serve as an elective in the LDE Master's concentration. Note: LALC 5140, 5150, 5160. Each of these three courses satisfies the requirements for the Colorado Endorsement in Linguistically Diverse Education and the LDE Master's concentration. The content of the courses are related, but the focus of each course is sufficiently different that students in the Master's program may use a second or third course in the sequence as an elective. **Semester Hours: 3 to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

LALC 5170 - Race, Class and Culture in Public Schools

Summer 2010 Registration **LLC 5170**

This course will focus on understanding culture and diversity, recognizing the role of inherited power and privilege in both individual and institutional interactions and developing a philosophy of social justice and equity in education. **Semester Hours: 3 to 3**
Registration is changing. Visit our website for details ucdenver.edu/registration.

LALC 5180 - Working with Communities and Families

Summer 2010 Registration **LLC 5180**

This course will focus on the importance of understanding and connecting with the community and families of the students in a school, by exploring the socio-cultural histories of students and communities. We will develop practical strategies and activities to uncover the rich resources that diverse students and families bring to schools as well as to connect and collaborate with the community organizations and activities to increase student engagement and relevance. Prereq: LALC 5170. **Semester Hours: 3 to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

LALC 5190 - Culturally Responsive Pedagogy and Practices

Summer 2010 Registration **LLC 5190**

This course focuses on developing practical tools for culturally responsive, inclusive instructional strategies, classroom management and curriculum and lesson planning.

Prereq: LALC 5170 and 5180. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

LALC 5210 - Literacy Development Pre K-3rd Grade

Summer 2010 Registration **LLC 5210**

Focuses on children's developing literacy understandings and proficiencies beginning in the preschool years. Attention is given to language development, assessment, and instruction in pre-kindergarten through third grade, partnerships with community literacy institutions provide information on their use for literacy development. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

LALC 5220 - Literacy Routines and Assessment, Pre K-3rd Grade

Summer 2010 Registration **LLC 5220**

This course will focus on the routines and practices which allow for student specific instruction and assessment in the Early Literacy classroom. Participants will examine and critique current literacy routines and assessments needed to best meet the needs of culturally and linguistically diverse children. Prereq: LALC 5210. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

LALC 5230 - Early Literacy Instruction

Summer 2010 Registration **LLC 5230**

Participants will examine Pre K-3rd grade literacy instruction to understand how to meet the needs of young students. The course will analyze instructional practices for young gifted, special needs and English language learning students to best meet the needs of all learners. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

LALC 5430 - Gender as Culture

Summer 2010 Registration **LLC 5430**

Examines ways some implicit conceptual and value systems regarding gender are manifested in schools, homes and work places. Provides students with knowledge and insight from interdisciplinary scholarship of gender in society. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

LALC 5700 - Language and Literacy Portfolios: Development, Reflection and Empowerment

Summer 2010 Registration **LLC 5700**

In this course, teachers learn: (1) to compile and assess student portfolios to inform

instruction and communicate progress, and (2) to experience developing personal portfolios with particular focus on self-reflection and empowerment over the course of the master's degree program. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

LALC 5710 - Primary Literacy: Pre-3rd Grade

Summer 2010 Registration **LLC 5710**

Provides teachers with a basic understanding of reading and writing development in preschool and early primary grades. Specific strategies are considered for using and teaching reading and writing in early primary grades. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

LALC 5720 - Writing: Process, Development, and Teaching Grades 3-12

Summer 2010 Registration **LLC 5720**

This course presents current theories of writing development as they relate to classroom practices. Participants in the course will use these theories to help analyze the writings of students in real classrooms. Understanding of the theories will also be increased through direct participation in personal writing, conferencing with other course members, revision of pieces, and the sharing of final products. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

LALC 5730 - Language and Literacy Across the Curriculum

Summer 2010 Registration **LLC 5730**

Explores the value and use of reading and writing as tools for learning across the curriculum on a K-12 basis. Specific needs and strategies for assisting at-risk and second language learners are also discussed. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

LALC 5740 - Adolescent Literature

Summer 2010 Registration **LLC 5740**

Reading and evaluating fiction and non-fiction appropriate for students in middle and senior high school. Emphasis is on modern literature written for students from a variety of ethnic backgrounds. This course is also appropriate for teachers working with adults learning English. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

LALC 5750 - Children's Literature in Spanish

Summer 2010 Registration **LLC 5750**

Taught in Spanish, this course presents children's literature from Spanish speaking

countries and Spanish speaking authors, along with teaching methodologies and avenues of further research in the field. Prereq: senior-level proficiency in Spanish. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

LALC 5760 - Theory and Methods of English Education

Summer 2010 Registration **LLC 5760**

Focuses on teaching/learning theories and practical classroom strategies for teaching English Language Arts to adolescent learners in middle school, junior high school, and high school classes. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

LALC 5770 - Effective Literacy Instruction for Second Language Learners

Summer 2010 Registration **LLC 5770**

Students explore and critique various methods and strategies for teaching reading and writing to non-native English speakers. Students acquire a foundation in written language acquisition for both first and second language learners. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

LALC 5780 - Connecting Cultures Through Literature

Summer 2010 Registration **LLC 5780**

This course looks at the issue of multicultural literacy for K-8th grade and how children's and young adult literature can be used to create a high quality multicultural curriculum which enhances literacy development and covers all the content areas. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

LALC 5790 - Children's Literature Through the Ages

Summer 2010 Registration **LLC 5790**

A basic children's literature course which looks at the historical development of children's literature. This course also looks at various genre in children's literature, how to critique and choose literature for instruction and children's literature awards. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

LALC 5795 - Current Children's Literature

Summer 2010 Registration **LLC 5795**

The focus of this course is on children's literature from the past 10 years, including established and newer authors and illustrators. Various genres will be covered, as

participants learn to critique children's literature and how to choose books for instruction.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

LALC 5800 - Sociolinguistics: Language Variation and its Implications for Teaching

Summer 2010 Registration **LLC 5800**

Provides an introduction to the field of educational sociolinguistics and research of classroom discourse. Students are introduced to the collection and analysis of oral and written language in educational contexts. Basic concepts and key issues regarding the form-function relationships of language use in instructional settings are discussed.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

LALC 5810 - Workshop in Language Acquisition and Development

Summer 2010 Registration **LLC 5810**

Provides students with an opportunity to examine current research on language acquisition and development, and to apply their knowledge to the learners in their teaching situation. The course focuses on language development and use in educational settings and addresses learners with English as their first language, second-language learners of English, bi-dialectal speakers and bilingual speakers. Students collect and analyze language samples, evaluate teaching materials and examine teaching techniques in light of the material covered in the course.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

LALC 5820 - Techniques in Teaching English as a Second Language

Summer 2010 Registration **LLC 5820**

Develops skills in using a variety of classroom techniques to teach English as a second language. The course is a practical presentation of ESL methods and techniques. Examples of classroom practices are taken from the full educational spectrum, from public schools to pre-university intensive courses on adult education. Cross-listed with LALC 4825.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

LALC 5821 - English Phonology for TESOL

Summer 2010 Registration **LLC 5821**

Provides ESL teachers with a basic understanding of the English sound system and the implications for teaching. Designed for teachers with a limited background in phonetics and phonology. An understanding of some of the basic concepts in linguistics is advantageous, though not required. Students collect speech data from non-native

speakers and use their analysis to develop instructional materials and strategies.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

LALC 5822 - Internet for ESL Teachers

Summer 2010 Registration LLC 5822

Provides teachers with the opportunity to explore Internet resources for instructional use and professional development. While learning how to access, navigate, and write for the Internet, class participants examine and devise instructional uses of the Internet in English language teaching. Issues of equity of access and pedagogical value are discussed.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

LALC 5825 - Methods and Materials of Language Teaching

Summer 2010 Registration LLC 5825

Provides an in-depth study of curriculum options for learners of English as a second language. Participants examine and apply strategies and materials for developing linguistic and academic capabilities of language learners.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

LALC 5826 - Language Teaching Lab

Summer 2010 Registration LLC 5826

Provides participants with a classroom-based examination of language teaching based on theoretical tenets of language acquisition and language teaching methods. Students develop lessons around particular language points and work with the professor and peers to implement insights in their classrooms or the classrooms of collaborating language teachers. Language focus varies from phonology, morphology, syntax and discourse features.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

LALC 5830 - Workshop in Multicultural Education

Summer 2010 Registration LLC 5830

Provides students with the experiences in multicultural methodology training. How to utilize community members, para-professionals, and peers to facilitate learning in a multicultural environment.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

LALC 5831 - Reading Recovery: Observation Survey

Summer 2010 Registration **LLC 5831**

A workshop class which introduces the participants to an understanding of literacy acquisition and prepares them to implement the Reading Recovery Program within their school or district. Prereq: reading and language arts methods. A minimum of three years primary teaching or reading teaching experience. **Semester Hours:** 2to 2

Registration is changing. Visit our website for details ucdenver.edu/registration.

LALC 5835 - Special Topics: Literacy and Language

Summer 2010 Registration **LLC 5835**

Specific topics vary but will include the exploration of literacy development and instruction in particular populations or with specific focuses. **Semester Hours:** 0.5to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

LALC 5840 - Independent Study

Summer 2010 Registration **LLC 5840**

Semester Hours: 1to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

LALC 5910 - Foundations of Language, Literacy and Culture

Summer 2010 Registration **LLC 5910**

Designed for veteran and novice teachers to gain an understanding of the broad fields of literacy and language education. Participants examine key educational philosophies based on the writings of important scholars in the field, on topics such as the politics of literacy, the nature of literacy and literacy/cultural identity. The course examines current thought concerning literacy and language learning and teaching from a variety of perspectives and contexts, including classroom, school and community. **Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

LALC 5911 - Reading Recovery Practicum: Early Intervention (Theory, Procedures and Practice)

Summer 2010 Registration **LLC 5911**

A field experience which extends the participants' understanding of literacy acquisition and prepares them to implement the Reading Recovery Program within their school or district. Prereq: LALC 5831. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

LALC 5920 - Readings in Multicultural Education

Summer 2010 Registration **LLC 5920**

Provides students with an opportunity to examine the current literature as it relates to trends in contemporary issues in the area of multicultural education. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

LALC 5925 - Selected Readings: Advanced Study in Literacy and Language

Summer 2010 Registration **LLC 5925**

Prereq: written permission of instructor. **Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

LALC 6090 - Research Seminar

Summer 2010 Registration **LLC 6090**

An advanced course which focuses on specific issues in language, language acquisition and language teaching. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

LALC 6713 - Introduction to Language Policy

Summer 2010 Registration **LLC 6713**

The legal, ideological, and historic foundations of language policies are examined. Also examined are connections with related topics such as language rights, language and power, and issues from the sociology of language, such as language loyalty. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

LALC 6840 - Independent Study

Summer 2010 Registration **LLC 6840**

Semester Hours: 1to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

LALC 6910 - Seminar and Practicum in Literacy and Language, K-6

Summer 2010 Registration **LLC 6910**

Provides opportunities for advanced students in the M.A. program to apply concepts acquired in course work and other educational experiences to specific situations. Students will work in schools, classrooms, administrative offices, or community centers (according to their experiences, interests and current teaching positions; sites to be identified before course begins) to study the potential for change in schools and society and to reflect upon their roles as change agents in the field. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

LALC 6911 - Seminar and Practicum in Literacy and Language, 7-12+

Summer 2010 Registration LLC 6911

Provides opportunities for advanced students in the M.A. program to apply concepts acquired in course work and other educational experiences to specific situations. Students will work in schools, classrooms, administrative offices, or community centers (according to their experience, interests and current teaching positions; sites to be identified before course begins) to study the potential for change in schools and society and reflect upon their own roles as change agents in the field. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

LALC 6912 - Seminar and Practicum in Literacy and Language, ESL and Bilingual Education

Summer 2010 Registration LLC 6912

Provides opportunities for advanced students in the M.A. program to apply concepts acquired in course work and other educational experiences to specific situations. Students will work in schools, classrooms, administrative offices, or community centers (according to experience, interests, and current teaching positions; sites to be identified before course begins) to study the potential for change in schools and society and reflect upon their own roles as change agents in the field. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

LALC 6913 - Reading Recovery: Practicum

Summer 2010 Registration LLC 6913

A practicum which refines the participants' understanding of literacy acquisition and finalizes preparation to implement the Reading Recovery Program within their school/district. Prereq: LALC 5831 and 5911. Reading and language arts methods. A minimum of three years primary teaching or reading teaching experience. **Semester Hours:** 4to 4
Registration is changing. Visit our website for details ucdenver.edu/registration.

LALC 6915 - Seminar and Practicum in Literacy Professional Development

Summer 2010 Registration LLC 6915

This final practicum is designed for teachers to enhance their education as reading professionals in two ways. First, by continuing to reflect on and analyze their own teaching, participants will deepen their understanding of how to assess and design instruction based on the needs of their students. Second, through structured coaching activities and observation of expert coaches/teachers, participants will improve their skills in the role of Literacy coach, an important aspect of a reading professional's career. This course is standards based using the Reading Teacher, Reading Professional and Literacy Coach standards from the Colorado Department of Education

and the International Reading Association. Prereq: LALC 5055, 6910 and 6911.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

LALC 6950 - Master's Thesis

Summer 2010 Registration **LLC 6950**

Semester Hours: 4to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

LALC 7410 - Communication and Control in Systems Change

Summer 2010 Registration **LLC 7410**

Examines educational settings -- classrooms, schools, school districts, corporate and clinical settings, church basements and community centers -- as systems, and explores strategies for change. Participants draw on interdisciplinary perspectives of individual and group behavior as they develop personal theories of change and apply these to their own situations. Prereq: EDLI 7100.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

LATN 1010 - Elementary Latin I

Summer 2010 Registration **LATN 1010**

Introduces grammar, syntax, and vocabulary of Classical Latin, with an emphasis on preparing students to read Latin while improving English grammar and vocabulary skills. Two semesters of Latin may be used to fulfill the CLAS language competency requirement.**Semester Hours:** 5to 5

Registration is changing. Visit our website for details ucdenver.edu/registration.

LATN 1020 - Beginning Latin II

Summer 2010 Registration **LATN 1020**

Completes the presentation of basic Latin grammar, syntax and vocabulary. Introduces students to Latin literature through readings in select authors adapted to meet the needs of beginning students. Prereq: LATN 1010 or equivalent.**Semester Hours:** 5to 5

Registration is changing. Visit our website for details ucdenver.edu/registration.

LATN 1050 - Vocabulary for Professionals

Summer 2010 Registration **LATN 1050**

Studies English words derived from Latin and Greek by analyzing their component parts (prefixes, stems, and suffixes). Cross-listed with ENGL 1050.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

LATN 1100 - Building Vocabulary From Greek and Latin Words

Summer 2010 Registration **LATN 1100**

Students learn to decipher unfamiliar words by breaking them down to their Latin or Greek roots. Prereq: none. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

LATN 2010 - Intermediate Latin I

Summer 2010 Registration **LATN 2010**

Introduces advanced Latin grammar, vocabulary, syntax, and stylistics of Latin prose via readings in Caesar, Cicero and Livy. Includes review of basic Latin grammar, plus introduction to Latin prose composition and Latin rhetoric. Emphasis on historical, cultural, social context of authors and works. Prereq: LATN 1020 or equivalent. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

LATN 2020 - Intermediate Latin II

Summer 2010 Registration **LATN 2020**

(Continuation of LATN 2010.) Completes the presentation of advanced Latin grammar, vocabulary, syntax, and stylistics of Latin prose. Continues the study of Latin prose composition and Latin rhetoric with emphasis on historical, cultural, and social context of authors and works. Prereq: LATN 2010 or equivalent. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

LATN 2840 - Independent Study

Summer 2010 Registration **LATN 2840**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

LATN 3000 - Medical Terminology

Summer 2010 Registration **LATN 3000**

The course enables students to understand medical terms by learning the Greek and Latin word elements that form these terms. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

LDAR 5501 - Landscape Architecture Design Studio 1

Summer 2010 Registration **L A 5501**

Introduction to basic strategies, methods and techniques of landscape architectural design with emphasis in theory, history, analysis and criticism. First in a three studio

course sequence. **Semester Hours:** 6to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

LDAR 5502 - Landscape Architecture Design Studio 2

Summer 2010 Registration L A 5502

Strategies, methods and techniques of landscape architectural design with emphasis in more complex issues, design processes and development and the application of theory and research. Second in a three studio course sequence. Prereq: LDAR 5501 or permission of department chair. **Semester Hours:** 6to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

LDAR 5503 - Landscape Architecture Design Studio 3

Summer 2010 Registration L A 5503

Problem-based studio covering the approaches, technologies and means for planning and designing sites to accommodate an intensive development program on a particular site within a regional context. Covers issues definition, site analysis, programming, development of design strategies, evaluation site planning, placemaking, regionalism and communication. Prereq: LDAR 5501 and LDAR 5502 or permission of department chair. **Semester Hours:** 6to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

LDAR 5510 - Graphic Media in Landscape Architecture

Summer 2010 Registration L A 5510

Introduces basic principles and methods associated with analog and digital drawing- plan, sections, perspectives, color, shading, composition and projection. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

LDAR 5521 - History of Landscape Architecture

Summer 2010 Registration L A 5521

Investigates architectural thought from antiquity to the present. Begins with a review of Greek ideals and proceeds -- through an appreciation of landscape and nature as essential cultural constituents -- with a survey of major themes such as Renaissance Humanism, Enlightenment, Rationalism, Romantic Historicism, Neo-Medievalism, the varieties of Modernism, Neo-Eclecticism and the most recent directions in landscape and garden design. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

LDAR 5532 - Landform Manipulation

Summer 2010 Registration L A 5532

Focuses on the fundamental technical aspects of landscape architectural design and implementation of related topography, grading and drainage design, landform manipulation, earthwork calculations, and road alignment. Note: course is to be taken with LDAR 6641, Computer Applications in Landscape Architecture. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

LDAR 5572 - Landscape Ecology

Summer 2010 Registration L A 5572

Focuses on the study of physiography, cultural factors, and aesthetic criteria in relation to landscape, spatial organization, and urban and regional structure. Emphasizes continuity and change in an ecology of both natural and man-made landscape. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

LDAR 5573 - Applied Advanced Landscape Ecology Workshop

Summer 2010 Registration L A 5573

Issues of sustainability and designing or planning at multiple and temporal scales (watershed, regional, site) provides basis for advanced studies in ecological-based design, planning, and restoration to accomplish project goals with minimal ecological impact. Prereq: LDAR 5572. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

LDAR 6520 - Landscape Architecture in Other Cultures

Summer 2010 Registration L A 6520

Various studies of landscape architecture and urbanism in foreign countries. **Semester Hours:** 1to 9

Registration is changing. Visit our website for details ucdenver.edu/registration.

LDAR 6604 - Landscape Architecture Design Studio 4

Summer 2010 Registration L A 6604

Advanced landscape architecture design studio covering situations of urbanization and change of various scales and complexities. This is the first in a two studio course sequence. Prereq: LDAR 5501, 5502, 5503 or permission of department chair. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

LDAR 6605 - Landscape Architecture Design Studio 5

Summer 2010 Registration **L A 6605**

Advanced landscape architecture design studio covering situations of urbanization and change of various scales and complexities. This is the second in a two studio course sequence. Prereq: LDAR 5501, 5502, 5503, 6604 or permission of department chair. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

LDAR 6606 - Landscape Architecture Design Studio 6

Summer 2010 Registration **L A 6606**

Advanced landscape architecture design studio covering situations of urbanization and change of various scales and complexities. This is the first in a two studio course sequence. Prereq: LDAR 5501, 5502, 5503, 6604, 6605 or permission of department chair. **Semester Hours:** 6to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

LDAR 6607 - Landscape Architecture Design Studio 7

Summer 2010 Registration **L A 6607**

Advanced landscape architecture design studio covering situations of urbanization and change of various scales and complexities. This is the second in a two studio course sequence. Prereq: LDAR 5501, 5502, 5503, 6604, 6605, 6606 or permission of department chair. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

LDAR 6608 - Landscape Architecture Design Studio 8

Summer 2010 Registration **L A 6608**

Advanced design studio that reflects topical situations in landscape architectural practice and/or applied research interests of instructor. This is the first in a two studio sequence. Prereq: LDAR 5501, 5502, 5503, 6604, 6605, 6606, 6607 or permission of department chair. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

LDAR 6620 - Landscape Architecture Theory and Criticism

Summer 2010 Registration **L A 6620**

Focuses on exploring and assessing current state of theory in landscape architecture and related design disciplines and the ideas undergoing contemporary design approaches. Narrative and explanatory theories are the objects of study. Emphasis is placed on history and pedagogic theories and their theories and relationships to other disciplines such as art, ecology, geography, architecture and anthropology. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

LDAR 6622 - Visual Quality Analysis

Summer 2010 Registration L A 6622

Introduces a range of philosophies, methods, and techniques in visual landscape analysis. Emphasis is placed on application of methods and techniques, urban and regional context and scale, as well as visual impact assessment and simulation. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

LDAR 6624 - The Built Environment in Other Cultures I: Research Design

Summer 2010 Registration L A 6624

Intends to broaden students' perspectives by asking them to examine design within another culture. Students prepare a proposal of study including a statement of the problem to be addressed, the type of field research to be undertaken, and the nature of the report to be produced. Cross-listed with ARCH 6624. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

LDAR 6625 - Landscape Architecture Field Studies

Summer 2010 Registration L A 6625

Critical field evaluation of built works of landscape architecture including field measurement, mappings, sketches, photography, written evaluations and applied projects. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

LDAR 6631 - Landscape Construction Materials and Methods

Summer 2010 Registration L A 6631

Develops understanding of detailed design processes, construction materials and selection of construction methods and documents. Typically taken with LDAR 6605 and 6606 (LDAR Design Studios 5 and 6). **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

LDAR 6632 - Site Planning

Summer 2010 Registration L A 6632

Focuses on the site planning process, including research and data gathering, data analysis and synthesis, design analysis and its relationship to building program and concept, and design synthesis of site and preparation of site plan. Design through grading, representation, manipulation and calculation of road work, utilities, and other site features. Vertical and horizontal alignment, earthwork and cost computation, and integration with existing and proposed features or systems are covered. **Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

LDAR 6641 - Computer Applications in Landscape Architecture

Summer 2010 Registration L A 6641

Introduces digital technologies and methods commonly used in Landscape Architecture including primarily CADD, visualization, simulation, graphic design, GIS and other emerging applications. Includes hands-on exercises. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

LDAR 6642 - Landscape Architecture Digital Design Workshop

Summer 2010 Registration L A 6642

Introduces surveys, and provides hands-on experiences in the disciplines, principles, software, and theories for engaging digital design in landscape architectural practice and research. Prereq: LDAR 6641. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

LDAR 6670 - Plants in Design

Summer 2010 Registration L A 6670

Focuses on the study of design methods used in landscape architecture. Formal design principles, spatial sequencing, and plant functions are applied in design studies, based on botanical aesthetic traits and physical requirements of a wide variety of plant material. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

LDAR 6671 - Plant Material Identification

Summer 2010 Registration L A 6671

Students learn the names, characteristics and site requirements of plants including trees, shrubs, ground covers and perennials commonly used in built works in the Colorado region. Methods are transferable to other regions. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

LDAR 6686 - Special Topics: Landscape Architecture

Summer 2010 Registration L A 6686

Various topical concerns are offered in landscape architecture history, theory, elements, concepts, methods, implementation strategies, and other related areas. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

LDAR 6710 - Landscape Representation

Summer 2010 Registration L A 6710

Focuses on developing understanding of various advanced analog and digital techniques for application in landscape analysis and design. Prereq: LDAR 5510.

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

LDAR 6711 - Advanced Landscape Architectural Graphics Workshop

Summer 2010 Registration L A 6711

Focuses on developing expertise in various drawing, reprographics, digital, and photographic techniques used in practice for enhanced effectiveness in graphic communication. Prereq: LDAR 5510.

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

LDAR 6712 - Green Roof-Design

Summer 2010 Registration L A 6712

The primary objective for this seminar is to give students a general understanding of green roof systems, vegetated roofs above underground architecture and vertical vegetated systems. The seminar will engage in critiques and discussions using international, national and local case studies, covering history, typologies, function, design, master planning and costs.

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

LDAR 6720 - Finding Common Ground

Summer 2010 Registration L A 6720

Focuses on principles and societal variables that influence the structure of urban neighborhood space through research application. Prereq: LDAR 6640.

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

LDAR 6721 - Regionalism

Summer 2010 Registration L A 6721

Explores environmental and cultural factors that shape regionally responsive design.

Prereq: LDAR 5521 and 6620 or permission of instructor.

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

LDAR 6722 - Contested Terrains

Summer 2010 Registration **L A 6722**

Explores the different processes, factors and forces and determines and influences occupation, land use and built form through the phenomena of conflict and contestation. Design is inherently located within the disputes and discourses involving landscape as location and resource. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

LDAR 6723 - Cinema and the Landscape

Summer 2010 Registration **L A 6723**

Explores landscapes in conjunction with cinema, examining the processes, images, stereotypes, and myths associated with the historical development of film and the creation of film theory within a context of space, race and representation. Interconnects film theory and criticism and landscape architecture, through the creation of short digital essays that examine the complexity of issues related to spatial meaning. **Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

LDAR 6724 - American Landscape Arch

Summer 2010 Registration **L A 6724**

Introduces the origins, theories and practitioners of landscape architecture in the United States from the founding of the ASLA in 1899 through the present. This period drew from many realms, including the arts, land ethics, political ideologies, and social agendas. The material covered offers a base for understanding trends and ideas embedded within or underpinning the contemporary American landscape. Prereq: LDAR 5521

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

LDAR 6750 - Professional Practice

Summer 2010 Registration **L A 6750**

Focuses on studies in the professional practice of landscape architecture and related professions and case problems in initiating and managing a professional practice. Explores the essential elements of professional practice and equips students with the fundamental knowledge and skills requisite to an understanding of and participation in the conduct of practice in landscape architecture. Covers organization of the landscape office, professional services of landscape architects, fee structures and fee management, contracts, legal rights and responsibilities, management, marketing, and delivery of professional services. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

LDAR 6840 - Independent Study

Summer 2010 Registration L A 6840

Studies initiated by students or faculty and sponsored by a faculty member to investigate a special topic or problem related to landscape architecture or urban design. Prereq: permission of instructor. **Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

LDAR 6910 - Teaching Assistantship

Summer 2010 Registration L A 6910

Work with a faculty member in a course to assist with course preparation and delivery.

Prereq: Permission of program chair and instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

LDAR 6930 - Landscape Architecture Internship

Summer 2010 Registration L A 6930

Designed to provide professional practice experience. The student is placed in a landscape architectural and/or design office by the College and receive credit instead of pay. Must complete the second-year level before taking this course. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

LDAR 6949 - Research Tools, Strategies and Methods

Summer 2010 Registration L A 6949

Introduces the thesis in landscape architecture and establishes the scholarly basis for the research and construction of a Master's Thesis project. This course will provide the student with the research practices and methodologies to develop the scholarship and products required to produce a Thesis Project Proposal. Completion of this course is a prerequisite for the student to submit the Thesis Proposal for departmental approval to continue with the remaining 9 credits of thesis to be undertaken in their final semester in the program. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

LDAR 6950 - Thesis Research

Summer 2010 Registration L A 6950

The student works closely with a landscape architecture faculty advisor and thesis committee to develop the thesis proposal through focused research. Research might entail both written and graphic inquiry leading to specific products with conclusive ideas that set the stage for the completion of the thesis in the following semester. Part of the Landscape Architecture Thesis sequence. Prereq: LDAR 6949 and permission of department chair. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

LDAR 6951 - Landscape Architecture Thesis

Summer 2010 Registration **L A 6951**

The Landscape Architecture thesis is expected to advance the field of landscape architecture by offering new insights into aspects of design, technology, history or professional principles. In this course, the student continues to work independently, but closely with a landscape architecture faculty advisor and thesis committee to complete the thesis. The thesis might take on different final forms (written volume, drawings, maps, digital images), depending on the subject inquiry. For further information on the Landscape Architecture Thesis Track consult the Landscape Architecture Thesis Guidelines. Prereq: LDAR 6949 and 6950. **Semester Hours:** 6to 6
Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 1009 - Computer-Based Algebraic Problem Solving

Summer 2010 Registration **MATH 1009**

A laboratory-based problem solving course focused on personal computing applications. Topics include general problem solving techniques, deductive reasoning, elementary probability, computer algebraic software, optimization, graphical analysis, systems of equations, spreadsheets, functions, descriptive statistics, linear programming and elementary programming logic. Prereq: basic high school algebra and some familiarity with Microsoft Windows. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 1010 - Mathematics for the Liberal Arts

Summer 2010 Registration **MATH 1010**

Designed to give liberal arts students the skills required to understand and interpret quantitative information that they encounter in the news and in their studies, and to make quantitatively-based decisions in their lives. Topics include a survey of logic and analysis of arguments, identifying fallacies in reasoning, working with numbers and units, linear and exponential relations and essentials of probability and statistics. The emphasis is on applications with case studies in economics, finance, environmental sciences, health, music and science. Prereq: three years of high school mathematics. **Semester Hours:** 3to 3 **GT Pathways Category Key:** GT-MA1
Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 1070 - Algebra for Social Sciences and Business

Summer 2010 Registration **MATH 1070**

Topics in algebra designed for students who intend to take business calculus. Functions, graphs, scatter plots, curve-fitting, solving systems of equations, polynomial and rational functions, and selected other topics. Note: Graphics calculator required. No co-credit with MATH 1110 or MATH 1130. Prereq: intermediate algebra and satisfactory score on

the placement exam. **Semester Hours:** 3to 3 **GT Pathways Category Key:** GT-MA1
Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 1075 - Linear Programming and Probability

Summer 2010 Registration **MATH 1075**

Designed to fulfill College of Business requirements for students who have had college algebra but not MATH 1070. Emphasis is on applications of linear programming and probability. Prereq: MATH 1110. No co-credit with MATH 1070. **Semester Hours:** 1to 1
Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 1080 - Polynomial Calculus

Summer 2010 Registration **MATH 1080**

A one-semester course in single-variable calculus. Topics include limits, derivatives, differentiation rules, integration and integration rules. Emphasis is on applications to business and social sciences. Note: No knowledge of trigonometry is required. Those planning to take more than one semester of calculus should take MATH 1401 instead of MATH 1080. Prereq: MATH 1070 or 1110. No co-credit with MATH 1401. **Semester Hours:** 3to 3 **GT Pathways Category Key:** GT-MA1
Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 1110 - College Algebra

Summer 2010 Registration **MATH 1110**

Topics in algebra designed for students who intend to take the calculus sequence. Functions, domains, ranges, graphs, data scatter plots and curve fitting, solving equations and systems of equations, polynomial functions, rational functions, and selected other topics. Graphic calculators and/or computer algebra systems are used extensively. Applications are emphasized. Note: No co-credit with either MATH 1070 or 1130. Prereq: intermediate algebra and satisfactory score on the placement exam. **Semester Hours:** 3to 3 **GT Pathways Category Key:** GT-MA1
Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 1111 - Freshman Seminar

Summer 2010 Registration **MATH 1111**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 1120 - College Trigonometry

Summer 2010 Registration **MATH 1120**

Topics in trigonometry, analytic geometry, and elementary functions designed for

students who intend to take the calculus sequence. Angles and trigonometry functions of acute angles, analytic trigonometry, fundamental trigonometric functions and identities including hyperbolic trigonometry, parametric equations, and polar coordinate system. Graphic calculators and/or computer algebra systems are used extensively. Applications are emphasized. Prereq: MATH 1110 and placement test. No joint credit with MATH 1130. **Semester Hours:** 3to 3**GT Pathways Category Key:** GT-MA1
Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 1130 - Precalculus Mathematics

Summer 2010 Registration **MATH 1130**

Condensed treatment of the topics in MATH 1110 and 1120. Prereq: satisfactory score on the placement exam. No co-credit with MATH 1070, 1110 or 1120. **Semester Hours:** 4to 4**GT Pathways Category Key:** GT-MA1
Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 1401 - Calculus I

Summer 2010 Registration **MATH 1401**

First course of a three-semester sequence (MATH 1401, 2411, 2421) in calculus. Topics covered include limits, derivatives, applications of derivatives, and the definite integral. Note: Students cannot receive credit for both MATH 1080 and 1401. Prereq: MATH 1120 or 1130 and satisfactory score on the placement exam. **Semester Hours:** 4to 4**GT Pathways Category Key:** GT-MA1
Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 2411 - Calculus II

Summer 2010 Registration **MATH 2411**

The second of a three-semester sequence (MATH 1401, 2411, 2421) in calculus. Topics covered include exponential, logarithmic, and trigonometric functions, techniques of integration, indeterminate forms, improper integrals and infinite series. Prereq: MATH 1401. **Semester Hours:** 4to 4**GT Pathways Category Key:** GT-MA1
Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 2421 - Calculus III

Summer 2010 Registration **MATH 2421**

The third of a three-semester sequence in calculus (MATH 1401, 2411 and 2421). Topics include vectors, vector-valued functions, partial differentiation, differentiation, multiple integration, and vector calculus. Prereq: MATH 2411. **Semester Hours:** 4to 4**GT Pathways Category Key:** GT-MA1
Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 2511 - Discrete Structures

Summer 2010 Registration **MATH 2511**

Covers the fundamentals of discrete mathematics, including: logic, sets, functions, growth of functions, algorithms, matrices, mathematical reasoning, proofs, induction, relations, graphs, trees and combinatorics. There is an emphasis on how discrete mathematics applies to computer science in general, and algorithm analysis in particular.

Prereq: CSCI 2421. Cross-listed with CSCI 2511. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 2810 - Topics

Summer 2010 Registration **MATH 2810**

Topics in mathematics with various subtitles reflecting course content. Prereq: permission of instructor. **Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 2830 - Introductory Statistics

Summer 2010 Registration **MATH 2830**

Basic statistical concepts, summarizing data, probability concepts, distributions, confidence intervals, hypothesis testing. Prereq: intermediate algebra. **Semester Hours:** 3to 3 **GT Pathways Category Key:** GT-MA1

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 2939 - Internship/Cooperative Education

Summer 2010 Registration **MATH 2939**

Experiences involving application of specific, relevant concepts and skills in supervised employment situations. Prereq: 15 hours of 2.75 GPA. **Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 3000 - Introduction to Abstract Mathematics

Summer 2010 Registration **MATH 3000**

Students learn to prove and critique proofs of theorems by studying elementary topics in abstract mathematics, including logic, sets, functions, equivalence relations and elementary combinatorics. Prereq: MATH 1401. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 3040 - Mathematics for Elementary Teachers

Summer 2010 Registration **MATH 3040**

Topics include intuitive and logical development of geometric ideas relevant to K-6

curriculum; measurement of length, area, volume, mass, angle, temperature, time and the metric system. Further study of the rational number system, probability and statistics, applications and problem solving. Note: Carries credit only for elementary education majors. Prereq: 3 years of high school mathematics. Cross-listed with ELED

5400.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 3140 - Introduction to Modern Algebra

Summer 2010 Registration **MATH 3140**

Studies the fundamental algebraic structures used in modern mathematics. Topics include groups, rings, fields and polynomials. Prereq: MATH 3000.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 3191 - Applied Linear Algebra

Summer 2010 Registration **MATH 3191**

Topics include systems of equations, Gaussian elimination with partial pivoting, LU--decomposition of matrices, matrix algebra, determinants, vector spaces, linear transformations, eigenvalues and applications. Note: No co-credit with MATH 3195.

Prereq: MATH 2411.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 3195 - Linear Algebra and Differential Equations

Summer 2010 Registration **MATH 3195**

Presents the essential ideas and methods of linear algebra and differential equations, emphasizing the connections between and the applications of both subjects. The course is designed for students in the sciences and engineering. Note: No co-credit with MATH 3200 and MATH 3191. Prereq: MATH 2411.**Semester Hours:** 4to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 3200 - Elementary Differential Equations

Summer 2010 Registration **MATH 3200**

First and second order differential equations, Laplace transforms, systems of equations, with an emphasis on modeling and applications. Note: No co-credit with MATH 3195.

Prereq: MATH 2411; coreq is MATH 3191.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 3210 - Higher Geometry I

Summer 2010 Registration **MATH 3210**

Studies the foundations of modern geometry by examining axiomatic systems for various geometrics, with an emphasis on non-Euclidean hyperbolic geometry. Prereq: MATH 3000.

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 3250 - Problem Solving Tools

Summer 2010 Registration **MATH 3250**

Students learn and refine both problem solving techniques and computer programming skills. Examples, exercises, and projects are taken from a wide range of mathematical topics including algebra, calculus, linear algebra and probability. Note: This course will not count toward a graduate degree in applied mathematics. Prereq: MATH 2421.

Cross-listed with MATH 5250. **Semester Hours:** 3to 3 **When Offered:** *SPRING*

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 3301 - Introduction to Operations Research I - Deterministic Systems

Summer 2010 Registration **MATH 3301**

A mathematical approach to decision making based on optimization. Topics include linear programming, network flows and production models. Prereq: MATH 3191 or 3195.

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 3302 - Operations Research II

Summer 2010 Registration **MATH 3302**

Elementary stochastic processes and standard nondeterministic operations research models: Markov chains, Poisson processes, renewal processes, queuing theory, inventory models, Markov decision processes, simulation. Prereq: MATH 3191 and 3800.

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 3440 - Introduction to Symbolic Logic

Summer 2010 Registration **MATH 3440**

Covers truth functional and quantificational logic through polyadic first order predicate calculus and theory of identity. Attention is given to such problems in metatheory as proofs of the completeness and consistency of systems of logic. Prereq: MATH 3000.

Cross-listed with PHIL 3440. **Semester Hours:** 3to 3 **When Offered:** *SPRING*

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 3511 - Mathematics of Chemistry

Summer 2010 Registration **MATH 3511**

Multivariate functions, probability and statistics for chemistry, matrices and vectors, mathematics of reaction kinetics and symmetry point groups. Course covers mathematics needed for CHEM 4511 and 4521. Can also be an elective for the mathematics minor. Prereq: MATH 2411, CHEM 2031, CHEM 2061. **Semester Hours:** 4to 4**When Offered:** FALL

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 3800 - Probability and Statistics for Engineers

Summer 2010 Registration **MATH 3800**

Basic probability theory, discrete and continuous random variables, point and interval estimation, test of hypotheses, one-way analysis of variance, and simple linear regression. Note: no co-credit with MATH 4810. Prereq: MATH 2411; coreq: MATH 2421. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 3939 - Internship/Cooperative Education

Summer 2010 Registration **MATH 3939**

Designed experiences involving application of specific, relevant concepts and skills in supervised employment situations. Prereq: junior standing and 2.75 GPA. **Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 4010 - History of Mathematics

Summer 2010 Registration **MATH 4010**

A history of the development of mathematical techniques and ideas from early civilization to the present, including the inter-relationships of mathematics and sciences. Prereq: MATH 1401. Cross-listed with MATH 5010. **Semester Hours:** 3to 3**When Offered:** SPRING

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 4027 - Topics in Mathematics

Summer 2010 Registration **MATH 4027**

Special topics in mathematics will be covered; consult 'Schedule Planner' for current topics and prerequisites. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 4101 - Applied Statistics Using SAS and SPSS I

Summer 2010 Registration **MATH 4101**

Teaches the practical statistical tools social scientists use to analyze real-world problems. Course split into four modules, each taught by a different instructor. The first module introduces SAS and SPSS; modules 2-4 are problem-based and cover topics such as ANOVA, multivariate regression, and cluster analysis. Prereq: any statistics course. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 4102 - Applied Statistics Using SAS and SPSS II

Summer 2010 Registration **MATH 4102**

(Continuation of MATH 4101.) Students use the skills they learned in the previous semester to analyze a social issue of their choosing and present their findings. In addition to lectures, weekly one-on-one meetings between faculty and student are required. Prereq: MATH 4101. **Semester Hours:** 3to 3 **When Offered:** *SPRING*
Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 4110 - Theory of Numbers

Summer 2010 Registration **MATH 4110**

Every other year. Topics include divisibility, prime numbers, congruencies, number theoretic functions, quadratic reciprocity, and special diophantine equations, with applications in engineering. Prereq: MATH 3000. Cross-listed with MATH 5110. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 4201 - Topology

Summer 2010 Registration **MATH 4201**

Metric spaces and topological spaces, compactness, separation properties, and connectedness. Prereq: MATH 3000. **Semester Hours:** 3to 3 **When Offered:** *SPRING*
Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 4220 - Higher Geometry II

Summer 2010 Registration **MATH 4220**

Studies affine and projective geometries. Coordinates are introduced in this framework. Planes and higher dimensional spaces are examined. Prereq: MATH 3191. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 4310 - Introduction to Real Analysis I

Summer 2010 Registration **MATH 4310**

Calculus of one variable, the real number system, continuity, differentiation, integration theory, sequence and series. Prereq: MATH 2421 and 3000. **Semester Hours:** 4to

4When Offered: *FALL*

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 4320 - Introduction to Real Analysis II

Summer 2010 Registration **MATH 4320**

Convergence, uniform convergence; Taylor's theorem; calculus of several variables including continuity, differentiation and integration; Picard's theorem in ordinary differential equations and Fourier series. Prereq: MATH 4310. **Semester Hours:** 4to

4When Offered: *SPRING*

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 4387 - Regression Analysis, Modeling and Time Series

Summer 2010 Registration **MATH 4387**

Topics include linear and multiple regression, basic experimental designs, one-way analysis of variance. Emphasis is on practical aspects and applications of linear models to the analysis of data in business engineering, behavioral, biological and physical sciences. Prereq: MATH 3191 and 3800/4820. Cross-listed with MATH 5387. **Semester**

Hours: 3to 3**When Offered:** *FALL*

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 4390 - Game Theory

Summer 2010 Registration **MATH 4390**

Begins with an introduction to the mathematical theory of games and the definition of a solution, including extensive and normal forms of representation. The fundamental minimax theorem is presented first as the foundation for two-person matrix games, then extended with fixed point theory to other games. Principles of dominance and solution methods are presented, plus applications to economics, political science, engineering, and other fields. An introduction to n-person game theory is included, with basic terms and concepts. Prereq: MATH 2421, 3191 and 3800/4810. Cross-listed with MATH 5390. **Semester Hours:** 3to 3**When Offered:** *FASPRSUM*

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 4394 - Experimental Designs

Summer 2010 Registration **MATH 4394**

Infrequent. Completely randomized block designs factorial and fractional factorial experiments, balanced incomplete block designs, responses surface methods. Prereq:

MATH 4387. Cross-listed with MATH 5394. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 4408 - Applied Graph Theory

Summer 2010 Registration **MATH 4408**

Introduces discrete structures and applications of graph theory to computer science, engineering, operations research, social science, and biology. Topics include connectivity, coloring, trees, Euler and Hamiltonian paths and circuits, matching and covering problems, shortest route and network flows. Prereq: CSCI/MATH 2511 or MATH 3000. Cross-listed with CSCI 4408. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 4409 - Applied Combinatorics

Summer 2010 Registration **MATH 4409**

Every other year. Major emphasis is on applied combinatorics and combinatorial algorithms, with applications in computer science and operations. Topics include general counting methods, generating functions, recurrence relations, inclusion-exclusion, and block designs. Prereq: MATH 4408 and 3140. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 4450 - Complex Variables

Summer 2010 Registration **MATH 4450**

Infrequent. Topics include complex algebra, Cauchy-Riemann equations, Laurent expansions, theory of residues, complex integration, and introduction to conformal mapping. Prereq: MATH 2421 and MATH 3000. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 4576 - Mathematical Foundations of Artificial Intelligence I

Summer 2010 Registration **MATH 4576**

Infrequent. Fundamentals course that complements other approaches, such as in engineering, psychology, and business administration. Here, the emphasis is on the mathematical foundations. Topics include logical inference, problem solving, heuristic search, neural search, neural nets, analogical reasoning and learning. Models and paradigms also consider different measures of uncertainty. Prereq: CSCI 2511, MATH 2511/3000 and 3191. Cross-listed with MATH 5576. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 4590 - Applied Math Senior Sem

Summer 2010 Registration **MATH 4590**

Semester Hours: 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 4650 - Numerical Analysis I

Summer 2010 Registration **MATH 4650**

Methods and analysis of techniques used to resolve continuous mathematical problems on the computer. Solution of linear and nonlinear equations, interpolation and integration. Prereq: MATH 2411, 3191 or 3195, and programming experience. Cross-listed with CSCI 4650, 5660, and MATH 5660. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 4660 - Numerical Analysis II

Summer 2010 Registration **MATH 4660**

Numerical differentiation and integration, numerical solution of ordinary differential equations, and numerical solutions of partial differential equations as time allows. Prereq: MATH 3195 or both 3191 and 3200; MATH or CSCI 4650 or 5660; or programming experience. Cross-listed with MATH 5661, CSCI 4660 and 5661. **Semester Hours:** 3to 3 **When Offered:** FALL SUM

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 4674 - Parallel Computing and Architectures

Summer 2010 Registration **MATH 4674**

Infrequent. Examines a range of topics involved in using parallel operations to improve computational performance. Parallel architectures, parallel algorithms, parallel programming languages, interconnection networks, and their relation to specific computer architectures. Prereq: MATH 4650. Cross-listed with MATH 5674. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 4733 - Partial Differential Equations

Summer 2010 Registration **MATH 4733**

Infrequent. Initial/Boundary value problems for first-order, wave, heat and Laplace Equations; maximum principles; Fourier Series and applications. Prereq: MATH 2421 and 3200. Cross-listed with MATH 5733. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 4779 - Math Clinic

Summer 2010 Registration **MATH 4779**

The clinic is intended to illustrate the applicability and utility of mathematical concepts. Research problems investigated originate from a variety of sources--industry, government agencies, educational institutions, or nonprofit organizations. Prereq: consult Schedule Planner or instructor. Cross-listed with MATH 5779. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 4788 - Bioinformatics

Summer 2010 Registration **MATH 4788**

Provides a broad exposure to the basic concepts and methodologies of bioinformatics and their application to analyzing genomic and proteomic data. Topics may include dynamic programming algorithms, graph theoretic techniques, hidden Markov models, phylogenetic trees, RNA/protein structure prediction and microarray analysis. Prereq: CSCI 1410 and MATH 3191 or 3195. Cross-listed with CSCI 4788, PHYS 4788. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 4791 - Continuous Modeling

Summer 2010 Registration **MATH 4791**

Every other year. Surveys mathematical problems that arise in natural sciences and engineering. Topics may include population models, epidemic models, mechanics, heat transfer and diffusion, tomography, pharmaco-kinetics, traffic flow, fractal models, wave phenomena, and natural resource management. Most models discussed are based on differential and integral equations. Emphasis is formulation and validation of models as well as methods of solution. Prereq: MATH 3191 and 3200. Cross-listed with MATH 5791. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 4792 - Probabilistic Modeling

Summer 2010 Registration **MATH 4792**

Every other year. Markov chains; Poisson processes, continuous time Markov chains, elementary topics in queuing theory, and some mathematical aspects of Monte Carlo simulation, including random variate generation, variance reduction, and output analysis. Prereq: MATH 4810, 5310 and some programming experience. Cross-listed with MATH 5792. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 4793 - Discrete Math Modeling

Summer 2010 Registration **MATH 4793**

Every other year. Focuses on the use of graph theory and combinatorics to solve problems in a wide variety of disciplines. Applications are selected from computer science, communication networks, economics, operations research, and the social, biological and environmental sciences. Prereq: MATH 3191 and 4408. Cross-listed with MATH 5793. **Semester Hours:** 3 to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 4794 - Optimization Modeling

Summer 2010 Registration **MATH 4794**

Every other year. Principles of model formulation and analysis are developed by presenting a wide variety of applications, both for natural phenomena and social systems. Examples of optimization models to represent natural phenomena include principles of least time and energy. Examples in social systems include resource allocation, environmental control and land management. Specific applications vary, but are chosen to cover a wide scope that considers dichotomies, such as discrete vs. continuous, static vs. dynamic, and deterministic vs. stochastic. Some computer modeling language (like GAMS) is taught. Prereq: MATH 2421 and 3191. Cross-listed with MATH 5794. **Semester Hours:** 3 to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 4810 - Probability

Summer 2010 Registration **MATH 4810**

Examines elementary theory of probability, including independence, conditional probability, and Bayes' theorem; random variables, expectations and probability distributions; joint and conditional distributions; functions of random variables; limit theorems, including the central limit theorem. Prereq: MATH 2421 and 3191. Cross-listed with MATH 5310. **Semester Hours:** 3 to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 4820 - Statistics

Summer 2010 Registration **MATH 4820**

Point and confidence interval estimation, principles of maximum likelihood, sufficiency and completeness, tests of simple and composite hypothesis, linear models and multiple regression, analysis of variance. Prereq: MATH 3800. MATH 4810 highly recommended, but not required. Cross-listed with MATH 5320. **Semester Hours:** 3 to 3 **When Offered:** SPRING

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 4830 - Applied Statistics

Summer 2010 Registration **MATH 4830**

Review of estimation, confidence intervals and hypothesis testing; Anova; categorical data analysis; non-parametric tests; linear and logistic regression. Prereq: an introductory course in statistics such as MATH 2830 or permission of instructor. Cross-listed with MATH 5830. **Semester Hours:** 3to 3**When Offered:** *SPRING*
Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 4840 - Independent Study

Summer 2010 Registration **MATH 4840**

Variable credit depending on the student's needs. Offered for the advanced student who desires to pursue a specific topic in considerable depth. Note: Supervision by a full-time faculty member is necessary, and the dean's office must concur. Students may register for this course more than once with departmental approval. **Semester Hours:** 1to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 5000 - RM-MSMSP: Algebraic Patterns and Functions I

Summer 2010 Registration **MATH 5000**

Systematic study of the core elements of algebra: linear, quadratic, exponential, logarithmic functions and their graphs. Includes modeling using graphing calculators and real world applications. Concepts are linked to other scientific, mathematical, and pedagogical domains. This course is not applicable toward any degree in the College of Liberal Arts and Sciences. Prereq: permission of project director. **Semester Hours:** 4to 4
Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 5002 - RM-MSMSP: Algebraic Patterns and Functions II

Summer 2010 Registration **MATH 5002**

This course is a continuation of the material covered in MATH 5000. Topics that will be covered include logarithmic, exponential and trigonometric functions and applications, parametric equations, systems of equations and inequalities, matrices and linear programming. This course is not applicable toward any degree in the College of Liberal Arts and Sciences. Prereq: MATH 5000 or permission of instructor. **Semester Hours:** 4to 4
Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 5004 - RM-MSMP: Statistics and Probability

Summer 2010 Registration **MATH 5004**

Studies the collection, presentation, and analysis of data; and elements and applications of counting discrete probability. Includes real world applications and technology. Concepts are linked to other scientific, mathematical, and pedagogical domains. This course is not applicable toward any degree in the College of Liberal Arts and Sciences.

Prereq: permission of project director. **Semester Hours:** 4to 4
Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 5005 - RM-MSMSP: Geometry

Summer 2010 Registration **MATH 5005**

Systematic study of advanced geometric concepts: history of geometry and measurement, patterns among shapes, 2- and 3-dimensional shapes, constructions, symmetry or transformational geometry. Includes applications and activity-oriented instruction. Concepts are linked to other scientific, mathematical, and pedagogical domains. This course is not applicable toward any degree in the College of Liberal and Sciences. Prereq: permission of project director. **Semester Hours:** 4to 4
Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 5006 - RM-MSMSP: Mathematics of Change

Summer 2010 Registration **MATH 5006**

Systematic study of the application of calculus to the analysis of changing systems in real world applications. Emphasizes the connections that exist between calculus and aspects of middle school curricula. Concepts are linked to other scientific, mathematical, and pedagogical domains. This course is not applicable toward any degree in the College of Liberal Arts and Sciences. Prereq: MATH 5000 (or equivalent) or permission of project director. **Semester Hours:** 4to 4
Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 5007 - RM-MSMP: Discrete Math--Counting the Possibilities

Summer 2010 Registration **MATH 5007**

Systematic study of basic techniques in discrete mathematics and their various applications: permutations and combinations, inclusion or exclusion, pigeonhole principle, graph theory, and recursive pattern solving. Applications to topics such as network analysis and voting theory are stressed. Concepts are linked to other scientific, mathematical, pedagogical domains. This course is not applicable toward any degree in the College of Liberal Arts and Sciences. Prereq: MATH 5000 (or equivalent) or permission of project director. **Semester Hours:** 4to 4
Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 5008 - RM-MSMSP: Discovery and Use of the History of Math

Summer 2010 Registration **MATH 5008**

Systematic study of the people, events, ideas and issues from the history of mathematics, focusing on historical topics that are central to the discipline and teaching of mathematics and emphasizing web research of historical topics of interest. Concepts are linked to other scientific, mathematical, and pedagogical domains. Note: This course

is not applicable toward any degree in the College of Liberal Arts and Sciences. Prereq: permission of the project director. **Semester Hours:** 4to 4
Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 5009 - RM-MSMSP: Math Modeling--Using and Applying Math

Summer 2010 Registration **MATH 5009**

Systematic study of math modeling using algebra, geometry, discrete mathematics, rates of change, and statistics to solve real-world problems in areas such as finance, biology, economics, and physics. Concepts are linked to other scientific, mathematical, societal, and pedagogical domains. This course is not applicable toward any degree in the College of Liberal Arts and Sciences. Prereq: MATH 5006 (or equivalent) or permission of instructor. **Semester Hours:** 4to 4
Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 5010 - History of Mathematics

Summer 2010 Registration **MATH 5010**

A history of the development of mathematical techniques and ideas from early civilization to the present, including the inter-relationships of mathematics and sciences. Prereq: MATH 1401. Not open to students who have had MATH 4010. No credit for applied math graduate students. Cross-listed with MATH 4010. **Semester Hours:** 3to 3
When Offered: *SPRING*
Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 5011 - RM-MSMSP: Mathematics and Science of Musical Instruments

Summer 2010 Registration **MATH 5011**

A mathematical modeling course which investigates the mathematics and physics behind musical instruments while providing a deeper understanding of trigonometry and elementary calculus concepts. Note: This course is not applicable toward any degree in the College of Liberal Arts and Sciences. Prereq: MATH 5000, 5002. **Semester Hours:** 4to 4
Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 5017 - Topics in Mathematics for Teachers

Summer 2010 Registration **MATH 5017**

Topics vary from semester to semester. Designed for professional mathematics teachers. Note: This course will not count toward a degree in applied mathematics. Prereq: permission of instructor. **Semester Hours:** 1to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 5027 - Topics in Applied Mathematics

Summer 2010 Registration **MATH 5027**

Selected topics in mathematical problems arising from various applied fields such as mechanics, electromagnetic theory, economics and biological sciences. Prereq: permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 5070 - Applied Analysis

Summer 2010 Registration **MATH 5070**

Designed to serve as an introduction to real analysis. Topics include: fundamentals of logic and theorem proving, infimum and supremum, real numbers, point-set topology in metric spaces, properties of functions, sequences and series of functions, fixed point theorems, Riemann integral, power series. Prereq: MATH 4320. **Semester Hours:** 3to 3
When Offered: *SPRING*
Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 5110 - Theory of Numbers

Summer 2010 Registration **MATH 5110**

Every other year. Topics include divisibility, prime numbers, congruences, number theoretic functions, quadratic reciprocity, and special Diophantine equations, with applications in engineering. Prereq: MATH 3000. Cross-listed with MATH 4110. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 5135 - Functions of a Complex Variable

Summer 2010 Registration **MATH 5135**

Infrequent. The complex plane, infinite series and products, elementary special functions, Cauchy-Riemann equations, conformal mapping, complex integration, Cauchy integral theory, and residue theory. Prereq: MATH 4320; MATH 5070 recommended. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 5198 - Mathematics for Bioscientists

Summer 2010 Registration **MATH 5198**

Infrequent. Develops mathematical reasoning: introduces linear algebra, discrete structures, graph theory, probability, and differential equations, using applications to molecular biology. Note: No credit for mathematics or engineering students. Prereq:

MATH 2411. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 5250 - Problem Solving Tools

Summer 2010 Registration **MATH 5250**

Students learn and refine both problem solving techniques and computer programming skills. Examples, exercises, and projects are taken from a wide range of mathematical topics including algebra, calculus, linear algebra and probability. Note: This course will not count toward a graduate degree in applied mathematics. Coreq: MATH 2421. Cross-listed with MATH 3250. **Semester Hours:** 3to 3 **When Offered:** FALL

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 5310 - Probability

Summer 2010 Registration **MATH 5310**

Examines elementary theory of probability, including independence, conditional probability, and Bayes' theorem; random variables, expectations and probability distributions; joint and conditional distributions; functions of random variables; limit theorems, including the central limit theorem. Prereq: MATH 2421 and 3191. Cross-listed with MATH 4810. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 5320 - Statistics

Summer 2010 Registration **MATH 5320**

Point and confidence interval estimation, principles of maximum likelihood, sufficiency and completeness, tests of simple and composite hypothesis, linear models and multiple regression, analysis of variance. Prereq: MATH 3800. MATH 4810 highly recommended, but not required. Cross-listed with MATH 4820. **Semester Hours:** 3to 3 **When Offered:** SPRING

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 5350 - Mathematical Theory of Interest

Summer 2010 Registration **MATH 5350**

Rates of interest, term structure of interest rates, force of interest, yield rate, principal, equation of value, annuity, perpetuity, stocks, bonds, other financial instruments. Prereq: MATH 4810/5310. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 5351 - Actuarial Models

Summer 2010 Registration **MATH 5351**

Severity models, frequency models, aggregate models, risk measures, ruin theory, construction and selection of empirical models, credibility, simulation. Prereq: Probability (MATH 4810/5310), Statistics (MATH 4820/5320). **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 5387 - Regression Analysis, Modeling and Time Series

Summer 2010 Registration **MATH 5387**

Topics include linear and multiple regression, basic experimental designs, one-way analysis of variance. Emphasis is on practical aspects and applications of linear models to the analysis of data in business engineering and behavioral, biological and physical sciences. Prereq: MATH 3191 and 3800/4820. Cross-listed with MATH 4387. **Semester Hours:** 3to 3 **When Offered:** FALL
Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 5390 - Game Theory

Summer 2010 Registration **MATH 5390**

Infrequent. Begins with an introduction to the mathematical theory of games and the definition of a solution, including extensive and normal forms of representation. The fundamental minimax theorem is presented first, as the foundation for two-person matrix games, then extended with fixed point theory to other games. Principles of dominance and solution methods are presented, plus applications to economics, political science, engineering, and other fields. An introduction to n-person game theory is included, with basic terms and concepts. Prereq: MATH 2421, 3191 and 3800/4810. Cross-listed with MATH 4390. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 5394 - Experimental Designs

Summer 2010 Registration **MATH 5394**

Infrequent. Completely randomized block designs, factorial and fractional factorial experiments, balanced incomplete block designs, response surface methods. Prereq: MATH 4387 and 5387. Cross-listed with MATH 4394. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 5410 - Modern Cryptology

Summer 2010 Registration **MATH 5410**

Every other year. Deals with the mathematics that underlies modern cryptology. Topics include: classical cryptology, public and private key cryptosystems, secret sharing schemes, authentication schemes, linear feedback shift registers, discrete logarithm and

elliptic curve-based schemes. Prereq: MATH 3191. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 5432 - Computational Graph Theory

Summer 2010 Registration **MATH 5432**

Infrequent. Algorithmic techniques in graph theory and other discrete mathematics areas. Typical topics include: branch-bound algorithms, matching, colorings, domination, min-plus algebra, simulated annealing and related heuristics, NP-completeness theory.

Prereq: a course in graph theory and some programming experience. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 5446 - Theory of Automata

Summer 2010 Registration **MATH 5446**

Infrequent. Studies the relationships between classes of formal languages (regular, context-free, context-sensitive, phrase-structure) and classes of automata (finite-state, pushdown, Turing machines). Additional topics include decidability and computability issues. Prereq: MATH 3000 and 3140. Cross-listed with CSCI 5446. **Semester Hours:**

3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 5490 - Network Flows

Summer 2010 Registration **MATH 5490**

Every other year. Begins with the classical min-cost flow problem, defined on an ordinary network. Other problems, such as shortest path, are also shown in this class. Both theory and algorithms are presented. Extensions include generalized networks, nonlinear costs, fixed charges, multi-commodity flows and additional applications, such as in communications networks. Prereq: graduate standing in math or computer science. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 5576 - Mathematical Foundations of Artificial Intelligence I

Summer 2010 Registration **MATH 5576**

Infrequent. A fundamentals course that complements other approaches, such as in engineering, psychology, and business administration. Here the emphasis is on the mathematical foundations. Topics include logical inference, problem solving, heuristic search, neural nets, analogical reasoning and learning. Models and paradigms also consider different measures of uncertainty. Prereq: CSCI 2511, MATH 2511/3000 and 3191. Cross-listed with MATH 4576. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 5593 - Linear Programming

Summer 2010 Registration **MATH 5593**

A linear program is an optimization problem that seeks to minimize or maximize a linear function subject to a system of linear inequalities and equations. This course begins with examples of linear programs and variations in their representations. Basic theoretical foundations covered include polyhedra, convexity, linear inequalities and duality. Two classes of solution algorithms are given: simplex methods and interior point methods. The primary emphasis of this course is on mathematical foundations, and applications are used to illustrate the main results. Prereq: MATH 3191. **Semester Hours: 3 to 3** **When Offered: FALL**

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 5610 - Computational Biology

Summer 2010 Registration **MATH 5610**

Every other year. Basic introduction and mathematical foundations. Topics include comparative genomics; proteomics; phylogeny; dynamic programming and sequence alignment; gene expression arrays and clustering; Bayesian networks; structure prediction and hidden Markov models. Prereq: CSCI 1410 or equivalent programming experience, and MATH 3191 or 3195. **Semester Hours: 3 to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 5660 - Numerical Analysis I

Summer 2010 Registration **MATH 5660**

Methods and analysis of techniques used to resolve continuous mathematical problems on the computer. Solution of linear and nonlinear equations, interpolation and integration. Prereq: MATH 2411, 3191 or 3195, and programming experience. Cross-listed with CSCI 4650, 5660, and MATH 4650. **Semester Hours: 3 to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 5661 - Numerical Analysis II

Summer 2010 Registration **MATH 5661**

Numerical differentiation and integration, numerical solution of ordinary differential equations, and numerical solutions of partial differential equations as time allows. Prereq: MATH 3195 or both 3191 and 3200; MATH or CSCI 4650 or 5660; or programming experience. Cross-listed with MATH 4660, CSCI 4660 and 5661. **Semester Hours: 3 to 3** **When Offered: SPRING**

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 5674 - Parallel Computing and Architectures

Summer 2010 Registration **MATH 5674**

Infrequent. Examines a range of topics involved in using parallel operations to improve computational performance. Parallel architectures, parallel algorithms, parallel programming languages, interconnection networks, and their relation to specific computer architectures. Prereq: MATH 4650. Cross-listed with MATH 4674. **Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 5718 - Applied Linear Algebra

Summer 2010 Registration **MATH 5718**

Topics include: vector spaces, practical solution of systems of equations, projections, eigenvalues and eigenvectors, unitary transformations, Schur QR, singular value decompositions, similarity transformations, Jordan forms, and positive definite matrices. Prereq: MATH 3191. **Semester Hours:** 3to 3 **When Offered:** FALL

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 5733 - Partial Differential Equations

Summer 2010 Registration **MATH 5733**

Infrequent. Initial/Boundary value problems for first-order, wave, heat and Laplace Equations; maximum principles; Fourier Series and applications. Prereq: MATH 2421 and 3200; graduate standing. Cross-listed with MATH 4733. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 5779 - Math Clinic

Summer 2010 Registration **MATH 5779**

The clinic is intended to illustrate the applicability and utility of mathematical concepts. Research problems investigated originate from a variety of sources--industry, government agencies, educational institutions, or nonprofit organizations. Prereq: consult Schedule Planner or instructor. Cross-listed with MATH 4779. **Semester Hours:**

3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 5791 - Continuous Modeling

Summer 2010 Registration **MATH 5791**

Every other year. Surveys mathematical problems that arise in natural sciences and engineering. Topics may include population models, epidemic models, mechanics, heat transfer and diffusion, tomography, pharmaco-kinetics, traffic flow, fractal models, wave phenomena, and natural resource management. Most models discussed are based on differential and integral equations. Emphasis is formulation and validation of models as well as methods of solution. Prereq: MATH 3191 and 3200. Cross-listed with MATH

4791. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 5792 - Probabilistic Modeling

Summer 2010 Registration **MATH 5792**

Every other year. Markov chains; Poisson processes, continuous time Markov chains, elementary topics in queuing theory, and some mathematical aspects of Monte Carlo simulation, including random variate generation, variance reduction, and output analysis.

Prereq: MATH 4810 or 5310 and some programming experience. Cross-listed with MATH 4792. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 5793 - Discrete Math Modeling

Summer 2010 Registration **MATH 5793**

Every other year. Focuses on the use of graph theory and combinatorics to solve problems in a wide variety of disciplines. Applications are selected from computer science, communication networks, economics, operations research, and the social, biological and environmental sciences. Prereq: MATH 3191 and 4408. Cross-listed with MATH 4793. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 5794 - Optimization Modeling

Summer 2010 Registration **MATH 5794**

Every other year. Principles of model formulation and analysis are developed by presenting a wide variety of applications, both for natural phenomena and social systems. Examples of optimization models to represent natural phenomena include principles of least time and energy. Examples in social systems include resource allocation, environmental control and land management. Specific applications vary, but are chosen to cover a wide scope that considers dichotomies, such as discrete vs. continuous, static vs. dynamic, and deterministic vs. stochastic. Some computer modeling language (like GAMS) is taught. Prereq: MATH 2421 and 3191. Cross-listed with MATH 4794. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 5830 - Applied Statistics

Summer 2010 Registration **MATH 5830**

Review of estimation, confidence intervals and hypothesis testing; ANOVA; categorical data analysis; non-parametric tests; linear and logistic regression. Prereq: an introductory course in statistics such as MATH 2830 or permission of instructor. Cross-

listed with MATH 4830. **Semester Hours:** 3 to 3 **When Offered:** *SPRING*
Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 5840 - Independent Study

Summer 2010 Registration **MATH 5840**

Available only with approval of graduate advisor. Subjects arranged. **Semester Hours:** 1 to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 5939 - Internship/Cooperative Education

Summer 2010 Registration **MATH 5939**

Semester Hours: 1 to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 5950 - Master's Thesis

Summer 2010 Registration **MATH 5950**

Semester Hours: 1 to 8

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 5960 - Master's Project

Summer 2010 Registration **MATH 5960**

Note: Credit hours for this course will not count toward a graduate degree in Applied Mathematics. **Semester Hours:** 1 to 8

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 6023 - Topics in Discrete Math

Summer 2010 Registration **MATH 6023**

Topics may include graph theory, combinatorics, matroid theory, combinatorial matrix theory, finite geometry, design theory, and discrete algorithms. Note: Since topic varies by semester, students may register for this course more than once. Prereq: permission of the instructor. **Semester Hours:** 3 to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 6131 - Real Analysis

Summer 2010 Registration **MATH 6131**

Every other year. Lebesgue measure and integration, general measure and integration theory, Radon-Nikodym Theorem, Fubini Theorem. Prereq: MATH 4320 or

5070.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 6330 - Workshop in Statistical Consulting

Summer 2010 Registration **MATH 6330**

Students participate as consultants in a drop-in consulting service operated by the department. Seminars provide students with supervised experience in short term statistical consulting. Note: Since problems vary each semester, students may register for this course more than once. Prereq: MATH 5387.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 6360 - Exploratory Data Analysis

Summer 2010 Registration **MATH 6360**

Every other year. Philosophy and techniques associated with exploratory (vs. confirmatory) data analysis, both as originally presented (John Turkey) and current computer-based implementations. Graphical displays, robust-resistant methods (lines, two-way fits), diagnostic plots, standardization. Prereq: Previous statistics course or permission of instructor.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 6376 - Statistical Computing

Summer 2010 Registration **MATH 6376**

Computationally-intensive methods in statistics, including random number generation and Monte Carlo methods, data partitioning and re-sampling, numerical and graphical methods, nonparametric function estimation, statistical models and data mining methodology, analysis of large data sets. Prereq: MATH 4820/4830 and 4387. Cross-listed with MATH 7376.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 6380 - Stochastic Processes

Summer 2010 Registration **MATH 6380**

Every other year. Markov processes in discrete and continuous time, renewal theory, martingales, Brownian motion, branching processes, and stationary processes. Applications include queuing theory, performance evaluation of computer and communication systems and finance. Prereq: MATH 3191, MATH 3200, and MATH 4810/5310.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 6384 - Analysis of Dependent Data

Summer 2010 Registration **MATH 6384**

Infrequent. Statistical methods for the analysis of data with temporal and/or spatial dependence. Longitudinal data, stationary and non-stationary time series models, geostatistical and lattice spatial models, point processes, hierarchical models. Prereq: MATH 4820 or 4830 and MATH 4387. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 6388 - Advanced Statistical Methods for Research

Summer 2010 Registration **MATH 6388**

Infrequent. The second in a two-semester course in applied statistics. Topics include multifactor analysis of variance and covariance, categorical data, general linear models, bootstrapping, and other computationally intensive statistical methods. Prereq: MATH 5387. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 6393 - Introduction to Bayesian Statistics

Summer 2010 Registration **MATH 6393**

Prior and posterior distributions, conjugate models, single and multiparameter models, hierarchical models, mixture models, numerical methods for evaluating posteriors, Monte Carlo methods, and Markov chain Monte Carlo. Prereq: MATH 3800 or both MATH 4810 and MATH 4820 (or equivalent). Some computer programming experience. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 6395 - Multivariate Methods

Summer 2010 Registration **MATH 6395**

Every other year. Multivariate distributions, hypothesis testing and estimation. Multivariate analysis of variance, discriminant analysis, multidimensional scaling, factor analysis, principal components. Prereq: MATH 5387. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 6398 - Calculus of Variations and Optimal Control

Summer 2010 Registration **MATH 6398**

Infrequent. Standard variational problems (geodesic, time-of-transit, isoperimetric, surface, area), Euler-Lagrange equations, variational principles in mechanics, optimal control problems, necessary conditions for optimality, Pontryagin principle. Prereq: MATH4320. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 6404 - Applied Graph Theory

Summer 2010 Registration **MATH 6404**

Every other year. Emphasis on graph theory. Topics will include trees, digraphs and networks, intersection graphs, coloring, clique coverings, distance, paths and cycles. Topics are motivated by applications. Prereq: Graduate standing. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 6595 - Computational Methods in Nonlinear Programming

Summer 2010 Registration **MATH 6595**

Every other year. Introduces fundamental algorithms and theory for nonlinear optimization problems. Topics include Newton, quasi-Newton and conjugate direction methods; line search and trust-region methods; active set, penalty and barrier methods for constrained optimization; convergence analysis and duality theory. Prereq: MATH 4320 and MATH 5718. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 6653 - Introduction to Finite Element Methods

Summer 2010 Registration **MATH 6653**

Every other year. The Finite Element Method (FEM) is introduced as a generic tool for the approximation of partial differential equations that model engineering and physics problems of interest. Elliptic, hyperbolic, and parabolic equations are solved with FEM. Prereq: MATH 5660. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 6735 - Continuum Mechanics

Summer 2010 Registration **MATH 6735**

Every other year. Indicical notation. Eulerian and Lagrangian coordinates. Deformation, strain, strain rate, stress. Conservation of mass, momentum, and energy. Exploitation of entropy production inequality to obtain constitutive equations for elastic, viscous, visco elastic, plastic, or porous materials. Prereq: MATH 3191 and 3200 or graduate standing. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 6840 - Independent Study

Summer 2010 Registration **MATH 6840**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 7101 - Topology

Summer 2010 Registration **MATH 7101**

Every other year. Topological spaces, compactness, separation properties and connectedness. Prereq: MATH 4320. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 7132 - Functional Analysis

Summer 2010 Registration **MATH 7132**

Every other year. Linear metric and topological spaces, duality, weak topology, spaces of functions, linear operators, compact operators, elements of spectral theory, and operator calculus. Prereq: MATH 6131. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 7376 - Statistical Computing

Summer 2010 Registration **MATH 7376**

Computationally-intensive methods in statistics, including random number generation and Monte Carlo methods, data partitioning and re-sampling, numerical and graphical methods, nonparametric function estimation, statistical models and data mining methodology, analysis of large data sets. Prereq: MATH 4820/4830 and 4387. Cross-listed with MATH 6376. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 7381 - Mathematical Statistics I

Summer 2010 Registration **MATH 7381**

Every other year. Mathematical theory of statistics. Parametric inference: discrete and continuous distributions, methods of parameter estimation, confidence intervals. Prereq: MATH 3191 and 4820/5320. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 7382 - Mathematical Statistics II

Summer 2010 Registration **MATH 7382**

Every other year. (Continuation of MATH 7381.) Hypothesis testing, robust estimation, tolerance intervals, nonparametric inference, sequential methods. Prereq: MATH 7381. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 7384 - Mathematical Probability

Summer 2010 Registration **MATH 7384**

Every other year. Measurable spaces, probability measures, random variables, conditional expectations and martingales. Convergence in probability, almost sure convergence, convergence in distribution, limit theorems (law of large numbers, central limit theorem, laws of iterated logarithm). Prereq: MATH 4810/5310 and MATH 5070 or MATH 6131. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 7385 - Stochastic Differential Equations

Summer 2010 Registration **MATH 7385**

Brownian motion, Ito integral, Ito formula, Dynkin's formula, stochastic optimal control, boundary value problems, Girsanov theorem, mathematical finance, optimal stopping. Prereq: MATH 7384. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 7397 - Nonparametric Statistics

Summer 2010 Registration **MATH 7397**

Every three years. Statistical inference without strong model assumptions. Hypothesis testing and estimation using permutations and ranks, analysis of variance, and nonparametric model fitting. Prereq: applied mathematics - statistics (PhD.) **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 7405 - Advanced Graph Theory

Summer 2010 Registration **MATH 7405**

Continuation of MATH 6404. Topics to be covered include: trees and optimization, encoding and embedding of graphs, generalized colorings and applications, perfect graphs, extremal problems, substructures, connectedness' and cycles. Prereq: MATH 6404 or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 7409 - Applied Combinatorics

Summer 2010 Registration **MATH 7409**

Every other year. Emphasis is on enumerative combinatorics. Topics include multinomial coefficients, generating functions, SDRs, Polya's enumeration theory, pigeon-hole principle, inclusion/exclusion and Moebius inversion of finite posets. Topics may also include introduction to designs and finite geometry. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 7410 - Combinatorial Structures

Summer 2010 Registration **MATH 7410**

Every other year. Finite combinatorial structures; existence, construction and applications. Topics include Latin squares, Hadamard matrices, block designs, finite geometries and extremal and non-constructive combinatorics. Prereq: MATH 5718 and MATH 7409 or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 7413 - Modern Algebra I

Summer 2010 Registration **MATH 7413**

Every other year. Groups, rings and ideals, integral domains. Prereq: MATH 3140. Coreq: MATH 5718. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 7414 - Modern Algebra II

Summer 2010 Registration **MATH 7414**

Every other year. Field theory, Galois theory, Modules over rings, especially over integral domains. Prereq: MATH 5718 and MATH 7413. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 7419 - Mathematical Coding Theory.

Summer 2010 Registration **MATH 7419**

Error correcting codes are used to recapture information that has been distorted in some transmission process. Various coding schemes use block codes obtained from algebraic, geometric and combinatorial structures. Topics include: fundamentals, linear, Reed-Muller, Golay, cyclic and BCH codes. Prereq: MATH 5718. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details.

MATH 7421 - Projective Geometry

Summer 2010 Registration **MATH 7421**

Every other year. Synthetic and algebraic development of projective spaces. Collineation groups, representation theorems, quadratic sets and applications. Emphasis is on finite projective spaces. Prereq: MATH 5718 and MATH 7409. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 7593 - Advanced Linear Programming

Summer 2010 Registration **MATH 7593**

Every three years. A Ph.D. level course that goes deeper into linear programming, starting from where a graduate-level course (5593) ends. Topics include advanced sensitivity analysis, sparse matrix techniques, and special structures. Additional topics, which vary, include deeper analysis of algorithms, principles of model formulation and solution analysis. Prereq: MATH 5593. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 7594 - Integer Programming

Summer 2010 Registration **MATH 7594**

Every three years. A Ph.D. level course that uses linear programming (5593), especially polyhedral theory, to introduce concepts of valid inequalities and superadditivity. Early group-theoretic methods by Gomory and Chvatal's rounding function are put into modern context, including their role in algorithm design and analysis. Duality theory and relaxation methods are presented for general foundation and analyzed for particular problem classes. Among the special problems considered are knapsack, covering, partitioning, packing, fix-charge, traveling salesman, generalized assignment matchings. Matroids are introduced and some greedy algorithms are analyzed. Additional topics, which vary, include representability theory, heuristic search and complexity analysis. Prereq: MATH 5593. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 7595 - Advanced Nonlinear Programming

Summer 2010 Registration **MATH 7595**

Every three years. Focuses primarily on the fundamental theory of nonlinear programming. Topics include convex analysis, optimality criteria, Lagrangian and conjugate duality, stability and sensitivity analysis. Other topics vary depending on the research interests of the instructor. Prereq: MATH 6595. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 7663 - Finite Difference Methods for Partial Differential Equations

Summer 2010 Registration **MATH 7663**

Every other year. Consistency, stability, and convergence for difference schemes. Derivations based on Taylor series and finite series. Methods for parabolic and hyperbolic initial value problems and initial-boundary-value problems, elliptic boundary-value problems, some nonlinear problems. Prereq: MATH 5070 and MATH 5733. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 7665 - Numerical Linear Algebra

Summer 2010 Registration **MATH 7665**

Every other year. Solution of linear equations, eigenvector and eigenvalue calculation, matrix error analysis, orthogonal transformation, iterative methods. Prereq: MATH 5660 and MATH 5718. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 7667 - Introduction to Approximation Theory

Summer 2010 Registration **MATH 7667**

Every other year. Linear normed and Banach spaces, convexity, existence and uniqueness of best approximations, least square approximation and orthogonal polynomials, Chebyshev approximation by polynomials and other related families, splines. Prereq: MATH 5070 and MATH 5718. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 7821 - Topics in Projective Geometry

Summer 2010 Registration **MATH 7821**

Infrequent. Advanced topics in projective geometry. Topics may include finite projective planes, free projective planes, derivation, collineation groups, higher dimensional projective spaces, ovals and ovoids. Prereq: MATH 7421. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 7822 - Topics in Linear Algebra

Summer 2010 Registration **MATH 7822**

Infrequent. Topics may include canonical forms, bilinear and quadratic forms, and combinatorial matrix theory. Prereq: MATH 5718. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 7823 - Topics in Discrete Math

Summer 2010 Registration **MATH 7823**

Infrequent. Advanced topics in discrete mathematics; will change from semester to semester. Prereq: MATH 7413, 6404 and 7409 or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 7824 - Topics in Computational Mathematics

Summer 2010 Registration **MATH 7824**

Infrequent. Topics include methods for differential equations, numerical optimization, approximation theory, inverse problems, and Fourier analysis. Prereq: Permission of

instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 7825 - Topics in Optimization

Summer 2010 Registration **MATH 7825**

Infrequent. Some topics are extensions of those introduced in MATH 6595, while other topics are new. Examples of topics are: duality, stability, sensitivity, consistency, redundancy, principles of optimality, control theory, calculus of various global (non-convex) optimization and model reformulation. Prereq: Permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 7826 - Topics in Probability and Statistics

Summer 2010 Registration **MATH 7826**

Infrequent. Topics may include generalized linear models, information theory, robust methods, spatial statistics, sequential analysis, Monte Carlo methods, queuing theory. Note: Since topics vary each semester, students may register for this course more than once. Prereq: Permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 7827 - Topics in Applied Mathematics

Summer 2010 Registration **MATH 7827**

Infrequent. Topics include problems in differential equations, optimization, mathematical modeling, Fourier analysis and approximation theory. Note: Since topics vary each semester, students may register for this course more than once. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 7840 - Independent Study

Summer 2010 Registration **MATH 7840**

Available only to Ph.D. students. **Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 7921 - Readings in Mathematics

Summer 2010 Registration **MATH 7921**

Annual. Seven readings courses are offered regularly primarily for Ph.D. students at the research level in the designated fields. The seminar format requires significant student participation. Prereq: permission of instructor. **Semester Hours:** 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 7922 - Rdgs:Math Fndts-Cmptr Sc

Summer 2010 Registration **MATH 7922**

Semester Hours: 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 7923 - Readings: Discrete Mathematics

Summer 2010 Registration **MATH 7923**

Semester Hours: 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 7924 - Rdgs:Comp Mathematics

Summer 2010 Registration **MATH 7924**

Semester Hours: 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 7925 - Readings: Optimization

Summer 2010 Registration **MATH 7925**

Semester Hours: 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 7926 - Rdgs:Applied Prob/Stats

Summer 2010 Registration **MATH 7926**

Semester Hours: 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 7927 - Rdgs:Comp/Math Biology

Summer 2010 Registration **MATH 7927**

Semester Hours: 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 8660 - Mathematical Foundations of Finite Element Methods

Summer 2010 Registration **MATH 8660**

Every other year. Theoretical foundations of finite element methods for elliptic boundary value problems, Sobolev spaces, interpolations of Sobolev spaces, variational formulation of elliptic boundary-value problems, basic error, estimates, applications to elasticity, practical aspects of finite element methods. Prereq: MATH 6653 (or equivalent

programming experience), and MATH 6131/7132. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 8664 - Iterative Methods in Numerical Linear Algebra

Summer 2010 Registration **MATH 8664**

Every other year. Preconditioned iterative methods for linear systems and eigen problems, conjugate gradients, multigrid and domain decomposition. Prereq: MATH 5660 and MATH 7665. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MATH 8990 - Doctoral Dissertation

Summer 2010 Registration **MATH 8990**

Only for students working on their Ph.D. research. **Semester Hours:** 1to 10
Registration is changing. Visit our website for details ucdenver.edu/registration.

MECH 1025 - CAD and Graphics for Mechanical Engineering

Summer 2010 Registration **M E 1025**

Introduction to 3-D computer-aided design software, solid modeling, industry-standard engineering drawing practices, and engineering graphics. Applications to mechanical engineering. Prereq: High School Geometry and Algebra. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MECH 1208 - Special Topics: 1208-1298

Summer 2010 Registration **M E 1208**

Subject matter to be selected from topics of current technological interest. Credit to be arranged. **Semester Hours:** 1to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MECH 2023 - Statics

Summer 2010 Registration **M E 2023**

A vector treatment of force systems and their resultants; equilibrium of trusses, beams, frames, and machines, including internal forces and three-dimensional configurations, static friction, properties of areas, distributed loads and hydrostatics. Prereq: PHYS 2311. Coreq: MATH 2411. Cross-listed with CVEN 2121. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MECH 2030 - Analysis Techniques in Mechanical Engineering

Summer 2010 Registration **M E 2030**

Introduces experimental methods and mathematical analysis used in engineering. Spreadsheets are used to analyze engineering data and prepare tables and graphs. Introduction to computer programming using MATLAB. Prereq: MATH 1401 and MECH 1025. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MECH 2033 - Dynamics

Summer 2010 Registration **M E 2033**

A vector treatment of dynamics of particles and rigid bodies, including rectilinear translation, central-force, and general motion of particles, kinematics of rigid bodies, the inertia tensor, plane motion of rigid bodies, energy and momentum methods for particles, systems of particles, and rigid bodies. Prereq: MECH 2023 or CVEN 2121. Cross-listed with CVEN 3111. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MECH 2208 - Special Topics: 2208-2298

Summer 2010 Registration **M E 2208**

Subject matter to be selected from topics of current technological interest. Credit to be arranged. **Semester Hours:** 1to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MECH 3010 - Elementary Numerical Methods and Programming

Summer 2010 Registration **M E 3010**

A development of basic numerical methods used to solve engineering problems. Introduction to MATLAB to implement numerical simulations. Coreq: MATH 3195 or (MATH 3191 and MATH 3200). **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MECH 3021 - Introduction to Fluid Mechanics

Summer 2010 Registration **M E 3021**

Applies exact and approximate theories to engineering problems in fluids. Examples include potential flow theory, Euler's equations for inviscid fluids, Bernoulli's equations, Navier-Stokes equations, and pipe flow. Prereq: MECH 2033 or CVEN 3111 and MATH 2421. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MECH 3022 - Thermodynamics II

Summer 2010 Registration **M E 3022**

Generalized thermodynamic cycles; general thermodynamic cycle considerations, compressor, expander, heat exchanger processes, refrigeration cycles, mixtures and combustion. Prereq: ENGR 3012 and MATH 2421. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MECH 3023 - System Dynamics I: Vibrations

Summer 2010 Registration **M E 3023**

Modeling of dynamical systems. Analysis of single and multiple degree of freedom systems. Introduction to continuous systems. Prereq: CVEN 3111 or MECH 2033, MATH 3195 or MATH 3191 and MATH 3200 and MECH 3010. Coreq: CVEN 3121 or MECH 3043. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MECH 3024 - Introduction to Materials Science

Summer 2010 Registration **M E 3024**

The development of the physical principles relating the structural features of materials to their observed properties. Prereq: PHYS 2311. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MECH 3027 - Measurements

Summer 2010 Registration **M E 3027**

Principles of digital and analog measurements; systems for sensing, transporting, modifying, and outputting information; systematic and random error analysis. The laboratory includes a variety of instruments and components illustrating fundamental experimental measurement techniques and methods. Prereq: MATH 3195 or (MATH 3191 and MATH 3200), MECH 3030 and MECH 3032. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MECH 3028 - Laboratory of Mechanical Measurements

Summer 2010 Registration **M E 3028**

Modern techniques for Mechanical measurements. Laboratory includes techniques for the calibration of transducers and analysis of Statistical uncertainty. Data Acquisition Systems used for Signal acquisition and measurement of common mechanical quantities, such as displacement, velocity, acceleration and force. Design and characterization of a second order measurement system based on strain gages. Coreq: MECH 3027. **Semester Hours:** 1to 1
Registration is changing. Visit our website for details ucdenver.edu/registration.

MECH 3030 - Electric Circuits and Systems

Summer 2010 Registration M E 3030

Basic electrical engineering concepts for non-majors. Basic study of circuit analysis (RLC and Op-amps), transformers and motor equations, and simple electronic circuits (diodes and transistors). Prereq: MATH 2421 and PHYS 2331. Cross-listed with ELEC 3030. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MECH 3031 - Fluids/Thermal Laboratory

Summer 2010 Registration M E 3031

Laboratory exercise in compressible and incompressible fluid flow; steady state and transient heat transfer. Prereq: ENGR 3012. Coreq: MECH 3021. **Semester Hours:** 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

MECH 3032 - Electric Circuits and Systems Lab

Summer 2010 Registration M E 3032

Basic electrical engineering lab for MECH majors. Coreq: MECH 3030 or ELEC 3030. **Semester Hours:** 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

MECH 3034 - Properties of Engineering Materials

Summer 2010 Registration M E 3034

Experiments to determine material properties and the effect of processing on properties important in mechanical design. Materials include metal, polymers, and composites. Loadings include tension, compression, and bending under static, dynamic impact and creep states. Coreq: MECH 3024 or (MECH 3043 or CVEN 3121). **Semester Hours:** 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

MECH 3035 - Design of Mechanical Elements

Summer 2010 Registration M E 3035

Review of mechanics of materials and stress analysis; detailed design of various machine elements such as fasteners, springs, brakes and gears. Includes design project. Prereq: MECH 3043, CVEN 3121. Coreq: MECH 3024. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MECH 3042 - Heat Transfer

Summer 2010 Registration **M E 3042**

Basic laws of heat transfer by conduction, convection, and radiation with engineering design applications. Includes design project. Prereq: ENGR 3012 and MATH

2421. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MECH 3043 - Strength of Materials

Summer 2010 Registration **M E 3043**

Application of exact and approximate theories of stress and displacement to engineering problems in solids. Examples include torsion of rods and bending of beams. Combined stresses, principal stresses and energy methods are examined. Prereq: MECH 2023, CVEN 2121. Cross-listed with CVEN 3121. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MECH 3065 - Intermediate Dynamics

Summer 2010 Registration **M E 3065**

An in-depth study of Newtonian dynamics with constraints. Mechanism synthesis using graphical and analytic techniques. Prereq: MECH 2033 or CVEN 3111 and MECH 3010. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MECH 3145 - Manufacturing Processes Design

Summer 2010 Registration **M E 3145**

Basic manufacturing background will be provided to engineering students in order to: (1) apply manufacturing specifications to the design of mechanical devices, and (2) communicate with technical personnel in a production environment. Topics cover metal casting, bulk and sheet metal forming, material removal and joining and fastening processes. Prereq: MECH 1025. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MECH 3147 - Bioengineering

Summer 2010 Registration **M E 3147**

Explores engineering principles that have application in biology, and principles discovered in biology which may have application in engineering. Some topics covered are: cell biology, molecular biology, viscoelasticity, physical theory of plant cell growth aerodynamics, fluid mechanics, biofluid dynamics and animal flight. Prereq: junior standing in engineering. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MECH 3208 - Special Topics: 3208-3298

Summer 2010 Registration M E 3208

Subject matter to be selected from topics of current technological interest. Credit to be arranged. **Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MECH 3840 - Independent Study

Summer 2010 Registration M E 3840

This category is intended for upper-division level special topics which students may wish to pursue on their own initiative, with guidance from a professor who agrees to limited consultation on the work and to award credit when the project is completed. **Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MECH 4023 - System Dynamics II: Controls

Summer 2010 Registration M E 4023

Introduces the Laplace Transformation. Control system analysis using root locus and frequency response methods. Basic compensation techniques are covered. Prereq: MECH 3023. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MECH 4024 - Mechanical Behavior of Materials

Summer 2010 Registration M E 4024

Studies the response of materials to applied stresses. Emphasis is on the understanding of the relationships between structure and properties. Fracture mechanics and fatigue are introduced. Prereq: MECH 3024. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MECH 4035 - Senior Design I

Summer 2010 Registration M E 4035

Group and individual projects to design engineering components and systems. Design methodology, product specs, creativity, design reviews, communication, presentations, and report writing are emphasized. MECH 4035 and MECH 4045 form a one year sequence and must be taken consecutively. Prereq: MECH 3035 and MECH 3042. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MECH 4045 - Senior Design II

Summer 2010 Registration **M E 4045**

Student teams manufacture and construct and/or redesign mechanical parts or assemblies that they designed in previous course (MECH 4035). A proposal, oral progress reports, and a final written report and demonstration are required. MECH 4035 and MECH 4045 form a one year sequence and must be taken consecutively. Prereq: MECH 4035.

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MECH 4110 - Numerical Methods for Engineers

Summer 2010 Registration **M E 4110**

Introduces numerical analysis. Solution of linear and nonlinear equation systems. Numerical methods for ordinary and partial differential equations. Engineering applications. Prereq: MATH 3195 or (3191 and 3200) and some programming experience.

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MECH 4112 - Internal Combustion Engines

Summer 2010 Registration **M E 4112**

Students obtain a sufficient understanding of internal combustion engines that will allow them to perform analysis of combustion thermodynamics and actual cycles, including heat addition, heat loss, air/fuel flow, and engine design and performance. Prereq: ENGR 3012.

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MECH 4114 - Designing with Composites

Summer 2010 Registration **M E 4114**

Analysis and design of polymers and polymer-based composites. Failure criteria include static strength, stiffness, creep, fatigue, impact and fracture toughness. Design criteria include strength-to-weight ratio and cost-to-strength ratio. Prereq: MECH 3043/CVEN 3121. Cross-listed with MECH 5114.

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MECH 4115 - Applied Plasticity and Creep

Summer 2010 Registration **M E 4115**

Plastic deformation of materials applied to bulk and sheet metal manufacturing processes such as extrusion, rolling and sheet metal. Linear and nonlinear viscoelastic creep with applications to plates and shells. Prereq: MECH 3043. Cross-listed with MECH 5115.

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MECH 4116 - Robotics

Summer 2010 Registration **M E 4116**

Introduces kinematics, dynamics, and control of robot manipulators. Emphasis is placed on computer use in control of actual robots and in computer simulation of mathematical models of robots. Students must turn in a project report based on the computer simulation. Prereq: MECH 3065. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MECH 4120 - Methods of Engineering Analysis

Summer 2010 Registration **M E 4120**

Selected topics from real analyses with applications to engineering analyses. Topics include vector calculus, ordinary differential equations, partial differential equations, and calculus of variations. Prereq: MATH 3195 or (MATH 3191 and MATH 3200). Cross-listed with MECH 5120. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MECH 4132 - Power Plant Systems Design

Summer 2010 Registration **M E 4132**

Detailed engineering analysis and design of a thermal power plant, including heat balance, selection of equipment (boiler, turbines, heat exchangers, pumps, cooling tower), performance evaluation, economic evaluation and feasibility studies. Prereq: MECH 3022 **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MECH 4135 - Mechanical Systems Design

Summer 2010 Registration **M E 4135**

Detailed engineering design of mechanical systems. Students work in teams on a project selected for entire class. Projects are similar to typical ones from industry. Course stresses creativity, synthesis, design judgment, and analysis of real-world problems. Oral and written presentations are required. Prereq: MECH 3035. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MECH 4136 - Control Systems Design

Summer 2010 Registration **M E 4136**

Detailed engineering design of control systems. Students work in teams on a project selected for entire class. Projects are similar to typical ones from industry. Course stresses creativity, synthesis, design judgment, and analysis of real-world problems. Oral and written presentations are required. Prereq: MECH 4023. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MECH 4141 - Fluid Mechanics

Summer 2010 Registration M E 4141

Viscous incompressible fluid flows. Topics include derivation of equations governing viscous compressible fluid motion; specializations to simple flows; boundary-layer theory; similarity solutions; introduction to turbulence and Reynolds stresses. Prereq: MECH 3021. Cross-listed with MECH 5141. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MECH 4142 - Thermal Systems Design

Summer 2010 Registration M E 4142

Detailed engineering design of thermal/fluids systems. Students work in teams on a project selected for entire class. Projects are similar to typical ones from industry. Course stresses creativity, synthesis, design judgment, and analysis of real-world problems. Oral and written presentations are required. Prereq: ENGR 3012 and MECH 3021. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MECH 4147 - Engineering Economy

Summer 2010 Registration M E 4147

Applies economic and financial principles to evaluation of engineering alternatives. Calculation of annual costs, present worth, and prospective rates of return on investment. Review of systems analysis techniques, including simulation, linear programming, and project scheduling. Prereq: junior standing in engineering. Cross-listed with CVEN 4077. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MECH 4155 - Air Conditioning Design

Summer 2010 Registration M E 4155

Basic principles of heating and ventilating systems. Determination of heating and cooling loads. Design and layout of heating, ventilating, and air conditioning systems. Includes design project. Prereq: MECH 3022 and MECH 3042. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MECH 4160 - Introduction to Operations Research

Summer 2010 Registration M E 4160

Introduces operations research, including mathematical programming models, models

for decision alternatives, for procurement and inventory, and for queuing operations. Prereq: MATH 3195 or (MATH 3191 and MATH 3200). **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MECH 4163 - Rigid-body Dynamics

Summer 2010 Registration **M E 4163**

Review of Newtonian dynamics, Lagrange's equations for particles, systems, and rigid bodies. Conservative and non-conservative systems, moments of inertia, principal axes, angular momentum and Euler equations. Illustrations from spinning bodies, including tops, gyro-compass and rotating machinery. Prereq: MECH 2033 or CVEN 3111, MATH 3195 or (MATH 3191 and MATH 3200). Cross-listed with MECH 5163. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MECH 4166 - Computerized Numerical Control (CNC) Manufacturing

Summer 2010 Registration **M E 4166**

Modern manufacturing engineering concepts using computerized numerical control (CNC). The students learn state-of-the-art CNC methodologies, including digitizing, drawing, generating codes, and manufacturing, using modern CNC machines. Prereq: junior standing in engineering. Cross-listed with MECH 5166. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MECH 4175 - Finite Element Analysis in Machine Design

Summer 2010 Registration **M E 4175**

Students learn basic theory of finite element analysis (FEA) as it applies to stress analysis and design of mechanical components. Commercial package will be used giving students practical experience in the use of FEA. Prereq: MECH 3035. Cross-listed with MECH 5175. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MECH 4195 - Solid Modeling

Summer 2010 Registration **M E 4195**

This is a basic course in solid modeling using Solid Works computer software. Topics include feature-based modeling, parametric part design, parent/child relationships, use of datums, patterning, relations, sweeps, blends, assembly, tolerancing, rapid prototyping, CNC manufacturing, CMM inspection, and Step standards. Prereq: Junior standing in engineering. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MECH 4208 - Special Topics: 4208-4298

Summer 2010 Registration M E 4208

Subject matter to be selected from topics of current technological interest. Credit to be arranged. Prereq: senior standing or permission of instructor. **Semester Hours:** 1to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MECH 4840 - Independent Study

Summer 2010 Registration M E 4840

This category is intended for upper division level special topics which students may wish to pursue on their own initiative, with guidance from a professor who agrees to limited consultation on the work and to award credit when the project is completed. **Semester Hours:** 1to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MECH 5110 - Numerical Methods for Engineers

Summer 2010 Registration M E 5110

Introduces numerical analysis. Solution of linear and nonlinear equation systems. Numerical methods for ordinary and partial differential equations. Engineering applications. Prereq: graduate standing or permission of instructor. Cross-listed with MECH 4110. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MECH 5114 - Designing with Composites

Summer 2010 Registration M E 5114

Analysis and design of polymers and polymer-based composites. Failure criteria include static strength, stiffness, creep, fatigue, impact and fracture toughness. Design criteria include strength-to-weight ratio and cost-to-strength ratio. Prereq: graduate standing or permission of instructor. Cross-listed with MECH 4114. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MECH 5115 - Applied Plasticity and Creep

Summer 2010 Registration M E 5115

Plastic deformation of materials applied to bulk and sheet metal manufacturing processes such as extrusion, rolling and sheet metal. Linear and nonlinear viscoelastic creep with applications to plates and shells. Prereq: graduate standing or permission of instructor. Cross-listed with MECH 4115. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MECH 5120 - Methods of Engineering Analysis

Summer 2010 Registration **M E 5120**

Selected topics from real analyses with applications to engineering analyses. Topics include vector calculus, ordinary differential equations, partial differential equations and calculus of variations. Prereq: Graduate standing or permission of instructor. Cross-listed with MECH 4120. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MECH 5121 - Introduction to Fluid Dynamics

Summer 2010 Registration **M E 5121**

Physical properties of gases and liquids; kinematics of flow fields; equations describing viscous, heat-conducting Newtonian fluids. Exact solutions and rational approximations for low- and high-speed dissipative flows, surface and internal waves, acoustics, stability, and potential flows. Prereq: Graduate standing or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MECH 5122 - Macroscopic Thermodynamics

Summer 2010 Registration **M E 5122**

Axiomatic presentation of fundamentals of classical thermodynamics (first law); energy, work and heat. Equilibrium, reversible, and irreversible processes; entropy production and the second law. Applications to stability and phase equilibrium. Irreversible thermodynamics and the Onsager reciprocal relations. Prereq: graduate standing or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MECH 5123 - Introduction to Continuum Mechanics

Summer 2010 Registration **M E 5123**

Cartesian tensor notation. Deformation, strain, strain rate and compatibility. Definition of stress vector and tensor. Fundamental balance laws of mass, momentum and energy; entropy production inequality. Constitutive equations for elastic, viscoelastic and plastic materials; ideal, compressible, and viscous fluids. Beltrami-Mitchell and Navier-Stokes equations. Prereq: graduate standing or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MECH 5124 - Yield-Limited Behavior of Materials

Summer 2010 Registration **M E 5124**

Analysis of material behavior within the "elastic range," with emphasis on the phenomenon of yield and factors that influence it. Examination of the theory of

dislocations; study of strengthening mechanisms in solids. Consideration of various time-dependent but reversible (inelastic) deformation phenomena. Presentation of appropriate engineering case studies to augment various topics. Prereq: MECH 5143. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MECH 5133 - Theory of Inelastic Materials

Summer 2010 Registration M E 5133

Mathematical theory of linear viscoelasticity. Finite elements models. Solution of boundary-value problems in linear viscoelasticity. Non-Newtonian flow. Selected topics in nonlinear material behavior. Prereq: MECH 5143 or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MECH 5141 - Viscous Flow

Summer 2010 Registration M E 5141

Viscous incompressible fluid flows. Topics include derivation of equations governing viscous compressible fluid motion; specializations to simple flows; boundary-layer theory; similarity solutions; introduction to turbulence and Reynolds stresses. Prereq: graduate standing or permission of instructor. Cross-listed with MECH 4141. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MECH 5142 - Statistical Thermodynamics

Summer 2010 Registration M E 5142

Introduces the molecular interpretation and calculation of thermodynamic properties of matter, thermodynamic probability, distribution functions, Schrodinger wave equations and solutions and ensemble theory. Applications to ideal and real gases, solids, liquids, radiation, conduction electrons, and chemical equilibrium. Prereq: graduate standing or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MECH 5143 - Theory of Elasticity

Summer 2010 Registration M E 5143

Review of the basic equations of linear theory of elasticity. St. Venant torsion and flexure. Plane strain, plane stress, and generalized plane stress. Application of conformal mapping and Fourier transform techniques. Prereq: graduate standing or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MECH 5144 - Plasticity and Creep

Summer 2010 Registration M E 5144

Inelastic deformation of materials such as metals, alloys, glasses, composites and polymers from the phenomenological and structural point of view. Case studies of plastic and creep deformations in engineering materials. Prereq: MECH 5143. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MECH 5161 - Compressible Flow

Summer 2010 Registration M E 5161

Energy, continuity, and momentum principles applied to compressible flow; one-, two-, and three-dimensional subsonic, supersonic and hypersonic flows. Normal and oblique shocks, and method of characteristics. Prereq: MECH 5141 or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MECH 5162 - Heat Transfer I

Summer 2010 Registration M E 5162

Review of equations governing transport of heat by conduction and radiation. Analytical and numerical solution of boundary value problems representative of heat conduction in solids. Radiation properties of solids, liquids and gases; transport of heat by radiation. Prereq: graduate standing or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MECH 5163 - Dynamics

Summer 2010 Registration M E 5163

Review of Newtonian dynamics, Lagrange's equation for particles, systems and rigid bodies. Conservative and non-conservative systems, moments of inertia, principal axes, angular momentum and Euler equations. Illustrations from spinning bodies, including tops, gyro-compass and rotating machinery. Prereq: Graduate standing or permission of instructor. Cross-listed with MECH 4163. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MECH 5166 - Computerized Numerical Control (CNC) Manufacturing

Summer 2010 Registration M E 5166

Modern manufacturing engineering concepts using computerized numerical control (CNC). The students learn state-of-the-art CNC methodologies, including digitizing, drawing, generating codes, and manufacturing using modern CNC machines. Prereq: graduate standing or permission of instructor. Cross-listed with MECH 4166. **Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MECH 5172 - Heat Transfer II

Summer 2010 Registration M E 5172

Review of equations governing transport of heat in fluids in motion. Description of heat transfer in free and forced convection, including laminar and turbulent flow. Dimensional analysis and heat transfer correlations, numerical methods and combined heat transfer mechanisms. Prereq: MECH 5141 or permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MECH 5175 - Finite Element Stress Analysis

Summer 2010 Registration M E 5175

Students learn basic theory of finite element analysis (FEA) as it applies to stress analysis and design of mechanical components. Commercial package will be used giving students practical experience in the use of FEA. Prereq: MECH 5143 or permission of instructor. Cross-listed with MECH 4175. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MECH 5208 - Special Topics: 5208-5298

Summer 2010 Registration M E 5208

Subject matter to be selected from topics of current technological interest. Credit to be arranged. Prereq: graduate standing or permission of instructor. **Semester Hours:** 1to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MECH 5840 - Independent Study

Summer 2010 Registration M E 5840

Available only through approval of the graduate advisor. Subjects arranged to fit needs of the particular student. Prereq: graduate standing. **Semester Hours:** 1to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MECH 5842 - Independent Study: MECH

Summer 2010 Registration M E 5842

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MECH 5950 - Master's Thesis

Summer 2010 Registration **M E 5950**

Semester Hours: 1to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

MECH 5960 - Master's Report

Summer 2010 Registration **M E 5960**

Master of Science in Engineering report. Students seeking the Master of Science in Engineering, and who do not choose to do a thesis, must complete an individual project of an investigative and creative nature under the supervision of a member of the graduate faculty. Prereq: completion of 21 hours toward the M.S. Degree. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MECH 5970 - Graduate Problem Course

Summer 2010 Registration **M E 5970**

The graduate problem course is for the solution of specific problems in MECH specialty areas. Each student is assigned a set of problems of some difficulty requiring the use of the literature of the various areas covered. Prereq: 15 hours of graduate level courses in MECH. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MGMT 1000 - Introduction to Business

Summer 2010 Registration **MGMT 1000**

This course will introduce students to the nature and role of business in our society. Problems confronting business are surveyed from a management, financial, economic and marketing viewpoint. Career opportunities in business are also considered. Students are advised to take this course during their freshman year and may not take it in the junior or senior years. Prereq: Open to freshman and sophomores, non-degree students and music majors at all levels. **Semester Hours:** 3to 3 **When Offered:** FASPRSUM

Registration is changing. Visit our website for details ucdenver.edu/registration.

MGMT 1111 - Business Freshman Seminar

Summer 2010 Registration **MGMT 1111**

This course introduces students to the nature and role of business in our society. Career opportunities in business are also considered. This course is designed to assist first year students transition to life on campus. The course content is integrated with various activities designed to familiarize 1st year students with school resources, develop critical thinking and writing skills and build relationships critical to ongoing academic success. Students are advised to take this course during the first semester of their freshman year. Note: Credit will not be given for both MGMT 1111 and MGMT 1000. Prereq: Open only

to new Freshman. **Semester Hours:** 3to 3 **When Offered:** FALL SPR
Registration is changing. Visit our website for details ucdenver.edu/registration.

MGMT 2939 - Cooperative Education

Summer 2010 Registration **MGMT 2939**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MGMT 3000 - Managing Individuals and Teams

Summer 2010 Registration **MGMT 3000**

Focuses on helping students understand how to manage individuals and groups effectively. Students are encouraged to know themselves better and how their behavior affects how they deal with organizational situations; they also learn how individuals differ and how to design, manage and work in a team. This is a business core course therefore a grade of a 'c' or better must be earned to satisfy graduation requirements.

Prereq: Junior standing. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MGMT 3010 - Managing People for a Competitive Advantage

Summer 2010 Registration **MGMT 3010**

Provides an overview of the management of human resources in organizations. Areas of study include recruitment, selection, training, career development, performance appraisal, compensation and employee or labor relations. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MGMT 3111 - Business Transfer Student Seminar

Summer 2010 Registration **MGMT 3111**

This course is designed to assist first year transfer students transition to UC Denver. The course includes various activities designed to familiarize students with University and Business School resources, develop critical thinking, writing, time management and study skills, and build relationships critical to ongoing academic success. Students are advised to take this course during their first or second semester at UC Denver.

Concurrent registration in MGMT 3000 is required. Prereq: Junior standing. Cross-listed with MGMT 3000. **Semester Hours:** 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

MGMT 3830 - Business and Sustainability

Summer 2010 Registration **MGMT 3830**

Business activity can have significant environmental and societal impacts. This course

examines some of the ways that companies and consumers are reducing their impact on communities and the environment. Sustainability issues will be considered from a management, finance, marketing, and consumer perspective. Climate change and renewable energy will be featured topics in the class. Prereq: MKTG 3000. Cross-listed with MGMT 4830, BUSN 6830. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MGMT 3939 - Internship/Cooperative Education

Summer 2010 Registration **MGMT 3939**

Supervised experiences involving the application of concepts and skills in an employment situation. Prereq: senior standing and 3.5 GPA. **Semester Hours:** 1to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MGMT 4100 - Managing Cultural Diversity

Summer 2010 Registration **MGMT 4100**

Practical and policy issues that arise from living and working in a multicultural world in order to promote informed, effective management. Particular emphasis is given to the development of innovative approaches to managing the challenges posed by a work force that differs in characteristics, such as race, gender, ethnicity, age, lifestyle and disability. Prereq: MGMT 3000. **Semester Hours:** 3to 3 **When Offered:** FALL SPR
Registration is changing. Visit our website for details ucdenver.edu/registration.

MGMT 4330 - Mastering Management

Summer 2010 Registration **MGMT 4330**

Designed to give students hands on practice developing critical management skills, such as communication, conflict handling, negotiation, giving feedback, public speaking, meeting management and self management. Prereq: MGMT 3000 with a grade of 'C' or better. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MGMT 4350 - Leading Organizational Change

Summer 2010 Registration **MGMT 4350**

Focuses on the tasks and skills of a leader in leading organizational changes. Topics include: diagnosing problems, creating urgency, building the change team, creating a vision, implementing change strategies, sustaining the momentum and making change stick. These tasks and skills are studied in various organizational change contexts. Prereq: MGMT 3000 with a grade of 'c' or better and MGMT 4370. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MGMT 4370 - Organization Design

Summer 2010 Registration **MGMT 4370**

Examines how to structure organizations to perform effectively. Addresses the effects of computer-based information technologies (e.g. intranets, extranets, and the internet) on firm structure, strategy, and culture. Emphasis is placed on the role of the task, technology, and the environment as constraints on organizational design. Prereq: MGMT 3000. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MGMT 4400 - Environments of International Business

Summer 2010 Registration **MGMT 4400**

An overview of the environmental complexities that arise when business activities and firms cross national borders. Key international business environmental complexities associated with country differences, cross-border trade and investment, and global monetary system are examined. Prereq: MGMT 3000 and junior standing. Cross-listed with INTB 4400. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MGMT 4410 - Operations of International Business

Summer 2010 Registration **MGMT 4410**

Focuses on the impact of environmental factors on international business operations and the identification and analysis of complex strategic and operational issues facing business firms in global markets. The strategies and structures of international businesses, alternative foreign market entry modes, and the unique roles of various business functions at international business firms are explained and assessed. Prereq: INTB 4400 or MGMT 4400. Cross-listed with INTB 4410. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MGMT 4420 - Human Resources Management: Staffing

Summer 2010 Registration **MGMT 4420**

Methods, theories, research findings, and issues in staffing. Topics include performance-based framework for selecting employees, establishing performance expectations, planning the recruitment process and finding valid and useful tools to select the best candidate. Prereq: MGMT 3010 (may be taken concurrently). **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MGMT 4430 - Human Resources Management: Training

Summer 2010 Registration **MGMT 4430**

Methods, theories, research findings, and issues in training. Topics include how to

design, deliver, and evaluate training programs. Prereq: MGMT 3010 (may be taken concurrently). Cross-listed with MGMT 6720.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MGMT 4440 - Human Resource Management: Performance Management

Summer 2010 Registration **MGMT 4440**

Focuses on the design and implementation of human resource management systems to assess and enhance employee performance. Areas of study include performance definition and measurement, goal setting, feedback, employee development, rater training, and pay for performance. Prereq: MGMT 3010 (may be taken concurrently).**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MGMT 4450 - Human Resources Management: Compensation

Summer 2010 Registration **MGMT 4450**

Develop and administer pay systems considering economic and social pressures, traditional approaches and strategic choices in managing compensation. Current theory research and practice. Students design a compensation strategy and a system that translates that strategy into reality. Prereq: MGMT 3010 (may be taken concurrently). Cross-listed with MGMT 6740.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MGMT 4500 - Business Policy and Strategic Management

Summer 2010 Registration **MGMT 4500**

Emphasis is on integrating the economic, market, social or political, technological, and components of the external environment with the internal characteristics of the firm; and deriving through analysis the appropriate interaction between the firm and its environment to facilitate accomplishment of the firm's objectives. Open only to business students in their graduation semester. This is a business core course therefore a grade of 'C' or better must be earned to satisfy Business graduation requirements. Prereq: Graduation term, senior standing and completion of all business core courses with a grade of a 'C' or better.**Semester Hours:** 3to 3**When Offered:** FASPRSUM
Registration is changing. Visit our website for details ucdenver.edu/registration.

MGMT 4770 - Human Resource Information Systems

Summer 2010 Registration **MGMT 4770**

Focuses on the management of human resource information systems. It addresses how modern information systems tools can provide better human resource intelligence to users in today's enterprises, allowing them to make better decisions. It examines how information about workforce and human resource management processes can be

collected and used to set targets to meet strategic objectives, monitor performance, receive notifications when performance is below expectations and respond immediately by taking corrective actions. Prereq: MGMT 3000. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MGMT 4780 - Managing Entrepreneurial Ventures

Summer 2010 Registration **MGMT 4780**

Teaches future new and small business owners the practical aspects of managing their entrepreneurial venture, to develop a comprehensive business plan and to develop the skills necessary to improve the odds of success. The course will consider strategies to leverage limited resources for maximum effect. Also covers small organization and group behavior, performance, leadership and motivation in small business settings and focuses on the owner/manager as the principle success factor in the context of a small organization. Note: For business majors only. Can be applied to management emphasis and to Entrepreneurship Certificate. Prereq: MGMT 3000, MKTG 3000, and BLAW 3000 strongly recommended. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MGMT 4830 - Business and Sustainability

Summer 2010 Registration **MGMT 4830**

Business activity can have significant environmental and societal impacts. This course examines some of the ways that companies and consumers are reducing their impact on communities and the environment. Sustainability issues will be considered from a management, finance, marketing, and consumer perspective. Climate change and renewable energy will be featured topics in the class. Prereq: MKTG 3000. Cross-listed with MGMT 3830, BUSN 6830. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MGMT 4834 - Global Sports & Entertainment Management

Summer 2010 Registration **MGMT 4834**

Through 2 weeks of visiting organizations with industry elite in London a broader perspective on the sports and entertainment industry is gained. Students will be asked to do advance reading, participate in discussions, keep a journal and write a reflection paper at the end of the experience. Site visits(to be confirmed) include: Arsenal Football Club, Premier League, the O2 Arena, NHL and NBA regular season games in London, 2012 Olympics Committee, Formula One, Hollywood Studio-International Finance Office, Theatre, Lord's Cricket Ground, All England Lawn Tennis Club/Wimbledon and the Office of the Minister of Sport. Prereq: MGMT 3000. Cross-listed with MGMT 6834. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MGMT 4840 - Independent Study

Summer 2010 Registration **MGMT 4840**

Semester Hours: 1to 8

Registration is changing. Visit our website for details ucdenver.edu/registration.

MGMT 4900 - Project Management and Practice

Summer 2010 Registration **MGMT 4900**

Covers the factors necessary for successful management of system development or enhancement projects. Both technical and behavioral aspects of project management are discussed. The focus is on management of development for enterprise-level systems. Topics include: managing the system life cycle; requirements determination, logical design, physical design, testing, implementation; system and database integration issues; network and client-server management; metrics for project management and system performance evaluation; managing expectations: superiors, users, team members and others related to the project; determining skill requirements and staffing the project; cost-effectiveness analysis; reporting and presentation techniques; effective management of both behavioral and technical aspects of the project; change management. Note: Successful completion of this course meets the educational requirements to sit for both the PMP and CAPM exams. Prereq: ISMG 3000. Cross-listed with ISMG 4900. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MGMT 4950 - Special Topics in Management

Summer 2010 Registration **MGMT 4950**

A number of different topics in management are offered under this course number. Consult the 'Schedule Planner' for current course offerings. Prerequisites vary depending on the topic and instructor requirements. Cross-listed with MGMT 5800. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MGMT 5800 - Special Topics in Management

Summer 2010 Registration **MGMT 5800**

A number of different topics in management are offered under this course number. Consult the Schedule Planner for current course offerings. Prerequisites vary depending on the topic and instructor requirements. Cross-listed with MGMT 4950. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MGMT 5939 - Internship or Cooperative Education

Summer 2010 Registration **MGMT 5939**

Supervised experiences involving the application of concepts and skills in an employment situation. Prereq: 21 semester hours and 3.5 GPA. **Semester Hours:** 1to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MGMT 6020 - Leadership in Difficult Times

Summer 2010 Registration **MGMT 6020**

The test of a leader often is their ability to lead their organizations through difficult times and crises. Such situations could be downsizing, product defects, ethical violations, a terrorist attack or a natural disaster. Successful management of these situations can strengthen and renew the organization. Inability to manage these situations can tarnish the organization's reputation and threaten its survival. This course examines leadership under stress and provides frameworks for categorizing and analyzing these difficult situations. The course also addresses strategies that leaders can use to enable their organizations to manage, recover and learn from these difficult experiences. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MGMT 6040 - International Human Resources Management

Summer 2010 Registration **MGMT 6040**

This course has two objectives: (1) to understand the impact of cultural differences in the management of people in multinational firms; and (2) to compare and contrast critical human resource issues in the contexts of domestic and international operations. Topics include recruitment, staffing, training, performance appraisal, compensation, and labor and management relations in markets around the world. (This course qualifies as an international elective for the MS in International Business program.) Prereq: MGMT 6380 or BUSN 6520 (or equivalent). Cross-listed with INTB 6040. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MGMT 6320 - Organizational Development

Summer 2010 Registration **MGMT 6320**

Instruction in the analysis, diagnosis, and resolution of problems in organizing people at work. Models of organizational change are examined. Group experiences, analysis of cases and readings are stressed. Prereq: BUSN 6520, may be taken concurrently. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MGMT 6360 - Designing Effective Organizations

Summer 2010 Registration **MGMT 6360**

Examines how to design organizations within the context of environmental,

technological, and task constraints. The emphasis is on learning how to recognize and correct structural problems through the analysis of existing organizations in which the students are involved. Prereq: BUSN 6520, may be taken concurrently. **Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MGMT 6380 - Managing People for Competitive Advantage

Summer 2010 Registration **MGMT 6380**

Focuses on the management of human resources in organizations. Oriented toward the practical application of human resources management principles in areas such as: equal employment opportunity, affirmative action, human resources planning, recruitment, staffing, benefits and compensation, labor relations, training, career management, performance management, and occupational health and safety. Prereq: BUSN 6520, may be taken concurrently. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MGMT 6710 - Human Resources Management: Staffing

Summer 2010 Registration **MGMT 6710**

Focuses on the design and implementation of human resources management systems to recruit and select employees. Areas of study include planning, job analysis, external and internal recruitment and selection, and decision making. Prereq: MGMT 6380 and BUSN 6530. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MGMT 6720 - Human Resources Management: Training

Summer 2010 Registration **MGMT 6720**

Methods, theories, research findings, and issues in training. Topics include how to design, deliver, and evaluate training programs. Prereq: MGMT 6380. Cross-listed with MGMT 4430. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MGMT 6730 - Human Resources Management: Performance Management

Summer 2010 Registration **MGMT 6730**

Focuses on the design and implementation of human resources management systems to assess and enhance employee performance. Areas of study include performance measurement, rater training, goal setting and feedback. Prereq: MGMT 6380. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MGMT 6740 - Human Resources Management: Compensation

Summer 2010 Registration **MGMT 6740**

Develop and administer pay systems considering economic and social pressures, traditional approaches and strategic choices in managing compensation. Current theory research and practice. Students design a compensation strategy and a system that translates that strategy into reality. Prereq: MGMT 6380 and BUSN 6530. Cross-listed with MGMT 4450. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MGMT 6780 - Small Business Management

Summer 2010 Registration **MGMT 6780**

The primary objective of this course is to teach future small business owners the practical aspects of small business management and to develop the skills necessary to improve the odds of success. The course will consider strategies to leverage limited resources for maximum effect in managing the small business enterprise. Also, this course covers small organization and group behavior, performance, leadership and motivation in small business settings and focuses on the owner/manager as the principal success factor in the context of a small organization. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MGMT 6800 - Special Topics in Management

Summer 2010 Registration **MGMT 6800**

Current topics in management will be occasionally offered. Consult the 'Schedule Planner' for specific offerings or contact an advisor for information. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MGMT 6801 - Career Strategies

Summer 2010 Registration **MGMT 6801**

The downsizing, restructuring, and re-engineering so prevalent in U.S. industries and companies have strongly affected the job and career market. Every individual must sharpen his/her competencies and skills in order to compete effectively in the changing job market. This course is designed to assist students in understanding and operating in this difficult job market. Using many of the concepts that organizations use in their strategy formulation process, and coupled with individual techniques and skills proven effective in job searches and career planning, this course prepares students to deal with the issues involved in finding a job and pursuing a career. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MGMT 6803 - Visionary Leadership

Summer 2010 Registration **MGMT 6803**

Examines the challenges faced by visionary leaders and the approaches used by these individuals (creation, articulation, and implementation of vision) to transform organizations. Participants utilize these approaches employed by effective leaders to develop plans for their own organizational success. Group experiences, applied readings, and videos are used to clarify the opportunities available. Prereq: BUSN 6520, may be taken concurrently. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MGMT 6804 - Bargaining and Negotiation

Summer 2010 Registration **MGMT 6804**

Designed as a seminar in bargaining, negotiation and interpersonal conflict management. Through simulations, role plays and personal experience, students practice and develop their negotiation skills and see how negotiations differ depending on the type of situation encountered. Specific topics covered include: the nature of negotiation, the role of the negotiation context, interdependence and power, strategies and tactics of distributive and integrative bargaining, negotiation ethics and interpersonal conflicting resolution. Prereq: BUSN 6520, may be taken concurrently. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MGMT 6805 - Entrepreneurship and Venture Capital

Summer 2010 Registration **MGMT 6805**

Combines analytical tools for evaluating and organizing new business ventures with detailed information for preparing business plans, structuring the business, and raising capital for new ventures. The course includes analysis of current start-up companies, and class presentations by managers of start-up and venture capital firms. Prereq: BUSN 6520 or equivalent. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MGMT 6806 - Corporate Entrepreneurship

Summer 2010 Registration **MGMT 6806**

Competitive performance in a global economy requires continuous innovation and new business growth. The creation and development of new ventures is a primary strategy for internally-generated growth. Managing innovation and new ventures requires attitudes, knowledge, and practices different from those usually required for the management of mature business units. This course provides the perspective, knowledge, and specific skills required for successful entrepreneurial

management. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MGMT 6820 - Management Field Studies

Summer 2010 Registration **MGMT 6820**

The objective of this course is to provide an opportunity for the in-depth examination of an actual management problem in a local organization. Much like an independent study conducted under faculty guidance, each student will execute a unique project suited to his or her interests. Priority is given to MGMT students. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MGMT 6821 - Managing for Sustainability

Summer 2010 Registration **MGMT 6821**

This course will consider how companies are using social responsibility as a competitive advantage. The so-called green revolution is calling for organizations to take on increasing responsibility for environmental conservation, employee well being, and community development. This course considers how organizations can work with various stockholders (employees, customers, communities, society-at-large) to develop and promote mutually beneficial products and solutions to key social needs and concerns. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MGMT 6822 - Business Ethics and Corporate Social Responsibility

Summer 2010 Registration **MGMT 6822**

Covers business ethics and corporate social responsibility in the global contexts of employment, marketing, product liability, the environment and other areas. Students compare ethical theories, including utilitarianism, Kantian, Rawlsian, stockholder, stakeholder and social contract and apply some or all of these theories to actual and hypothetical case studies. The doctrine of corporate social responsibility is defined and explored and diverging views of corporate social responsibility are discussed. Examples of how corporate social responsibility can increase a company's goodwill and net income are analyzed. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MGMT 6830 - Sports and Entertainment Management

Summer 2010 Registration **MGMT 6830**

This course is designed as a speaker series of sports and entertainment industry elite focusing on: industry trends, strategic planning, managing revenue streams, managing media, managing for effectiveness, managing post-merger integration, leadership and

leading change.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MGMT 6832 - Law and Negotiation in the Sports/ Entertainment Industries

Summer 2010 Registration **MGMT 6832**

Provides an overview of major legal issues in the sports and entertainment industries. Students develop the skills required to negotiate contracts in these industries. Topics include contracts with athletes (agency, player and sponsorship), stadium financing and sports franchises, labor law and collective bargaining agreements, entertainment contracts in the music, film and live theater fields and copyright, trademark and tort law principles in the sports and entertainment industries.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MGMT 6834 - London Calling: Global Sports and Entertainment Management

Summer 2010 Registration **MGMT 6834**

Through 2 weeks of visiting organizations and talking with industry elite in London a broader perspective on the Sports and Entertainment Industry is gained. Students will be asked to do advanced reading, participate in discussions, keep a journal and write a reflection paper at the end of the experience. Site visits (to be confirmed) include: Arsenal Football Club, Premier League, the O2 Arena, NHL and NBA regular season games in London, 2012 Olympics Committee, Formula One, Hollywood Studio-International Finance Office, Theatre, Lord's Cricket Ground, All England Lawn Tennis Club/Wimbledon and the office of the Minister of Sport.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MGMT 6840 - Independent Study

Summer 2010 Registration **MGMT 6840**

Instructor approval required. Allowed only under special and unusual circumstances. Regularly scheduled courses cannot be taken as independent study.**Semester Hours:** 1to 8
Registration is changing. Visit our website for details ucdenver.edu/registration.

MGMT 6950 - Master's Thesis

Summer 2010 Registration **MGMT 6950**

Semester Hours: 1to 8

Registration is changing. Visit our website for details ucdenver.edu/registration.

MILR 1011 - Adventures in Leadership

Summer 2010 Registration **MILR 1011**

Introduces fundamentals of leadership and the U.S. Army. Examines Army organization, customs and history as well as its current relevance and purpose. Students also investigate basic leadership and management skills necessary to be successful in both military and civilian settings. Includes fundamentals of Army leadership doctrine, team-building concepts, cartography, marksmanship and basic military tactics. Note: lab fee, 3 hour lecture, 2 hour lab, 3 hours of PT per week and 80 hours of field training. **Semester Hours: 2to 2**

Registration is changing. Visit our website for details ucdenver.edu/registration.

MILR 1021 - Adventures in Leadership II

Summer 2010 Registration **MILR 1021**

Covers selected leadership topics in small military organizations such as troop leading procedures, military first aid and casualty evacuation concepts, ethical work climates, Army organizations and installations, and basic military tactics. Introduces students to effective military writing styles. Note: Lab fee. 2 hour lecture, 2 hours lab, and 3 hours PT per week. 80 hours field training. Prereq: Milr 1011. **Semester Hours: 2to 2**

Registration is changing. Visit our website for details ucdenver.edu/registration.

MILR 2031 - Leadership and Management I

Summer 2010 Registration **MILR 2031**

Comprehensively reviews advanced leadership and management concepts including motivation, attitudes, communication skills, problem solving, human needs and behavior and leadership self development. Students continue to refine effective written and oral communication skills and to explore topics such as unit light infantry tactics and are prepared to perform as midlevel leaders in the cadet organization. Note: lab fee, 3 hour lecture, 2 hour lab, 3 hours of PT per week and 80 hours of field training. **Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

MILR 2041 - Leadership and Management II

Summer 2010 Registration **MILR 2041**

Focuses on leadership and management functions in military and corporate environments. Covers various components of Army leadership, risk management and planning theory, and leadership evaluation. Continues to refine written and oral communication skills. Note: Lab fee. 3 hour lecture, 2 hours lab, and 3 hours PT per week. 80 hours field training. Prereq: MILR 2031. **Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

MILR 3052 - Operations and Training I

Summer 2010 Registration **MILR 3052**

Further explores the theory of managing and leading small military units at the squad platoon levels. Students examine leadership styles and techniques related to advanced small unit tactics. Familiarizes students cartography, land navigation, field craft and weapons systems. Involves multiple, evaluated leadership opportunities in field settings and hands-on experience with actual military equipment. Students are given maximum leadership opportunities in weekly labs. Note: lab fee, 3 hour lecture, 2 hour lab, 3 hours of PT per week and 80 hours of field training. Prereq: permission of professor of Military Science.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MILR 3062 - Leadership and Development II

Summer 2010 Registration **MILR 3062**

Focuses on managing personnel and resources, military decision making, operations order, and oral communication. Exposes students to tactical unit leadership in preparation for the summer advance camp experience. Note: Lab fee. 3 hour lecture, 2 hours lab, and 3 hours PT per week. 80 hours field training. Prereq: Consent of the Professor of Military Science, MILR 3052.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MILR 4072 - Officer Leadership I

Summer 2010 Registration **MILR 4072**

Examine management and leadership concepts and techniques at company and higher echelons. Includes analyses of professional ethics, effective training procedures, subordinate counseling and staff officer briefing techniques. Also investigates counter terrorism, modern peacekeeping missions and the impact of the information revolution on the art of land warfare. Conducted with multiple practical leadership opportunities to organize cadet training and activities. Note: lab fee, 3 hour lecture, 2 hour lab, 3 hours of PT per week and 80 hours of field training. Prereq: permission of professor of Military Science.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MINS 5000 - Topics

Summer 2010 Registration **MINS 5000**

With prior approval by a candidate's advisor, an MIS candidate may enroll in an upper division course in science, computer science, mathematics, and complete additional work for graduate credit. Prereq: MIS candidate with 12 hours of upper division work completed.**Semester Hours:** 3to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

MINS 5840 - Independent Study

Summer 2010 Registration **MINS 5840**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MINS 5939 - Internship/Cooperative Education

Summer 2010 Registration **MINS 5939**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MINS 5950 - Master's Thesis

Summer 2010 Registration **MINS 5950**

Prereq: advisor approval.**Semester Hours:** 1to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

MINS 5960 - Master's Project

Summer 2010 Registration **MINS 5960**

Prereq: advisor approval.**Semester Hours:** 1to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

MKTG 1000 - Introduction to Marketing

Summer 2010 Registration **MKTG 1000**

Provides an introduction and overview of marketing. Discusses market and buyer analysis. Includes product planning, pricing, promotion and distribution of goods and services. For non-business majors only. Does not satisfy the MKTG 3000 business requirement.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MKTG 2939 - Internship/Cooperative Education

Summer 2010 Registration **MKTG 2939**

Introductory supervised experiences involving the applications, concepts and skills in an employment situation. Prereq: sophomore standing**Semester Hours:** 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

MKTG 3000 - Principles of Marketing

Summer 2010 Registration **MKTG 3000**

Focuses on the basic marketing concepts of Buyer Behavior, Marketing Research,

Marketing Planning and Implementation and the marketing process of product, price, distribution and promotion. This is a business core course therefore a grade of a 'C' or better must be earned to satisfy graduation requirements. Prereq: Junior standing. **Semester Hours:** 3to 3 **When Offered:** FASPRSUM
Registration is changing. Visit our website for details ucdenver.edu/registration.

MKTG 3100 - Marketing Research

Summer 2010 Registration **MKTG 3100**

Provides practical experience in research methodologies, planning an investigation, designing a questionnaire, selecting a sample, interpreting results and making a report. Techniques focus on attitude surveys, behavioral experiments, and qualitative research. Prereq: MKTG 3000 and DSCI 2010. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MKTG 3200 - Buyer Behavior

Summer 2010 Registration **MKTG 3200**

Focuses on improving the student's understanding of consumer and organizational buying behavior as a basis for better formulation and implementation of marketing strategy. Blends concepts from the behavioral sciences with empirical evidence and introduces buyer research techniques. Prereq: MKTG 3000. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MKTG 3939 - Internship/Cooperative Education

Summer 2010 Registration **MKTG 3939**

Supervised experiences involving the application of concepts and skills in an employment situation. Prereq: senior standing and 3.5 GPA. **Semester Hours:** 1to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MKTG 4000 - Advertising

Summer 2010 Registration **MKTG 4000**

Analyzes principles and practices in advertising from a managerial viewpoint. Considers the reasons to advertise, product and market analysis as the planning phase of the advertising program, media selection, creation and production of advertisements, copy testing, and development of advertising budgets. Prereq: MKTG 3000. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MKTG 4050 - Applied Marketing Management

Summer 2010 Registration **MKTG 4050**

The course is designed to enhance the student's ability to formulate and implement a marketing plan and to better understand the relationship of marketing to other business functions. Emphasized application of marketing concepts through the use of cases, simulations or projects. Prereq: MKTG 3000 and DSCI 2010. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MKTG 4051 - Honors Applied Marketing Management

Summer 2010 Registration **MKTG 4051**

Offered as the second course in a sequence following the principles of marketing course (MKTG 3000) it is therefore designed to enhance the student's ability to formulate and implement a marketing plan and to better understand the relationship of marketing to other business functions. It will emphasize application of marketing concepts through the use of cases, simulations or projects. This Honors course is modeled after understanding of the concepts covered. Note: MKTG 4051 is open only to marketing majors who have a cumulative GPA of 3.2 or higher. Students taking MKTG 4051 cannot receive credit for MKTG 3050 or MKTG 4050. Prereq: MKTG 3000, cumulative GPA of 3.2 or higher. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MKTG 4200 - International Marketing

Summer 2010 Registration **MKTG 4200**

Studies managerial marketing policies and practices of firms marketing their products in foreign countries. Analytical survey of institutions, functions, policies, and practices in international marketing. Relates marketing activities to market structure and environment. Prereq: MKTG 3000. **Semester Hours:** 3to 3 **When Offered:** FALL SPR
Registration is changing. Visit our website for details ucdenver.edu/registration.

MKTG 4220 - Asian Business Development and Marketing

Summer 2010 Registration **MKTG 4220**

This course investigates methods of Business Development and Marketing in the Asian Business Environment. It seeks to examine and explain methods of determining market potential and techniques tapping this market potential in this dynamic and rapidly growing business environment the course uses a combination of experienced guest speakers, Asian business cases and projects to develop the marketing skills in students to successfully compete in Asia. Prereq: MKTG 3000. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MKTG 4250 - Sports Marketing

Summer 2010 Registration **MKTG 4250**

This course is designed to understand and evaluate the role and functions of marketing in sports organizations. The course seeks to evaluate the marketing function in sports as well as understand the behavior of fans as consumers, celebrity product endorsements, sponsorship of sporting events for all sport providers, sports intermediaries and channels and advertising and promotion in the sports world. The course is taught using lectures, guest speakers, cases and examinations. Prereq: MKTG 3000. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MKTG 4580 - International Transportation

Summer 2010 Registration **MKTG 4580**

Analysis of international transportation (primarily sea and air) in world economy. Detailed study of cargo documentation and freight rate patterns. Included are liability patterns, logistics, economics, and national policies of transportation. Prereq: MKTG 3000. **Semester Hours:** 3to 3 **When Offered:** FALL SPR
Registration is changing. Visit our website for details ucdenver.edu/registration.

MKTG 4700 - Personal Selling and Sales Management

Summer 2010 Registration **MKTG 4700**

Introduces the student to principles of personal selling and issues in managing the field sales force. Focuses on models of personal selling, recruiting, selection, training, compensation, supervision, and motivation, as well as organizing the field sales force, sales analysis, forecasting and budgeting. Prereq: MKTG 3000. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MKTG 4720 - Internet Marketing

Summer 2010 Registration **MKTG 4720**

Distinctly influences the way marketers conduct marketing activities. The Internet media promises to establish marketing theories, identifies obsolete situations, explores how marketing functions have irreversibly changed as a result of the internet, and outlines basic marketing strategies for successful online marketing. Prereq: MKTG 3000. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MKTG 4760 - Customer Relationship Management

Summer 2010 Registration **MKTG 4760**

This marketing-theory driven course examines customer relationship management (CRM) as a key strategic process for organizations. Composed of people, technology and processes, effective CRM optimizes the selection or identification, acquisition, growth and retention of desired customers to maximize profit. Besides presenting an

overview of the CRM process, its strategic role in the organization and its place in marketing, students have an opportunity to create simulated CRM database using popular software package that help to illustrate what CRM can do, its advantages and limitations. Prereq: MKTG 3000. Cross-listed with ISMG 4760. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MKTG 4800 - Marketing Seminar

Summer 2010 Registration **MKTG 4800**

Offered to provide consideration of a wide variety of topical issues in marketing, such as, services marketing, pricing, product development or creative marketing strategies.

Prereq: MKTG 3000. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MKTG 4840 - Independent Study

Summer 2010 Registration **MKTG 4840**

Semester Hours: 1to 8

Registration is changing. Visit our website for details ucdenver.edu/registration.

MKTG 4950 - Special Topics

Summer 2010 Registration **MKTG 4950**

Courses offered on an irregular basis for the purpose of presenting new subject matter in marketing. Prerequisites vary depending upon the particular topic and instructor requirements. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MKTG 5939 - Internship/Cooperative Education

Summer 2010 Registration **MKTG 5939**

Supervised experiences involving the applications of concepts and skills in an employment situation. Prereq: 21 semester hours and 3.5 GPA. **Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MKTG 6010 - Marketing Strategy, Evaluation and Development

Summer 2010 Registration **MKTG 6010**

Focuses on marketing strategy and marketing planning. Addresses the formulation and implementation of marketing plans within the context of the overall strategies and objectives of both profit and not-for-profit organizations. There is heavy emphasis on group projects and presentations. Note: This course is intended to be taken near the end of your program. Prereq: BUSN 6560. **Semester Hours:** 3to 3 **When Offered:** FALL SPR

Registration is changing. Visit our website for details ucdenver.edu/registration.

MKTG 6020 - International Marketing

Summer 2010 Registration **MKTG 6020**

Explores problems, practices, and strategies involved in marketing goods and services internationally. Emphasized analysis of uncontrollable environmental forces, including cultures, governments, legal systems, and economic conditions, as they affect international marketing planning. Prereq: BUSN 6560. Note: students cannot receive credit for both MKTG 6020 and INTB 6026. Cross-listed with INTB 6026. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MKTG 6030 - Sales and Sales Force Management

Summer 2010 Registration **MKTG 6030**

Focuses on issues in personal selling and managing the field sales force. Deals with organization sales analysis, forecasting, budgeting and operating, with particular emphasis on the selling task, recruiting, selection, training, compensation, supervision and motivation. Prereq: BUSN 6560. **Semester Hours:** 3to 3 **When Offered:** *SPRING*
Registration is changing. Visit our website for details ucdenver.edu/registration.

MKTG 6040 - Services Marketing

Summer 2010 Registration **MKTG 6040**

Service industries such as health care, finance, information, entertainment, retailing, government, and professional services comprise 80% of the total employment and GDP of the US. Manufacturing firms are increasingly look to value-added services to improve their bottom lines. Yet customer satisfaction with services has been consistently lower than with goods. This course teaches students how to design and deliver high quality services, improve customer satisfaction, and thereby increase revenues and profitability. It also addresses how small, medium, and large firms can develop marketing plans and strategies in the new service environment. A variety of teaching methods may be used to demonstrate these concepts, such as cases, projects, field experiences, and/or guest speakers. **Semester Hours:** 3to 3 **When Offered:** *FALL SPR*

Registration is changing. Visit our website for details ucdenver.edu/registration.

MKTG 6050 - Marketing Research

Summer 2010 Registration **MKTG 6050**

The objectives relate to effective marketing information management. Objectives include: (1) developing an understanding of the techniques and procedures that can be used to generate timely and relevant marketing information; (2) gaining experience in developing and analyzing information that is decision oriented; and (3) gaining experience in making recommendations and decisions based on relevant and timely information. Computer analysis and projects are employed. **Semester Hours:** 3to

3When Offered: *FALL SPR*

Registration is changing. Visit our website for details ucdenver.edu/registration.

MKTG 6060 - Buyer Behavior

Summer 2010 Registration **MKTG 6060**

Why do consumers buy? How can marketing activities influence buyer behavior? Answers to these questions are key to marketing success & business fortune. In this course, we explore how to understand the heart & soul of consumers & examine the strategic implications of consumer psychology. Course participants conduct a market segmentation project that identifies & dissects various buyer groups within a chosen market. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MKTG 6070 - Integrated Marketing Communications and Brand Identity

Summer 2010 Registration **MKTG 6070**

A brand's identity has a substantial influence on an organization's financial wealth. But brand identity is not simply the result of a great product or a creative ad. Utilizing many real examples, historic approaches, and current trends, this course explores how integrated marketing communications help build a brand identity that reverberates with consumers. Participants create an integrated marketing communications campaign.

Prereq: BUSN 6560. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MKTG 6080 - Marketing in Emerging Markets

Summer 2010 Registration **MKTG 6080**

Explores problems, practices and strategies involved in marketing goods and services in emerging markets. Emphasizes analysis of uncontrollable environmental forces, including cultures, government, legal, systems and economic conditions as they affect marketing planning. Prereq: BUSN 6560. Note: students cannot receive credit for both MKTG 6080 and INTB 6082. Cross-listed with INTB 6082. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MKTG 6090 - Customer Relationship Management

Summer 2010 Registration **MKTG 6090**

Involves the management of customer relationships to maximize customer service and its associated benefits at minimal cost. Includes services marketing concepts and techniques, IT applications, and software. Designed to acquaint students with practices and issues in state-of-the-art customer relationship management systems in an array of different types of organizations. The course initially focuses on the nature of customer relationship management (CRM) the interaction between strategic management

planning, corporate culture and CRM. Other topics examined include successful models of CRM, managing the employee or CRM interface, marketing research, and CRM, and customer trust, loyalty, CRM customer service levels, customer service levels, customer profitability or metrics, selecting and integrating CRM software, CRM integration and timing of CRM roll-out. Prereq: BUSN 6560. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MKTG 6091 - Strategic Product Marketing

Summer 2010 Registration **MKTG 6091**

Familiarizes students with key theories and practices regarding products. Successful development of a new product, or extending the life cycle of an existing product. Outlines and necessitates the understanding of product development, key concepts related to successful product management over the course of its life cycle including the way the product function adds synergy to other marketing activities and, in turn, benefits from them. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MKTG 6092 - Internet Marketing

Summer 2010 Registration **MKTG 6092**

Explores how the marketing function has irreversibly changed as a result of the internet and to lay out basic marketing strategies for successful online marketing. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MKTG 6094 - Marketing Issues in the Chinese Environment

Summer 2010 Registration **MKTG 6094**

This course assesses numerous marketing and marketing related topics in the Chinese environment with the objective of helping the graduate student develop managerial and marketing expertise. In specific, the course pinpoints key developments in the Chinese business environment, develops expertise in conducting market opportunity analysis, assesses market entry conditions and strategies and applies marketing mix strategies in the context of the Chinese environment. Note: It is recommended for students to take BUSN 6560 or INTB 6000 prior to this course. Cross-listed with INTB 6094. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MKTG 6120 - Non-Profit and Social Marketing

Summer 2010 Registration **MKTG 6120**

In this course, students will examine the role and application of marketing processes in non-profit organizations, such as those addressing social issues and causes. Using case

studies and projects, students will consider the non-profit sector's multiple marketing objectives, which include aiming to change behavior, developing donor relationships, and creating partnerships with for-profit organizations. Students will consider these perspectives while applying marketing concepts such as segmentation, positioning, branding, and the marketing mix. Prereq: BUSN 6560. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MKTG 6200 - Marketing Dashboards & Scorecards

Summer 2010 Registration **MKTG 6200**

Performance measurement systems help companies monitor their progress and stay on track toward their stated goals and objectives. Some performance measures, such as financial or operations data, can be readily provided by internal information systems. In contrast, marketing performance measures depend upon the activities of skilled marketing researchers to gather external market-based information about the market, customers, and competitors. This hands-on course provides students with a tool-kit for gathering market performance metrics for companies of all sizes, for-profit and not-for-profit, manufacturers or service providers. The course also teaches students how to use tools such as dashboards and scorecards to apply market-performance measures to the firm's strategies and objectives. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MKTG 6700 - Marketing Travel Study

Summer 2010 Registration **MKTG 6700**

This is a 2-week travel course, designed to focus on the marketing of the specific country we visit. In the past the travel course has been to Spain and Costa Rica, but the country of destination may be different every time (usually offered every other year). While in the country, students will visit companies (such as advertising agencies, marketing research firms, local grocery stores, marketing departments of multinational corporations, etc.), have lectures/discussions on marketing in that country and work on a marketing plan for a local company or not-for-profit organization. Prereq: BUSN 6560. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MKTG 6800 - Topics in Marketing

Summer 2010 Registration **MKTG 6800**

Courses offered irregularly for the purpose of presenting new subject matter in marketing. Consult the current 'Schedule Planner' for semester offerings. Prereq: BUSN 6560. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MKTG 6820 - Sports & Entertainment Marketing

Summer 2010 Registration **MKTG 6820**

This course focuses on techniques for formulating marketing plans for various types of sports organizations. The course deals with marketing issues particularly germane to sports organizations such as: fans as consumers, fan loyalty, sports pricing, servicescapes, player development and sports sponsorships. This course includes lectures, guest speakers, cases, examinations and student group projects. **Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

MKTG 6840 - Independent Study

Summer 2010 Registration **MKTG 6840**

Allowed only under special and unusual circumstances. Regularly scheduled courses cannot be taken as independent study. Prereq: permission of instructor. **Semester Hours: 1to 8**

Registration is changing. Visit our website for details ucdenver.edu/registration.

MLNG 1111 - Freshman Seminar

Summer 2010 Registration **MLNG 1111**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MLNG 2939 - Cooperative Education

Summer 2010 Registration **MLNG 2939**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MLNG 4690 - Methods of Teaching Modern Languages

Summer 2010 Registration **MLNG 4690**

Methodology of teaching foreign language in an urban setting. Note: Requirement for language majors in the teacher certification program, School of Education, CU-Denver. Cross-listed with MLNG 5690. **Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

MLNG 4691 - Methods of Teaching Modern Languages II

Summer 2010 Registration **MLNG 4691**

A continuation of the study of modern language teaching methods. This second course has an emphasis on experiential learning through individual teaching demonstrations,

class observations, as well as team teaching with experienced instructors. Prereq: MLNG 4690. Cross-listed with MLNG 5691. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MLNG 5690 - Methods of Teaching Modern Languages

Summer 2010 Registration **MLNG 5690**

Methodology of teaching foreign language in an urban setting. Requirement for language majors in the teacher certification program, School of Education, CU-Denver. Cross-listed with MLNG 4690. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MLNG 5691 - Methods of Teaching Modern Languages II

Summer 2010 Registration **MLNG 5691**

a continuation of the study of modern language teaching methods. This second course has an emphasis on experiential learning through individual teaching demonstrations, class observations, as well as team teaching with experienced instructors. Prereq: MLNG 5690. Cross-listed with MLNG 4691. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MSRA 5000 - Introduction to Graduate Studies

Summer 2010 Registration **MSRA 5000**

Surveys existing literature and research in science, technology, and pedagogy of recording arts. Extensive use of available resources in library, electronic and print, trade and scientific publications are explored. Use of computer applications for research and publication are developed. Prereq: Admission to the MSRA degree program. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MSRA 5001 - MSRA Research Seminar

Summer 2010 Registration **MSRA 5001**

In preparation for their thesis/portfolio, students learn research techniques by: applying skills from MSRA 5000, learning research design, performing research, interpreting results, and writing. Students will discover opportunities to add to the body of audio literature and recording techniques. Prereqs: MSRA 5000. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MSRA 5500 - Topics in Professional Audio

Summer 2010 Registration **MSRA 5500**

Selected topical subjects to include live or studio sound recording, sound reinforcement,

new technologies or practices in the audio industry. Cross-listed with MSRA 4500.**Semester Hours:** 1to 4
Registration is changing. Visit our website for details ucdenver.edu/registration.

MSRA 5505 - Audio Post Production I

Summer 2010 Registration **MSRA 5505**

Reviews all aspects of audio synchronized with picture, including music, sound effects, narration, and dialog replacement. Topics studied with respect to film, video and multi-media. Cross-listed with MUSC 4505.**Semester Hours:** 4to 4
Registration is changing. Visit our website for details ucdenver.edu/registration.

MSRA 5550 - Audio Production III

Summer 2010 Registration **MSRA 5550**

Advanced studies in sound recording and reinforcement, aesthetics and techniques of multi-track analog and digital recording and stereo imaging. Team lab recording projects. Prereq: MUSC 2650 or permission of instructor. Cross-listed with MUSC 4550.**Semester Hours:** 4to 4
Registration is changing. Visit our website for details ucdenver.edu/registration.

MSRA 5560 - Mastering & Advanced Digital Audio

Summer 2010 Registration **MSRA 5560**

A study and practice of the art of mastering. Topics covered include: history, monitoring, signal flow, metering, jitter, audio restoration, limiting, creating a CD pre-master, & mastering for new media. Students will get practical experience mastering their own projects. Prereq: MUSC 4550 or admittance into the MSRA program.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MSRA 5575 - Graduate Surround Sound

Summer 2010 Registration **MSRA 5575**

This lecture-lab course deals with surround sound in film, digital TV and DVD's. Topics include monitoring, microphone techniques, recording, mixing, mastering, delivery formats and psychoacoustics. Students work on two lab projects in the semester. Prereq: MSRA 5550. Cross-listed with MUSC 4575.**Semester Hours:** 4to 4
Registration is changing. Visit our website for details ucdenver.edu/registration.

MSRA 5576 - Surround Sound II

Summer 2010 Registration **MSRA 5576**

Students will work on advanced surround sound projects and study mixing aesthetics,

high-definition technology and authoring. Students will have advanced knowledge of these topics and produce professional, competitive material for their demo. Prereq: MSRA 5550, 5575 and 5505, or permission of instructor. Cross-listed with MUSC 4576.**Semester Hours:** 4to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

MSRA 5580 - Graduate Audio Seminar

Summer 2010 Registration **MSRA 5580**

Faculty and majors of the music engineering program assemble to discuss and demonstrate issues of artistic and technical applications of recording technology. Student projects, faculty, and guest lectures provide topical focus. Prereq: MUSC 2560 or permission of instructor. Cross-listed with MUSC 4580.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MSRA 5590 - Graduate Audio Production

Summer 2010 Registration **MSRA 5590**

Deals with advanced audio skills for music recording, including technical and artistic considerations. This is a required course for the MSRA degree. Prereq: Acceptance into MSRA Degree Program.**Semester Hours:** 4to 4
Registration is changing. Visit our website for details ucdenver.edu/registration.

MSRA 5600 - Topics in Music

Summer 2010 Registration **MSRA 5600**

Various topics relating to the study of music performance, music technology and music business. Cross-listed with MUSC 4600.**Semester Hours:** 1to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MSRA 5605 - Audio Post Production II

Summer 2010 Registration **MSRA 5605**

Students will learn advanced Pro Tools techniques by designing, conceptualizing, and completing sound for a student film project. This interdisciplinary course prepares students for working relationships between Recording Arts, Film and Video areas and an entry level job in post production. Prereq: MUSC 4505/MSRA 5505 Audio Post Production I (formerly Audio Sweetening I) for RA majors and MSRA majors; FILM 2150 and FILM 2000 for film majors, and permission of instructor. Cross-listed with MUSC 4605.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MSRA 5840 - Independent Study for MSRA

Summer 2010 Registration **MSRA 5840**

Allows graduate students to pursue in-depth study of an audio-related topic, to be discussed with and approved by the Graduate Advisor. A final report or other tangible results will be determined on a case- by-case basis. Prereq: permission of instructor and per stipulations of college Is policies. **Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MSRA 6510 - Graduate Audio Studies Pedagogy

Summer 2010 Registration **MSRA 6510**

Surveys available resources for audio education. Interdisciplinary materials in physics, acoustics, engineering, music, broadcast, medicine, psychology, multi-media, theater, and film or video are reviewed. Emphasis on design and development of new methods and materials are pursued. (MSRA graduate students only.) Prereq: MUSC 5000. **Semester Hours:** 4to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

MSRA 6530 - Graduate Audio Forensics

Summer 2010 Registration **MSRA 6530**

Deals with audio for the legal profession. Topics covered include tape authentication, audio enhancement, voice prints and analysis, consultation and expert witness testimony. The labs work with practice and real-life situations and prepare students for further research in this area. Prereq: MSRA graduate students only or permission of instructor. **Semester Hours:** 4to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

MSRA 6550 - Sound Design

Summer 2010 Registration **MSRA 6550**

Deals with designing sound for live theater, film, video, television, theme parks, games and soundscapes. Focuses on using technology to achieve specific esthetic aspects of audio production. This is accomplished through lectures, listening assignments, research and lab practice. (For graduate students only.) Prereq: MUSC 5000 and 5590 or permission of instructor. **Semester Hours:** 4to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

MSRA 6950 - Thesis in Professional Audio

Summer 2010 Registration **MSRA 6950**

With the guidance of a thesis advisor, each candidate for the MSRA degree select an approved topic for scholarly review, research and publication. The approved materials are evaluated for written and oral defense. Prereq: MUSC 5000, 5590, 6510, 6580,

6530.**Semester Hours:** 4to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

MSRA 6951 - Professional Audio Portfolio Thesis

Summer 2010 Registration **MSRA 6951**

With the guidance of a portfolio advisor, each candidate for the Msra degree produce specified documentation and audio materials that reflect the career intentions of the candidate. a completed "Show kit" or professional "Demo" of the candidate's specialty are produced. The approved materials are evaluated for written, audio and oral defense.

Prereq: MUSC 5000, 5590, 6510, 6530.**Semester Hours:** 4to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

MUSC 1111 - Freshman Seminar

Summer 2010 Registration **MUS 1111**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MUSC 2220 - Commercial Electronic Music Composition

Summer 2010 Registration **MUS 2220**

An investigation, analysis and application of contemporary electronic music compositional and production techniques in relation to commercial music and historical context. Prereq: PMUS 1200, PMUS 1210 and MUSC 2300.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MUSC 2300 - Introduction to Songwriting

Summer 2010 Registration **MUS 2300**

Studies the craft of songwriting. Emphasis is on the creation of original melodies and lyrics. A variety of non-classical contemporary musical styles are considered.**Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MUSC 2450 - Introduction to Performing Arts and Events Management

Summer 2010 Registration **MUS 2450**

Introduces stage management of events in the performing arts. Development of leadership and organizational skills as well as a general understanding of the profession.

Cross-listed with THTR 2450.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MUSC 2470 - Music Applications on the Computer

Summer 2010 Registration **MUS 2470**

Introduces the use of computers in the music industry. Topics include basic computer operation, computer hardware, desktop publishing for music business, music notation, MIDI sequencing and digital audio. Students individually create several computer lab projects. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MUSC 2500 - Performance Art and Experimental Music

Summer 2010 Registration **MUS 2500**

Introduces the history, philosophies and techniques of the European and American Avant-Garde theatrical performance and music. A study of music's various roles provides students with opportunities for creative application. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MUSC 2540 - Audio Production I

Summer 2010 Registration **MUS 2540**

Operating principles and performance characteristics of microphones, amplifiers, speaker systems, equalizers, mixers and multi-track recorders; acoustics of music, auditoriums and recording studios. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MUSC 2560 - Audio Production II

Summer 2010 Registration **MUS 2560**

Studies aesthetics and technology of electronic music, voltage controlled and MIDI sound synthesis, and multi-track analog recording and signal processing. Team lab recording projects. Prereq: MUSC 2540 or permission of instructor. **Semester Hours:** 4to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

MUSC 2700 - Introduction to Music Business

Summer 2010 Registration **MUS 2700**

Introduces music as a business and a product, emphasizing music publishing, recording, broadcasting, marketing, licensing and legal aspects. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MUSC 2715 - Music Business Modules

Summer 2010 Registration **MUS 2715**

One week modular courses intended to give exposures to specific business and management aspects of various subindustries within the music industry. Students comprehension of topics are evaluated through such mechanisms as group projects, research essays and/or assessment exams. Prereq: MUSC 2700. **Semester Hours:** 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

MUSC 3120 - Music in Film: Altered Reality

Summer 2010 Registration **MUS 3120**

This course examines films that make use of altered space and time, analyzing the scores for compositional techniques and discussing the effectiveness of these techniques in these films and others of the same type. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MUSC 3125 - Sound and Music for Video Games

Summer 2010 Registration **MUS 3125**

This course will give students an overview of the function of sound and music for video games including: history, sound engines, types of audio utilized, stereo and surround sound localization, music capabilities of hardware configurations and future trends in sound for video games. Prereq: MUSC 2540 and MUSC 2470 or permission of instructor. **Semester Hours:** 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

MUSC 3210 - Music and Entertainment Marketing

Summer 2010 Registration **MUS 3210**

In this course students learn the essential elements of marketing as applied to the music and entertainment industry. Course topics include: marketing principles, theories and tools utilized in the music and entertainment businesses and specific industry practices and applications. Prereq: MUSC 2700. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MUSC 3220 - Artist Management

Summer 2010 Registration **MUS 3220**

Students learn the theory and practice of artist management as it relates to developing a career through entrepreneurship, establishing business structures for the artist, and concepts including: promotion, live performance, recording, contracts, and essential business practices. Prereq: MUSC 2700 **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MUSC 3310 - Songwriting II

Summer 2010 Registration **MUS 3310**

Presents concepts of songwriting that build upon those presented in MUSC 2300. Students are expected to understand and discuss musical concepts and lyric structure and use these concepts in the creation of original songs. Prereq: MUSC 2300, PMUS 1200, PMUS 1210 and PMUS 1023. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MUSC 3530 - Live Sound Reinforcement

Summer 2010 Registration **MUS 3530**

This course focuses on the basic elements of sound reinforcement: acoustics, equalization, equipment and mixing techniques. The major emphasis is the production of the final sonic product. Prereq: Admittance to Recording Arts/Tech focus. **Semester Hours:** 4to 4
Registration is changing. Visit our website for details ucdenver.edu/registration.

MUSC 3540 - Recording Studio Maintenance and Calibration

Summer 2010 Registration **MUS 3540**

A basic course in calibration, alignment, and minor repair necessary for functional operation of the recording studio. Prereq: Admittance to Recording Arts/Tech focus. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MUSC 3550 - Critical Listening for Recording Arts

Summer 2010 Registration **MUS 3550**

Students will be trained to recognize: boosts and cuts in different bands of frequencies at increasingly small increments, types of distortion, parameters for compression, delay, reverb and stereo imaging. Students will develop a vocabulary for describing sounds and improving auditory memory. Prereq: Admittance to Recording Arts/Tech focus. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MUSC 3615 - Topics In Music Business

Summer 2010 Registration **MUS 3615**

Various topics relating to the study of music performance, music technology and music business. **Semester Hours:** 1to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MUSC 3690 - Concert Promotion, Tour, and Venue Management

Summer 2010 Registration **MUS 3690**

This course gives students a working knowledge of touring, presenting, promoting, marketing and management of live concerts. They will undertake an in-depth analysis from various points of reference: issues for agent, independent promoter, venue manager, tour/production manager and performer. Prereq: MUSC 2700. **Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MUSC 3695 - Music and Entertainment Business in the Digital Age

Summer 2010 Registration **MUS 3695**

In this course students learn the trends and developments changing the industry in the Digital Age. Course focuses on current technology, terminology and business models shaping the industry, preparing students for entry into an evolving music and entertainment career. Prereq: MUSC 2700 **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MUSC 3720 - Law and the Music Industry

Summer 2010 Registration **MUS 3720**

Students will learn how to use and analyze music law principles through a review of essential court case studies. Students will be tested on lecture material and provided with an opportunity to complete research papers for a more in-depth examination.

Prereq: MUSC 2700 (Intro to Music Business), MUSC 3220 (Artist Management), Jr. standing. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MUSC 3745 - CAM Records

Summer 2010 Registration **MUS 3745**

Provides students with the opportunity to participate in the administrative and business practices of operating a record label. Prereq: MUSC 2700 and MUSC 3210 (Music and Ent Mktg). **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MUSC 3755 - Music Publishing

Summer 2010 Registration **MUS 3755**

An in-depth look at the function and responsibilities of music publishers and the operation of music publishing companies. Key issues related to music publishing activities are studied and analyzed. Prereq: MUSC 2700 and (MUSC 3210 (Music and

Ent Mktg) or MUSC 3220 (Artist Mgmt). **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

MUSC 3770 - Recording Studio Management

Summer 2010 Registration **MUS 3770**

Study of the management and operations of a commercial recording studio; spanning home-based businesses or project studios as well as larger commercial facilities. **Semester Hours:** 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

MUSC 3785 - Current Issues In the Music Business

Summer 2010 Registration **MUS 3785**

Class discusses and analyzes cutting-edge business and legal developments in the music industry, focusing particularly on the developments' impact on historical traditions, career paths and creative applications in the field. Prereqs: MUSC 3210 (Music and Ent. Mktg), MUSC 3220 (artist management), Jr. standing. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MUSC 3790 - Video Production in the Arts: Music

Summer 2010 Registration **MUS 3790**

Introduces the development of the contemporary music video with an emphasis on stylistic and technical analysis. Combines a lecture demonstration format with hands-on videography. Open to music, theatre, fine arts majors, and students who have successfully completed at least one College of Arts and Media course. **Semester Hours:** 4to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

MUSC 3820 - Digital Music Techniques

Summer 2010 Registration **MUS 3820**

Studies the general principles and applications of digital music technology, emphasizing the function and operation of specific computer software. Topics include digital audio workstations, MIDI sequencers, digital signal processing programs, and distribution on optical discs and computer-based mediums. Prereq: Admittance to Recording Arts/Tech focus. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MUSC 3845 - Music Independent Study

Summer 2010 Registration **MUS 3845**

Prereq: MUSC 2700**Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MUSC 3939 - Internship/Cooperative Education

Summer 2010 Registration **MUS 3939**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MUSC 4200 - Advanced Composition

Summer 2010 Registration **MUS 4200**

Composition of extended forms. May be repeated once for credit. Prereq: MUSC 3200.**Semester Hours:** 2to 2

Registration is changing. Visit our website for details ucdenver.edu/registration.

MUSC 4500 - Topics in Professional Audio

Summer 2010 Registration **MUS 4500**

Selected topical subjects to include live or studio sound recording, sound reinforcement, new technologies or practices in the audio industry. Prereq: Admittance to Recording Arts/Tech focus. Cross-listed with MSRA 5500.**Semester Hours:** 1to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

MUSC 4505 - Audio Post Production I

Summer 2010 Registration **MUS 4505**

Reviews all aspects of audio synchronized with picture, including music, sound effects, narration, and dialog replacement. Topics studied with respect to film, video and multi-media. Prereq: Admittance to Recording Arts/Tech focus. Cross-listed with MSRA 5505.**Semester Hours:** 4to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

MUSC 4550 - Audio Production III

Summer 2010 Registration **MUS 4550**

Advanced studies in sound recording and reinforcement, aesthetics and techniques of multi-track digital recording and stereo imaging. Team lab recording projects. Prereq: Admittance to Recording Arts/Tech focus. Cross-listed with MSRA 5550.**Semester Hours:** 4to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

MUSC 4560 - Mastering & Advanced Digital Audio

Summer 2010 Registration **MUS 4560**

A study and practice of the art of mastering. Topics covered include: history, monitoring, signal flow, metering, jitter, audio restoration, limiting, creating a CD pre-master, & mastering for new media. Students will get practical experience mastering their own projects. Prereq: MUSC 4550 or admittance into the MSRA program. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MUSC 4575 - Surround Sound

Summer 2010 Registration **MUS 4575**

This lecture-lab course deals with surround sound in film, digital TV and DVDs. Topics include monitoring, microphone techniques, recording, mixing, mastering, delivery formats and psychoacoustics. Students work on two lab projects in the semester. Prereq: MUSC 4550 and admittance to Recording Arts/Tech focus. Cross-listed with MSRA 5575. **Semester Hours:** 4to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

MUSC 4576 - Surround Sound II

Summer 2010 Registration **MUS 4576**

Students will work on advanced surround sound projects and study mixing aesthetics, high-definition technology and authoring. Students will have advanced knowledge of these topics and produce professional, competitive material for their demo. Prereq: MUSC 4550, 4575, 4505 or permission of instructor. Cross-listed with MSRA 5576. **Semester Hours:** 4to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

MUSC 4580 - Audio Production Seminar

Summer 2010 Registration **MUS 4580**

Faculty and majors of the music engineering program assemble to discuss and demonstrate issues of artistic and technical applications of recording technology. Student projects, faculty, and guest lectures provide topical focus. (Music facility fee applies.) Prereq: Admittance to Recording Arts/Tech focus. Cross-listed with MSRA 5580. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MUSC 4605 - Audio Post Production II

Summer 2010 Registration **MUS 4605**

Students will learn advanced Pro Tools techniques by designing, conceptualizing, and

completing sound for a student film project. This interdisciplinary course prepares students for working relationships between Recording Arts, Film and Video areas and an entry level job in post production. Prereq: MUSC 4505/MSRA 5505 Audio Post Production I (formerly Audio Sweetening I) for RA majors and MSRA majors; FILM 2150 and FILM 2000 for film majors, and permission of instructor. Cross-listed with MSRA 5605.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MUSC 4740 - Music Business Analysis

Summer 2010 Registration **MUS 4740**

Students learn to analyze specific managerial situations unique to the music and entertainment industries and will understand aspects of finance, taxation, and management science. Prereq: MUSC 3210 (Music and Ent Mktg.), MUSC 3220 (Artist Mgmt.).**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MUSC 4890 - Music Business Senior Seminar

Summer 2010 Registration **MUS 4890**

Faculty and majors of the Music Business program meet to discuss senior capstone projects. Prereq: MUSC 3210 (Music Marketing), MUSC 3220 (Artist Management), Sr. standing.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MUSC 5840 - Independent Study: MUSC

Summer 2010 Registration **MUS 5840**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

MUSC 5939 - Cooperative Education

Summer 2010 Registration **MUS 5939**

Semester Hours: 1to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 1012 - Introduction to Philosophy: Relationship of the Individual to the World

Summer 2010 Registration **PHIL 1012**

Introductory course in philosophy that focuses on some of the central questions of philosophy, including theories of reality and the nature of knowledge and its limits. The knowledge of these areas is essential to the student for informed participation in the resolution of contemporary problems in today's society.**Semester Hours:** 3to 3GT

Pathways Category Key: GT-AH3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 1020 - Introduction to Ethics and Society: The Person and the Community

Summer 2010 Registration **PHIL 1020**

Studies some of the traditional problems in ethics that tend to be focused on individual morality within the larger context of social and political philosophy. Some specific contemporary moral and social problems may be addressed, such as AIDS, abortion, famine, and individual rights versus the collective rights of society. **Semester Hours: 3to**

3GT Pathways Category Key: GT-AH3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 1111 - Freshman Seminar

Summer 2010 Registration **PHIL 1111**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 1700 - Philosophy and the Arts

Summer 2010 Registration **PHIL 1700**

Considers philosophical questions involved in the analysis and assessment of artistic expressions and of the objects with which the arts, including the literary arts, are concerned. **Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 2441 - Logic and Language

Summer 2010 Registration **PHIL 2441**

Introductory course that considers the significance of logical form and language use in argumentation and persuasion. Topics covered include definition, types of discourse, informal fallacies, traditional syllogisms, rules of logical inference, and problem solving similar to that found on the L.S.A.T. **Semester Hours: 3to 3GT Pathways Category**

Key: GT-AH3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 2510 - Philosophy of Nature

Summer 2010 Registration **PHIL 2510**

Critical comparison of different views of nature presupposed in science, art, religion, and environmental policy. Concepts of "natural" are examined in relation to such issues as animal rights, wilderness preservation, synthetic landscape, technology, pollution, and

population control. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 2939 - Internship/Cooperative Education

Summer 2010 Registration **PHIL 2939**

Experiences involving application of specific, relevant concepts and skills in supervised employment situations. Prereq: 15 hours of 2.75 GPA. **Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 3000 - Ethics in Community Affairs

Summer 2010 Registration **PHIL 3000**

Includes an overview of ethical concepts and approaches, together with consideration of applications to contemporary cases taken from current events in for-profit, non-profit, and governmental arenas. **Semester Hours:** 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 3002 - Ancient Greek Philosophy

Summer 2010 Registration **PHIL 3002**

History of ancient Greek thought, including traditional myth, pre-Socratic fragments, Plato's dialogues, and Aristotle's systematic philosophy. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 3005 - Roman and Early Medieval Philosophy

Summer 2010 Registration **PHIL 3005**

Surveys philosophy in the Roman era, focusing on the Hellenistic schools (Epicureanism, Stoicism and Skepticism), Neoplatonic thought, the advent of Christianity, and the earliest Christian philosophers. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 3010 - Medieval Philosophy

Summer 2010 Registration **PHIL 3010**

History of philosophy from Augustine through Scotus and Ockham, the 5th through the 14th centuries. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 3022 - Modern Philosophy

Summer 2010 Registration **PHIL 3022**

History of philosophy from Descartes through Kant. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 3032 - Twentieth Century Analytic Philosophy

Summer 2010 Registration **PHIL 3032**

Surveys representative philosophers, methods, and problems in the 20th century analytic tradition. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 3100 - Current Perspectives on the Evolution of Consciousness and Culture

Summer 2010 Registration **PHIL 3100**

Studies of evolution traditionally regard morphology (anatomy)/behavior and mind/consciousness as separate fields that belong either in biology/paleontology or in psychology/philosophy. The "middle ground" behavior, anthropology, social systems, is also treated separately in most cases. Recent approaches tend toward a more holistic view using unifying principles and "laws of nature" that show similar processes (dissipative effects, information theory, development theory) operating across all fields. Examines the relationships and common threads between the physical anatomical evolution of organisms and their behavior perception and consciousness. Prereq: Introductory course in evolution (biology/paleontology), psychology, philosophy, anthropology or permission of instructor. Cross-listed with GEOL 3100 and RLST 4280. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 3150 - History of Ethics

Summer 2010 Registration **PHIL 3150**

Surveys the ethical thought of major figures in the history of philosophy, beginning with Plato and ending with the 19th century. Examples: Aristotle, Hume, Kant and Mill. (Class readings of primary philosophical texts.) **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 3200 - Social and Political Philosophy

Summer 2010 Registration **PHIL 3200**

Examines basic issues in social and political philosophy, including justice, freedom, individuality, power and community. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 3250 - Business Ethics

Summer 2010 Registration **PHIL 3250**

Surveys some of the major moral problems which arise in business, such as the nature and scope of the moral responsibilities of corporations, affirmative action, and truth in advertising. Begins with a study of moral reasoning, ethical theory, and the challenges of applying ethical theory. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 3280 - War and Morality

Summer 2010 Registration **PHIL 3280**

Attempts to identify and analyze some of the major moral issues of war. When is a war just, when is it not? What are morally acceptable rules of engagement? What, if anything, justifies violating them? How does one evaluate terrorism and war against terrorism? What are moral alternatives to the violence of war? **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 3300 - Special Topics in Philosophy

Summer 2010 Registration **PHIL 3300**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 3350 - Metaphysics

Summer 2010 Registration **PHIL 3350**

Studies major theories of reality, including topics such as the nature of substance, space and time, and universals and particulars. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 3360 - Epistemology

Summer 2010 Registration **PHIL 3360**

Study of major theories of knowledge, including such problems as perception and the distinction between belief and knowledge. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 3420 - Kosmos: Theories of the Universe

Summer 2010 Registration **PHIL 3420**

A course in philosophical cosmology using material from the sciences, history and philosophy. The goal is to illuminate our present theories concerning the nature of the universe and the place of life within it. Cross-listed with RLST 4260. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 3440 - Introduction to Symbolic Logic

Summer 2010 Registration **PHIL 3440**

Covers truth functional and quantificational logic through polyadic first order predicate calculus and theory of identity. Attention is given to such problems in metatheory as proofs of the completeness and consistency of systems of logic. Cross-listed with MATH 3440. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 3500 - Ideology and Culture: Racism and Sexism

Summer 2010 Registration **PHIL 3500**

Surveys the nature and role of racism and sexism. Topics may include ideology theory, naturalism, the equal protection clause, recent scientific discussion, sociolegal history, and social constructionism. Cross-listed with WGST 3500. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 3550 - Philosophy of Death and Dying

Summer 2010 Registration **PHIL 3550**

Historical overview of the metaphysical question of whether there is life after bodily death, beginning with classical arguments through the current debate over such phenomena as near death experiences and deathbed visions. Also focuses on ethical controversies such as suicide, euthanasia, and capital punishment, and the efficacy of philosophical consolations for grief. Prereq: Three hours of philosophy; preferably PHIL 1012. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 3656 - Contemporary Religious Ethics: Jewish and Christian Traditions

Summer 2010 Registration **PHIL 3656**

Historical and thematic introduction to ethics in Judaism, Roman Catholicism and Protestantism. A study of selected ethical issues: bio-medical, social justice, sexuality, economic justice, business and personal ethics. Prereq: English composition; intro to philosophy; world religions; world history; junior status. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 3666 - Asian Philosophies and Religions

Summer 2010 Registration **PHIL 3666**

We in the Western world encounter a vastly different world, a radically different "universe of meaning," when we examine the traditions of the East. Even what we tacitly assume to be "real" is claimed by the Hindus and Buddhists of India to be a grand illusion. The world of China is, again, very different from India. An examination of Tibetan and

Japanese religious forms will conclude our study of Asian thought. Cross-listed with RLST 3400.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 3840 - Independent Study

Summer 2010 Registration **PHIL 3840**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 3939 - Internship/Cooperative Education

Summer 2010 Registration **PHIL 3939**

Designed experiences involving application of specific, relevant concepts and skills in supervised employment situations. Prereq: Junior standing and 2.75 GPA.**Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 3981 - Chinese Philosophy and Culture

Summer 2010 Registration **PHIL 3981**

China is a fascinating world with its own characteristic orientation to philosophical questions. Chinese thinkers produced the "Flowering of a Hundred Schools of Thought" in the Axial Age, the same period of time in which philosophy was coming to birth in ancient Greece. Covers some of the Chinese schools, including Confucianism, Taoism, Mohism, Legalis, Chinese "logic," and the later schools of Neo-Confucianism, Neo-Taoism and Chinese Buddhism. Cross-listed with RLST 3660.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 4000 - 19th Century Philosophy

Summer 2010 Registration **PHIL 4000**

Covers the systematic work of such German idealists as Hegel, Fichte, and Shelling, as well as responses to those systems by such authors as Marx, Kierkegaard, and Nietzsche. Prereq: PHIL 3002 or 3022. Cross-listed with PHIL 5000, HUMN 5000 and SSCI 5000.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 4040 - Skeptic and Believer

Summer 2010 Registration **PHIL 4040**

Considers radical skepticism in the form of Sextus Empiricus' Outlines of Pyrrhonism. Following Peter Suber's "Essay on Classical Skepticism," the course also looks at historical responses to Pyrrhonean skepticism, especially in theories of belief. Prereq:

PHIL 3002 or 3022, a minimum grade of "C" in each previous philosophy course, or permission of instructor. Cross-listed with PHIL 5040.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 4101 - Pragmatism: Classical American Philosophy

Summer 2010 Registration **PHIL 4101**

The most significant philosophical tradition born in the United States is pragmatism. Examines several of the most important classical works of this tradition, the influence of thinkers who have helped to shape pragmatism, and the contemporary relevance of this tradition. Figures who may be included are: Emerson, Pierce, Royce, James, Dewey, Mead and Rorty. Prereq: PHIL 3002 or 3022, a minimum grade of "C" in each previous philosophy course, or permission of instructor. Cross-listed with PHIL 5101, HUMN 5101, SSCI 5101.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 4150 - Twentieth Century Ethics

Summer 2010 Registration **PHIL 4150**

Surveys representative philosophers, methods, and/or problems in 20th century ethics. Prereq: PHIL 3002 or 3022, a minimum grade of "C" in each previous philosophy course, or permission of instructor.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 4200 - Philosophical Problems and Contemporary Culture

Summer 2010 Registration **PHIL 4200**

Issues and controversies in contemporary culture, their relation to modern theories of society, and their manifestations in the arts, science and technology, education, religion and ethics. Prereq: PHIL 3002 or 3022, a minimum grade of "C" in each previous philosophy course, or permission of instructor.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 4220 - Aesthetics and the Philosophy of Art

Summer 2010 Registration **PHIL 4220**

Introduction to major theories of aesthetics and contemporary discussions of problems in aesthetics and the philosophy of art, including topics such as: the nature of art, interpretation and evaluation in art. Cross-listed with PHIL 5220 and HUMN 5220.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 4230 - Postmodernism and the Social Sciences

Summer 2010 Registration **PHIL 4230**

Traces the history of a set of ideas collectively known as postmodern. Disrupting traditional frameworks of knowledge, these concepts have had an enormous impact on the social sciences, the humanities, and the arts. Course readings expose students to the cross-disciplinary impact of postmodernism on theory, content, and method. Prereq: Upper division standing; PHIL 3002 or 3022, minimum grade of "C" in each previous philosophy course, or permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 4242 - Bioethics

Summer 2010 Registration **PHIL 4242**

Examines some of the major moral issues confronting the nation's health care system. The class will search for solutions to such problems as financing health care for those unable to do so on their own, determining the extent of a patient's right to both refuse and demand certain types of medical treatment, and allocating scarce medical resources such as lifesaving vital organs. The springboard for examining these issues will be the doctor or patient relationship framed by the moral principles of respect for persons and beneficence. Prereq: PHIL 3002 or 3022, a minimum grade of "C" in each previous philosophy course, or permission of instructor. Cross-listed with PHIL 5242, SSCI 5242, HUMN 5242. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 4250 - Environmental Ethics

Summer 2010 Registration **PHIL 4250**

While human industry/technology creates enormous material prosperity, it can result in devastating environmental damage. This course analyzes the moral values, consequences and duties implied in relationships between human beings, animals and ecological systems, while seeking out new and ethical approaches. Cross-listed with PHIL 5250, HUMN 5250 and SSCI 5250. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 4260 - Philosophy of Law

Summer 2010 Registration **PHIL 4260**

Surveys theoretical positions on the nature of law, with particular emphasis on American law. Prereq: PHIL 3002 or 3022, a minimum grade of "C" in each previous philosophy course, or permission of instructor. Cross-listed with PHIL 5260. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 4270 - Philosophy of History

Summer 2010 Registration **PHIL 4270**

Examines critical and speculative theories of history, including the problems of methodology, explanation, values, and the relationship between history and social philosophy. Prereq: PHIL 3002 or 3022, a minimum grade of "C" in each previous philosophy course, or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 4300 - Philosophy of Mind

Summer 2010 Registration **PHIL 4300**

Consideration of the problems in the philosophy of mind, such as the mind-body problem, the problem of our knowledge of other minds, the compatibility of free will and determinism, and discussion of such concepts as action, intention, motive, desire, enjoyment, memory, imagination, dreaming and self-knowledge. Prereq: PHIL 3002 or 3022, a minimum grade of "C" in each previous philosophy course, or permission of instructor. Cross-listed with PHIL 5300. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 4360 - American Legal Process

Summer 2010 Registration **PHIL 4360**

Introduces students to basic issues in American jurisprudence as well as to the elements and dynamics of the modern American legal system. Cross-listed with PHIL

5360. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 4460 - Theories of Human Nature

Summer 2010 Registration **PHIL 4460**

Consideration of such problems as the changeability and definability of human nature, and the possibility of a science of human nature. Prereq: PHIL 3002 or 3022, a minimum grade of "C" in each previous philosophy course, or permission of instructor. **Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 4470 - Concepts of the Soul

Summer 2010 Registration **PHIL 4470**

Asks the questions: What is the nature of the human being? What makes us "human?" Do humans have a "soul?" What is its nature? Is it different from the "spirit?" What is its ultimate fate? Examines the various theories put forward by philosophers of both Eastern and Western traditions. Cross-listed with PHIL 5470 and RLST 4440, 5440. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 4480 - Perspectives on Good and Evil

Summer 2010 Registration **PHIL 4480**

Examines the "problem of evil." As formulated in the philosophical tradition: if the deity is understood as perfect, then why is there evil? How can a perfect entity create imperfection? Why would an absolutely benevolent God cause or allow the innocent to suffer? Presents the classical formulation of the problem, the traditional solutions offered, and the classical critiques of each answer. Considers the perspectives of the various religious orientations, each of which deals differently with the question of suffering. Cross-listed with RLST 4480. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 4600 - Philosophy of Religion

Summer 2010 Registration **PHIL 4600**

Nature of religion and methods of studying it. Cross-listed with HUMN 5600, PHIL 5600, RLST 4060, 5060, and SSCI 5600. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 4650 - Differing Concepts of God

Summer 2010 Registration **PHIL 4650**

God, gods, and goddesses have been imagined in many different modes, forms, aspects, and guises throughout human history. This course investigates Paleolithic models of God, the Great Goddess of the Neolithic era, the gods of mythological traditions, Biblical God, the abstract God of the philosophers, the God of the pantheists, the deists, and the God of the mystics. Cross-listed with PHIL 5655, RLST 4400 and 5400. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 4700 - Seminar in a Major Philosopher (topics)

Summer 2010 Registration **PHIL 4700**

The major philosophical texts of one philosopher is studied in this course. Philosophers to be studied are major figures in the history of philosophy such as Plato, Aristotle, Kant and Hume. Note: May be taken for credit more than once. Prereq: PHIL 3002 or 3022, a minimum grade of "C" in each previous philosophy course, or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 4710 - Western Religious Thought

Summer 2010 Registration **PHIL 4710**

Focuses on philosophers and theologians who have contributed to the evolution of the

three great religious traditions of the West: Judaism, Christianity and Islam. Targets thinkers from three periods: the ancient or formative era, the medieval era, and the contemporary era. Note: Specific philosophers chosen may vary in different semesters. Cross-listed with RLST 4070. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 4720 - Eastern Religious Thought

Summer 2010 Registration **PHIL 4720**

Parallels the course in Western religious thought. The great religious traditions of the East, including Hinduism, Buddhism, Confucianism, and Taoism, are examined as they are presented in the writings of key philosophical representatives of each tradition. Cross-listed with RLST 4080. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 4730 - Philosophy and Literature

Summer 2010 Registration **PHIL 4730**

Considers the philosophical dimensions of literature. Prereq: PHIL 3002 or 3022, a minimum grade of "C" in each previous philosophy course, or permission of instructor. Cross-listed with PHIL 5730, ENGL 4735 and 5735. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 4735 - Rationalism

Summer 2010 Registration **PHIL 4735**

Addresses the fundamental questions of truth and reality through natural reason. Topics vary and may include metaphysics and the rise of modern science; women and the enlightenment; historical problems and linguistic analysis. Prereq: PHIL 3002 or 3022, a minimum grade of "C" in each previous philosophy course, or permission of instructor. Cross-listed with PHIL 5735. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 4740 - Empiricism

Summer 2010 Registration **PHIL 4740**

Considers the nature and importance of experience. Focuses on British Empiricism, but additional themes which vary may include: American pragmatism, logical positivism, scientific empiricism, phenomenology of experience. Prereq: PHIL 3002 or 3022, a minimum grade of "C" in each previous philosophy course, or permission of instructor. Cross-listed with PHIL 5740. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 4750 - Introduction to Phenomenology

Summer 2010 Registration **PHIL 4750**

Examines the contribution of phenomenology to selected topics in the theory of meaning, philosophy of mind, ontology, and epistemology, through a study of such philosophers as Husserl, Heidegger, Sartre and Merleau-Ponty. Prereq: PHIL 3002 or 3022, a minimum grade of "C" in each previous philosophy course, or permission of instructor. Cross-listed with PHIL 5750. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 4760 - Kant

Summer 2010 Registration **PHIL 4760**

A close study of Immanuel Kant's revolutionary thought, focusing on Kant's ontology, epistemology, and ethical theory, as they are articulated in his Critique of Pure Reason and Critique of Practical Reason. Prereq: PHIL 3002 or 3022, a minimum grade of "C" in each previous philosophy course, or permission of instructor. Cross-listed with PHIL 5830. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 4770 - Hegel

Summer 2010 Registration **PHIL 4770**

A systematic study of the thought of G.W.F. Hegel through his most important and influential works: The Phenomenology of Spirit; The Encyclopedia of Philosophical Sciences; The Science of Logic; Lectures on the Philosophy of History; and his lectures on the history of philosophy, art and religion. Focus of the course varies. Prereq: PHIL 3002 or 3022, a minimum grade of "C" in each previous philosophy course, or permission of instructor. Cross-listed with PHIL 5770. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 4780 - Heidegger

Summer 2010 Registration **PHIL 4780**

Studies the thought of Martin Heidegger, one of the most important philosophers of the 20th century. Includes texts from both Heidegger's early and later periods, and focuses on his analyses of human subjectivity and being. Prereq: PHIL 3002 or 3022, a minimum grade of "C" in each previous philosophy course, or permission of instructor. Cross-listed with PHIL 5780. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 4790 - Nietzsche

Summer 2010 Registration **PHIL 4790**

A close study of Nietzsche's philosophical writings, with attention to his significance for philosophy in the 20th century and beyond. Cross-listed with PHIL 5790. **Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 4800 - Plato

Summer 2010 Registration **PHIL 4800**

A careful study of Plato's writings, emphasizing the dialogue form, and discussion of Plato's significance for the history of ethics, political theory, psychology, metaphysics and epistemology. Prereq: PHIL 3002 or 3022, a minimum grade of "C" in each previous philosophy course, or permission of instructor. Cross-listed with PHIL 5800. **Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 4810 - Aristotle

Summer 2010 Registration **PHIL 4810**

Examines Aristotle's systematic philosophy and discusses its contributions to logic, epistemology, physics, psychology, metaphysics, ethics and political theory. Prereq: PHIL 3002 or 3022, a minimum grade of "C" in each previous philosophy course, or permission of instructor. Cross-listed with PHIL 5810. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 4812 - Special Topics in Philosophy

Summer 2010 Registration **PHIL 4812**

Prereq: PHIL 3002 or 3022, a minimum grade of "C" in each previous philosophy course, or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 4820 - Hume

Summer 2010 Registration **PHIL 4820**

Considers the work of eighteenth century philosopher David Hume. Emphasis on unity of Hume's thought. Prereq: PHIL 3002 or 3022, a minimum grade of "C" in each previous philosophy course, or permission of instructor. Cross-listed with PHIL 5820. **Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 4833 - Existentialism

Summer 2010 Registration **PHIL 4833**

Examines one of the most influential movements in recent European thought, beginning with existentialism's 19th century roots, and continuing on to the existentialist philosophers of the 20th century. Figures covered may include Dostoyevsky, Kierkegaard, Nietzsche, Heidegger, Sartre and de Beauvoir. Prereq: PHIL 3000 or 3022, a minimum grade of "C" in each previous philosophy course or permission of instructor. Cross-listed with PHIL 5833, HUMN 5833 and SSCI 5833. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 4840 - Independent Study: PHIL

Summer 2010 Registration **PHIL 4840**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 4900 - John Dewey

Summer 2010 Registration **PHIL 4900**

John Dewey was one of the most important of the American philosophers and public intellectuals of the twentieth century. Topics may include Dewey's philosophical naturalism, pragmatist epistemology, process metaphysics and philosophies of experience, aesthetics, religion, technology and democracy. Cross-listed with PHIL 5900. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 4920 - Philosophy of Media and Technology

Summer 2010 Registration **PHIL 4920**

A philosophical examination of interrelationships between contemporary media, technology, and their impacts upon character of contemporary life and values. Topics may include ethics, epistemology, democracy, advertising, media literacy and criticism. Cross-listed with PHIL 5920, HUMN 5920, SSCI 5920. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 4933 - Philosophy of Eros

Summer 2010 Registration **PHIL 4933**

Why is philosophy an erotic activity and what are the implications of this insight? We will explore these issues, first, by reading Plato's erotic dialogues: Lysis, Symposium and Phaedrus. Then we will focus on Freud's influential (and controversial) appropriation of Plato's thought in the writings that span his career, from The Interpretation of Dreams (1900) to Civilization and its Discontents (1930) and beyond. Finally, we will survey post-Freudian theories of eros, such as Michel Foucault's History of Sexuality, as well as the more recent contributions of thinkers such as Jonathan Lear, Thomas Nagel, Martha

Nussbaum and Slavoj Zizek. Cross-listed with WGST 4933, PHIL 5933, SSCI 5933, and HUMN 5933. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 4950 - Honors Thesis

Summer 2010 Registration **PHIL 4950**

Semester Hours: 3to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 4980 - Special Topics in Philosophy

Summer 2010 Registration **PHIL 4980**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 5000 - 19th Century Philosophy

Summer 2010 Registration **PHIL 5000**

Covers the systematic work of such German idealists as Hegel, Fichte, and Shelling, as well as responses to those systems by such authors as Marx, Kierkegaard, and Nietzsche. Prereq: PHIL 3002 or 3022. Cross-listed with PHIL 4000, HUMN 5000 and SSCI 5000. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 5013 - Philosophical Problems in the Social Sciences and the Humanities

Summer 2010 Registration **PHIL 5013**

Presents an overview of key theoretical issues currently emerging across academic disciplines. Examines questions about reality, knowledge, and ethics that affect social research and writing in the humanities. Readings explore how contemporary philosophical and cultural discourses have altered theory and method. Assignments include influential theoretical pieces by key historical and contemporary thinkers, examples of application in social research, and interpretations of thought and affect in cultural contexts. Cross-listed with HUMN/SSCI 5013. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 5020 - Elements of Social Thought

Summer 2010 Registration **PHIL 5020**

Introduces students to the disciplines that comprise the social sciences (classical anthropology, sociology, sociology of religion, philosophy of history, political theory, classical psychology, etc.). Provides necessary tools for interdisciplinary students to understand the social infrastructure of contemporary society. Cross-listed with SSCI

5020 and HUMN 5020. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 5040 - Skeptic and Believer

Summer 2010 Registration **PHIL 5040**

Considers radical skepticism in the form of Sextus Empiricus' Outlines of Pyrrhonism. Following Peter Suber's "Essay on Classical Skepticism," the course also looks at historical responses to Pyrrhonian skepticism, especially in theories of belief. Cross-listed with PHIL 4040. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 5100 - Topics in the History of Philosophy

Summer 2010 Registration **PHIL 5100**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 5101 - Pragmatism: Classical American Philosophy

Summer 2010 Registration **PHIL 5101**

The most significant philosophical tradition born in the United States is pragmatism. Examines several of the most important classical works of this tradition, the influence of thinkers who have helped pragmatism, and the contemporary relevance of this tradition. Figures who may be included in this course are: Emerson, Pierce, Royce, James, Dewey, Mead and Rorty. Prereq: An introductory course in philosophy. Cross-listed with PHIL 4101, SSCI 5101, HUMN 5101. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 5220 - Aesthetics and the Philosophy of Art

Summer 2010 Registration **PHIL 5220**

Introduction to major theories of aesthetics and contemporary discussions of problems in aesthetics and the philosophy of art, including topics such as: the nature of art, interpretation and evaluation in art. Cross-listed with PHIL 4220 and HUMN 5220. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 5242 - Bioethics

Summer 2010 Registration **PHIL 5242**

Examines some of the major moral issues confronting the nation's health care system. The class will search for solutions to such problems as financing health care for those unable to do so on their own, determining the extent of a patient's right to both refuse

and demand certain types of medical treatment, and allocating scarce medical resources such as lifesaving vital organs. The springboard for examining these issues will be the doctor or patient relationship framed by the moral principles of respect for persons and beneficence. Cross-listed with PHIL 4242, HUMN 5242, SSCI 5242. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 5250 - Environmental Ethics

Summer 2010 Registration **PHIL 5250**

While human industry/technology creates enormous material prosperity, it can result in devastating environmental damage. This course analyzes the moral values, consequences and duties implied in relationships between human beings, animals and ecological systems, while seeking out new and ethical approaches. Cross-listed with PHIL 4250, HUMN 5250 and SSCI 5250. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 5260 - Philosophy of Law

Summer 2010 Registration **PHIL 5260**

Surveys theoretical positions on the nature of law, with particular emphasis on American law. Cross-listed with PHIL 4260. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 5300 - Philosophy of Mind

Summer 2010 Registration **PHIL 5300**

Consideration of the problems in the philosophy of mind, such as the mind-body problem, the problem of our knowledge of other minds, the compatibility of free will and determinism, and discussion of such concepts as action, intention, motive, desire, enjoyment, memory, imagination, dreaming and self-knowledge. Cross-listed with PHIL 4300. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 5360 - American Legal Process

Summer 2010 Registration **PHIL 5360**

Introduces students to basic issues in American jurisprudence as well as to the elements and dynamics of the modern American legal system. Cross-listed with PHIL 4360. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 5470 - Concepts of the Soul

Summer 2010 Registration **PHIL 5470**

Asks the questions: What is the nature of the human being? What makes us "human?" Do humans have a "soul?" What is its nature? Is it different from the "spirit?" What is its ultimate fate? Examines the various theories put forward by philosophers of both Eastern and Western traditions. Cross-listed with PHIL 4470 and RLST 4440, 5440. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 5550 - Paris 1910: Art, Philosophy and Psychology

Summer 2010 Registration **PHIL 5550**

Traces the influences of philosophy, psychology, and art in the English, French, and German-speaking worlds in the early twentieth century. This intellectual history is extended to broader cultural and political contexts. Key period is between 1910 and 1968, when modernity's key aspirations and tensions became explicit. Cross-listed with HUMN 5550 and SSCI 5550. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 5600 - Philosophy of Religion

Summer 2010 Registration **PHIL 5600**

Nature of religion and methods of studying it. Cross-listed with HUMN 5600, PHIL 4600, RLST 4060, 5060, and SSCI 5600. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 5650 - Reflections on Modernity

Summer 2010 Registration **PHIL 5650**

Explores modernity as a historical epoch and a theoretical space, looking at the commentaries and reflections of influential 20th century thinkers including Adorno, Arendt, Levinas, Merleau-Ponty, Habermas and Foucault. Examines how the theoretical inclinations of modernity were influenced by politics, art, literature and culture. Cross-listed with HUMN 5650 and SSCI 5650. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 5655 - Differing Concepts of God

Summer 2010 Registration **PHIL 5655**

God, gods, and goddesses have been imagined in many different modes, forms, aspects, and guises throughout human history. This course investigates Paleolithic models of God, the Great Goddess of the Neolithic era, the gods of mythological traditions, Biblical God, the abstract God of the philosophers, the God of the pantheists, the deists, and the God of the mystics. Cross-listed with PHIL 4650, RLST 4400 and

5400.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 5720 - Topics in Recent Philosophy

Summer 2010 Registration **PHIL 5720**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 5730 - Philosophy and Literature

Summer 2010 Registration **PHIL 5730**

Considers the philosophical dimensions of literature. Cross-listed with PHIL 4730, ENGL 4735 and 5735.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 5735 - Rationalism

Summer 2010 Registration **PHIL 5735**

Addresses the fundamental questions of truth and reality through natural reason. Topics vary and may include metaphysics and the rise of modern science; women and the enlightenment; historical problems and linguistic analysis. Prereq: Six hours in Western philosophy. Cross-listed with PHIL 4735.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 5740 - Empiricism

Summer 2010 Registration **PHIL 5740**

Considers the nature and importance of experience. Focuses on British Empiricism, but additional themes which vary may include: American pragmatism, logical positivism, scientific empiricism, phenomenology of experience. Prereq: Six credit hours in Western philosophy. Cross-listed with PHIL 4740.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 5750 - Introduction to Phenomenology

Summer 2010 Registration **PHIL 5750**

Examines the contribution of phenomenology to selected topics in the theory of meaning, philosophy of mind, ontology, and epistemology, through a study of such philosophers as Husserl, Heidegger, Sartre and Merleau-Ponty. Cross-listed with PHIL 4750.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 5755 - Philosophical Psychology

Summer 2010 Registration **PHIL 5755**

Explores debates about psyche and body, mind and world, self and others, and consciousness and nature. Examines the philosophical questions related to those debates that arise within theories of perception, affect and cognition offered by influential psychological models. Cross-listed with HUMN 5750, SSCI 5750. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 5770 - Hegel

Summer 2010 Registration **PHIL 5770**

A systematic study of the thought of G.W.F. Hegel through his most important and influential works: The Phenomenology of Spirit; The Encyclopedia of Philosophical Sciences; The Science of Logic; Lectures on the Philosophy of History; and his lectures on the history of philosophy, art and religion. Focus of the course varies. Cross-listed with PHIL 4770. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 5780 - Heidegger

Summer 2010 Registration **PHIL 5780**

Studies the thought of Martin Heidegger, one of the most important philosophers of the 20th century. Includes texts from both Heidegger's early and later periods, and focuses on his analyses of human subjectivity and being. Prereq: Six credit hours in Western philosophy. Cross-listed with PHIL 4780. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 5790 - Nietzsche

Summer 2010 Registration **PHIL 5790**

A close study of Nietzsche's philosophical writings, with attention to his significance for philosophy in the 20th century and beyond. Cross-listed with PHIL 4790. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 5800 - Plato

Summer 2010 Registration **PHIL 5800**

A careful study of Plato's writings, emphasizing the dialogue form, and discussion of Plato's significance for the history of ethics, political theory, psychology, metaphysics

and epistemology. Cross-listed with PHIL 4800.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 5810 - Aristotle

Summer 2010 Registration **PHIL 5810**

Examines Aristotle's systematic philosophy and discusses its contributions to logic, epistemology, physics, psychology, metaphysics, ethics and political theory. Cross-listed with PHIL 4810.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 5812 - Special Topics in Philosophy

Summer 2010 Registration **PHIL 5812**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 5820 - Hume

Summer 2010 Registration **PHIL 5820**

Considers the work of eighteenth century philosopher David Hume. Emphasis on unity of Hume's thought. Cross-listed with PHIL 4820.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 5830 - Kant

Summer 2010 Registration **PHIL 5830**

A close study of Immanuel Kant's revolutionary thought, focusing on Kant's ontology, epistemology, and ethical theory, as they are articulated in his Critique of Pure Reason and Critique of Practical Reason. Cross-listed with PHIL 4760.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 5833 - Existentialism

Summer 2010 Registration **PHIL 5833**

Examines one of the most influential movements in recent European thought, beginning with existentialism's 19th century roots, and continuing on to the existentialist philosophers of the 20th century. Figures covered may include Dostoyevsky, Kierkegaard, Nietzsche, Heidegger, Sartre and de Beauvoir. Cross-listed with PHIL 4833, HUMN 5833 and SSCI 5833.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 5840 - Independent Study: PHIL

Summer 2010 Registration **PHIL 5840**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 5900 - John Dewey

Summer 2010 Registration **PHIL 5900**

John Dewey was one of the most important of the American philosophers and public intellectuals of the twentieth century. Topics may include Dewey's philosophical naturalism, pragmatist epistemology, process metaphysics and philosophies of experience, aesthetics, religion, technology and democracy. Cross-listed with PHIL 4900. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 5920 - Philosophy of Media and Technology

Summer 2010 Registration **PHIL 5920**

A philosophical examination of interrelationships between contemporary media, technology, and their impacts upon character of contemporary life and values. Topics may include ethics, epistemology, democracy, advertising, media literacy and criticism. Cross-listed with PHIL 4920, HUMN 5920, SSCI 5920. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHIL 5933 - Philosophy of Eros

Summer 2010 Registration **PHIL 5933**

Why is philosophy an erotic activity and what are the implications of this insight? We will explore these issues, first, by reading Plato's erotic dialogues: Lysis, Symposium and Phaedrus. Then we will focus on Freud's influential (and controversial) appropriation of Plato's thought in the writings that span his career, from *The Interpretation of Dreams* (1900) to *Civilization and its Discontents* (1930) and beyond. Finally, we will survey post-Freudian theories of eros, such as Michel Foucault's *History of Sexuality*, as well as the more recent contributions of thinkers such as Jonathan Lear, Thomas Nagel, Martha Nussbaum and Slavoj Žižek. Cross-listed with PHIL 4933, WGST 4933, SSCI 5933, and HUMN 5933. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 1000 - Introduction to Physics

Summer 2010 Registration **PHYS 1000**

Introductory survey course for nonscientists that emphasizes the main concepts of physics. Although this course is mainly descriptive, some high school algebra will be used. The accompanying lab work is designed to illustrate the material discussed in the

lectures. **Semester Hours:** 4to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 1052 - General Astronomy I

Summer 2010 Registration **PHYS 1052**

The history of astronomy is studied from early civilizations to the present. The basic motions of the earth, moon, sun, and planets are discussed both qualitatively and quantitatively, using elementary principles of physics. Properties of our solar system are discussed in detail, including results from unmanned space probes. Note: An additional 30 hours of laboratory work (at times to be arranged), plus appropriate report preparation time, are required to complete laboratory component of the course. Prereq: High school algebra or equivalent. **Semester Hours:** 4to 4 **GT Pathways Category Key:** GT-SC1

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 1100 - Foundations of Physics

Summer 2010 Registration **PHYS 1100**

One-semester non-lab survey course especially designed for non-science majors. Acquaints students with some of the major principles and methods of physics. Includes applications of physics to everyday life and some discussion of the historical development of physics. Prereq: A good working knowledge of elementary algebra. **Semester Hours:** 4to 4 **GT Pathways Category Key:** GT-SC2

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 1111 - Freshman Seminar

Summer 2010 Registration **PHYS 1111**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 1115 - Physics Content

Summer 2010 Registration **PHYS 1115**

Covers content areas of undergraduate physics. Topics include matter and energy; heat and thermodynamics; atomic and nuclear structure; mechanics; electricity and magnetism; and wave characteristics. **Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 1332 - Explorations in Physics

Summer 2010 Registration **PHYS 1332**

Applications of physics are explored in depth for students considering physics as a major

or minor. Topics vary each semester, providing conceptual and mathematical insights and hands-on activities on how physics is used in the real world or at research frontiers. Prereq: Algebra and Trigonometry. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 1840 - Independent Study: PHYS

Summer 2010 Registration **PHYS 1840**

Students must check with a faculty member before taking this course. **Semester Hours:** 1to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 2010 - College Physics I

Summer 2010 Registration **PHYS 2010**

(This course is an approved Colorado Statewide Guaranteed Transfer Course). Mechanics, heat and sound. Prereq: College algebra and trigonometry. **Semester Hours:** 4to 4 **GT Pathways Category Key:** GT-SC1
Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 2020 - College Physics II

Summer 2010 Registration **PHYS 2020**

Electricity, magnetism, light and modern physics. Prereq: PHYS 2010. **Semester Hours:** 4to 4 **GT Pathways Category Key:** GT-SC1
Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 2030 - College Physics Lab I

Summer 2010 Registration **PHYS 2030**

Semester Hours: 1to 1 **GT Pathways Category Key:** GT-SC1
Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 2040 - College Physics Lab II

Summer 2010 Registration **PHYS 2040**

Prereq: PHYS 2030. **Semester Hours:** 1to 1 **GT Pathways Category Key:** GT-SC1
Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 2311 - General Physics I: Calculus-Based

Summer 2010 Registration **PHYS 2311**

Covers vector displacement, uniform and accelerated motion, force, momentum, energy, rotating systems, oscillations, and an introduction to thermodynamics. Emphasis is on

basic principles. Coreq: MATH 1401. **Semester Hours:** 4to 4
Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 2321 - General Physics Lab I

Summer 2010 Registration **PHYS 2321**

Semester Hours: 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 2331 - General Physics II: Calculus-Based

Summer 2010 Registration **PHYS 2331**

Covers electrostatics, magnetic fields, electromagnetic waves (including light), and optics. Prereq: PHYS 2311. Coreq: MATH 2411. **Semester Hours:** 4to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 2341 - General Physics Lab II

Summer 2010 Registration **PHYS 2341**

Prereq: PHYS 2321. **Semester Hours:** 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 2371 - Topic-Driven Physics Lab

Summer 2010 Registration **PHYS 2371**

A focused topic is used to show how many fundamental ideas in physics provide the basis for current applications and research. A laboratory component further illustrates the ideas and develops essential skills in physics experimentation. Coreq: PHYS 2331. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 2711 - Vibrations and Waves

Summer 2010 Registration **PHYS 2711**

Introduces vibrations and waves associated with physical phenomena. Analytic and numerical methods in physical contexts. Topics include harmonic oscillators, resonance, coupled oscillators, nonlinear oscillators, waves in elastic media, sound waves, pulses and dispersion. Prereq: PHYS 2331 and MATH 2411. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 2811 - Modern Physics I

Summer 2010 Registration **PHYS 2811**

Presents a study of the events and discoveries that occurred during the latter part of the

19th and the first part of the 20th centuries which led to the discovery of quantum mechanics; namely, special relativity, particle nature of radiation, wave properties of particles, models of the atom, and the introduction of quantum mechanics. Prereq: PHYS 2331 and MATH 2411. **Semester Hours:** 4to 4
Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 2821 - Modern Physics II

Summer 2010 Registration **PHYS 2821**

Quantum physics used for an understanding of energy levels and configuration of hydrogen atoms, strength of molecular bonds, atomic and molecular spectroscopy, solid state physics, band theory, nuclear and subatomic physics. Also includes quantum statistics, general relativity and cosmology. Prereq: PHYS 2811. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 2840 - Independent Study: PHYS

Summer 2010 Registration **PHYS 2840**

Students must check with a faculty member before taking this course. **Semester Hours:** 1to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 2939 - Internship/Cooperative Education

Summer 2010 Registration **PHYS 2939**

Experiences involving application of specific, relevant concepts and skills in supervised employment situations. Prereq: 15 hours of 2.75 GPA. **Semester Hours:** 1to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 3040 - Modern Cosmology

Summer 2010 Registration **PHYS 3040**

Designed for non-majors, covering the large-scale structure of the universe. Topics covered are gravitational concepts, neutron stars, pulsars, black holes, big bang universe and cosmological tests. Prereq: PHYS 2010 or equivalent. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 3050 - General Astronomy II

Summer 2010 Registration **PHYS 3050**

Evolution of our sun and other stars is studied, as well as the methods used to gain the information. Discussion includes objects such as neutron stars, novae and supernovae, and black holes. Large-scale structures, including clusters and galaxies, are studied.

Prereq: PHYS 1052, 2010 or 2311. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 3060 - Astronomical Image Processing Lab

Summer 2010 Registration **PHYS 3060**

Techniques in digital image processing. Emphasis on data reduction of astronomical images, processed and reduced on the department's own computer and software platform. Exercise and project oriented. Prereq: MATH 2411 or PHYS 2811 or 1052 and PHYS 2020. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 3082 - Energy and the Environment

Summer 2010 Registration **PHYS 3082**

For students of various backgrounds who wish to increase their understanding of the environmental and technical issues of supplying the energy demands of our society. Alternative energy sources and conservation are explored as solutions to promote sustainable society. Prereq: One college-level science course and MATH 1110 or equivalent. Cross-listed with ENVS 3082. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 3120 - Methods of Mathematical Physics

Summer 2010 Registration **PHYS 3120**

Typically covers calculus of variations, special functions, partial differential equations, integral transforms, linear vector spaces, and tensor analysis. Prereq: MATH 2421 and 3195 (or equivalent) or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 3151 - Biophysics Outlook I

Summer 2010 Registration **PHYS 3151**

Designed as a companion to General Biology I (but can take stand-alone), this course explores how biophysics concepts and experimental methods add to the knowledge of life's processes at the molecular and cellular level. Prereq: PHYS 2311 and PHYS 2331. **Semester Hours:** 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 3161 - Biophysics Outlook II

Summer 2010 Registration **PHYS 3161**

Designed as a companion to General Biology I (but can take stand-alone), this course explores how biophysics concepts and experimental methods contribute to the

understanding of the structure and function of plants, animals & ecological systems.

Prereq: PHYS 2311 and PHYS 2331. **Semester Hours:** 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 3211 - Analytical Mechanics

Summer 2010 Registration **PHYS 3211**

Topics include the Lagrange and Hamiltonian formulations, the two-body problem, rigid body motion, and small oscillations. Prereq: PHYS 2711, MATH 2421 and 3195 or equivalent. Coreq: PHYS 3120. **Semester Hours:** 4to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 3251 - Biophysics of the Body

Summer 2010 Registration **PHYS 3251**

Fundamental ideas of mechanics are used to model the form and function of the human body, including statistics, locomotion, energy, and fluid flow. Topics from analytical mechanics are included to ensure student knowledge of Lagrangian and Hamiltonian formalisms. **Semester Hours:** 4to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 3411 - Thermal Physics

Summer 2010 Registration **PHYS 3411**

Covers the basic concepts of the three related disciplines of thermodynamics, statistical mechanics, and kinetic theory. Prereq: PHYS 2331, 2811 and MATH 2421; Coreq: MATH 3195 or equivalent. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 3451 - Biophysics of the Cell

Summer 2010 Registration **PHYS 3451**

This course will cover the fundamentals of thermodynamics and statistical mechanics and apply these physical principles to the understanding of biological systems. Topics covered include, heat entropy, equilibrium, Brownian motion, probability and statistics. The biological processes studied will include molecular motors, protein function, membranes, ion channels, and action potentials. Prereq: PHYS 2331, PHYS 2811 and MATH 2421. Coreq: MATH 3195 or equivalent. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 3620 - Sound and Music

Summer 2010 Registration **PHYS 3620**

Considers the basic nature of sound waves, the ear and hearing, and musical

instruments. Although this course is mainly descriptive, some high school algebra will be used. Prereq: MATH 1070 or equivalent. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 3711 - Junior Laboratory I

Summer 2010 Registration **PHYS 3711**

Advanced laboratory in classical and modern physics. Prereq: PHYS 2811. **Semester Hours:** 2to 2
Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 3721 - Junior Laboratory II

Summer 2010 Registration **PHYS 3721**

Advanced laboratory in classical and modern physics. Prereq: PHYS 3711. **Semester Hours:** 2to 2
Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 3811 - Quantum Mechanics

Summer 2010 Registration **PHYS 3811**

A course in which both wave and matrix mechanics are developed and applied to selected problems in atomic physics. Prereq: PHYS 2811 and 3211. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 3820 - Subatomic Physics

Summer 2010 Registration **PHYS 3820**

Introductory treatment of the various concepts and models used to describe nuclear and high energy particle phenomena. Prereq: PHYS 2811. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 3840 - Independent Study: PHYS

Summer 2010 Registration **PHYS 3840**

Note: Students must check with a faculty member before taking this course. **Semester Hours:** 1to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 3939 - Internship/Cooperative Education

Summer 2010 Registration **PHYS 3939**

Designed experiences involving application of specific, relevant concepts and skills in

supervised employment situations. Prereq: Junior standing and 2.75 GPA. **Semester Hours: 1to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 4331 - Principles of Electricity and Magnetism

Summer 2010 Registration **PHYS 4331**

Elements of mathematical theory of electricity and magnetism, including electrostatics, magnetostatics, polarized media, direct and alternating current theory, and introduction to electromagnetic fields and waves. Prereq: PHYS 2331 and 3120. **Semester Hours: 4to 4**

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 4351 - Bioelectromagnetism

Summer 2010 Registration **PHYS 4351**

The fundamental theory of electric and magnetic fields is developed and applied to problems of biology and medicine. Examples in medical diagnostics and treatment are built upon rigorous application of Maxwell's equations and constitutive models of electromagnetic properties of biomaterials. Prereq: PHYS 2331 and 3120. **Semester Hours: 4to 4**

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 4400 - Topics in Scientific Instrumentation and Laboratory Methods

Summer 2010 Registration **PHYS 4400**

Short courses on practical knowledge needed to design scientific instruments, develop technical products, and use special laboratory procedures to research. Topics include materials, mechanisms, electronics, and optics. Specific topic information is available through the physics department web site. Prereq: Two semesters of 2000-level introductory physics or instructor's permission. Cross-listed with PHYS 5400-5499. **Semester Hours: 1to 1**

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 4401 - Special Topics

Summer 2010 Registration **PHYS 4401**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 4402 - Special Topics

Summer 2010 Registration **PHYS 4402**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 4403 - Special Topics

Summer 2010 Registration **PHYS 4403**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 4510 - Optics

Summer 2010 Registration **PHYS 4510**

Presents a contemporary treatment of selected topics in optics, such as matrix methods in geometrical optics, the Fourier analysis approach to physical optics, and interaction of light with matter. Prereq: PHYS 2331, 2811 and 3120. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 4550 - Astrophysics

Summer 2010 Registration **PHYS 4550**

Covers stellar astrophysics, solar physics, star formations, stellar evolution, processes in the interstellar medium, galactic dynamics and evolution, formation of galaxies and cosmology. Prereq: MATH 3195; PHYS 2821 and 3050 recommended. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 4610 - Computational Physics

Summer 2010 Registration **PHYS 4610**

Designed to provide an understanding of the role of the computer in modern theoretical physics by studying the simulation of physical phenomena in various fields of physics. Prereq: PHYS 3120. **Semester Hours:** 2to 2

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 4620 - Computational Physics II

Summer 2010 Registration **PHYS 4620**

Assigns the student to an individual, advanced-level project modeling a physical phenomenon on the computer. Prereq: PHYS 4610. **Semester Hours:** 2to 2

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 4650 - Solid State Physics

Summer 2010 Registration **PHYS 4650**

Covers the basic thermal and electrical properties of solids which are explained in terms of the Brillouin zone structures of phonons and electrons. Prereq: PHYS 3411 and 3811. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 4711 - Senior Laboratory I

Summer 2010 Registration **PHYS 4711**

Individual project laboratory with emphasis on modern methods of physical experimentation. Prereq: PHYS 3721. **Semester Hours:** 2to 2

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 4721 - Senior Laboratory II

Summer 2010 Registration **PHYS 4721**

Individual project laboratory with emphasis on modern methods of physical experimentation. Prereq: PHYS 4711. **Semester Hours:** 2to 2

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 4788 - Bioinformatics

Summer 2010 Registration **PHYS 4788**

Provides a broad exposure to the basic concepts and methodologies of bioinformatics and their application to analyzing genomic and proteomic data. Topics may include dynamic programming algorithms, graph theoretic techniques, hidden Markov models, phylogenetic trees, RNA/protein structure predictions and microarray analysis. Prereq: CSCI 1410, MATH 3191 or 3195. Cross-listed with CSCI 4788, MATH 4788. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 4810 - Atomic and Molecular Structure

Summer 2010 Registration **PHYS 4810**

A course in which quantum mechanical methods are applied to problems in atomic and molecular physics, such as the one-electron atom, atomic and molecular spectra, and particle scattering. Prereq: PHYS 3811. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 4840 - Independent Study: PHYS

Summer 2010 Registration **PHYS 4840**

Note: Students must check with a faculty member before taking this course. **Semester**

Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 4850 - Physics for Design and Innovation I

Summer 2010 Registration **PHYS 4850**

A service-learning project using fundamental physical principles to design a prototype scientific instrument, technical device, or technical process for a real-world client.

Includes instruction on project management, intellectual property, and market analysis.

Cross-listed with PHYS 5850. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 4852 - Physics for Design and Innovation II

Summer 2010 Registration **PHYS 4852**

A capstone project using fundamental physical principles to prototype a scientific instrument, technical device or technical process. The focus is on the student's own product idea. Includes online guided readings on the wider context of product development. Students should consult with instructor on necessary physics and mathematics preparation for the project. Prereq: PHYS 4850. Cross-listed with PHYS 5852. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 4920 - Advanced Undergraduate Seminar

Summer 2010 Registration **PHYS 4920**

Studies a focused topic such as: size and age of the universe, critical phenomena, non-linear optics, energy, fiber-optic communications, among others. Students research these topics and give a seminar outlining their findings. Prereq: PHYS 2811 or permission of instructor. **Semester Hours:** 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 4931 - Internship in Applied Physics

Summer 2010 Registration **PHYS 4931**

Lab experience at major federal and industrial laboratories; an alternative means by which senior physics students complete their senior lab requirement. Note: To be taken in lieu of PHYS 4711 and/or 4721. Prereq: PHYS 3721. **Semester Hours:** 2to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 4939 - Cooperative Education

Summer 2010 Registration **PHYS 4939**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 4980 - Advanced Physics Topics

Summer 2010 Registration **PHYS 4980**

Covers a particular topic, as announced in the 'Schedule Planner.' Note: May be taken more than once for credit in different topics. Prereq: PHYS 2811. **Semester Hours:** 1to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 5101 - RM-MSMSP: Forces and Motion

Summer 2010 Registration **PHYS 5101**

Systematic study of the concepts of motion and the forces that cause motion to change, using daily hands-on activities that include identifying patterns by collecting, graphing or analyzing data and applying concepts to everyday phenomena. Concepts are linked to other scientific, mathematical, societal, and pedagogical domains. This course is not applicable toward any degree in the College of Liberal Arts and Sciences. Prereq: Permission of project director. **Semester Hours:** 4to 4
Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 5102 - RM-MSMSP: Light, Color, and Geometrical Optics

Summer 2010 Registration **PHYS 5102**

Systematic study of numerous phenomena in light and geometrical optics including: illumination, shadows, and pinholes; reflection and image formation with lenses; color. Concepts are linked to other scientific, mathematical, societal, and pedagogical domains. This course is not applicable toward any degree in the College of Liberal Arts and Sciences. Prereq: Permission of project director. **Semester Hours:** 4to 4
Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 5103 - Forms and Transfer of Energy

Summer 2010 Registration **PHYS 5103**

Presents approaches to teaching basic concepts of energy with an emphasis on electricity and magnetism. Addresses the Colorado Department of Education's Grade 8 science assessment framework, specifically 2.8, 2.9 and 4.2. Course is not applicable toward any degree in physics. Prereq: Permission of project director. **Semester Hours:** 4to 4
Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 5400 - Topics in Scientific Instrumentation and Laboratory Methods

Summer 2010 Registration **PHYS 5400**

Short courses on practical knowledge needed to design scientific instruments, develop technical products, and use special laboratory procedures in research. Topics include materials, mechanisms, electronics, and optics. Specific topic information is available through the physics department web site. Cross-listed with PHYS 4400-4499. **Semester Hours: 1 to 1**

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 5401 - Special Topics

Summer 2010 Registration **PHYS 5401**

Semester Hours: 1 to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 5402 - Special Topics

Summer 2010 Registration **PHYS 5402**

Semester Hours: 1 to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 5403 - Special Topics

Summer 2010 Registration **PHYS 5403**

Semester Hours: 1 to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 5840 - Independent Study: PHYS

Summer 2010 Registration **PHYS 5840**

Note: Students must check with a faculty member before taking this course. **Semester Hours: 1 to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 5850 - Physics for Design and Innovation I

Summer 2010 Registration **PHYS 5850**

A service-learning project using fundamental physical principles to design a prototype scientific instrument, technical device, or technical process for a real-world client. Includes instruction on project management, intellectual property, and market analysis. Cross-listed with PHYS 4850. **Semester Hours: 3 to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 5852 - Physics for Design and Innovation II

Summer 2010 Registration **PHYS 5852**

A capstone project using fundamental physical principles to prototype a scientific instrument, technical device or technical process. The focus is on the student's own product idea. Includes online guided readings on the wider context of product development. Students should consult with instructor on necessary physics and mathematics preparation for the project. Prereq: PHYS 4850 or 5850. Cross-listed with PHYS 4852. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 5939 - Internship/Cooperative Education

Summer 2010 Registration **PHYS 5939**

Note: Students must check with a faculty member before taking this course. **Semester Hours:** 1to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 5950 - Master's Thesis

Summer 2010 Registration **PHYS 5950**

Note: Students must check with a faculty member before taking this course. **Semester Hours:** 1to 8

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 5960 - Master's Project

Summer 2010 Registration **PHYS 5960**

Note: Students must check with a faculty member before taking this course. **Semester Hours:** 1to 8

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 5980 - Advanced Physics Topics

Summer 2010 Registration **PHYS 5980**

Covers a particular topic as announced in the 'Schedule Planner.' Note: May be taken more than once for credit in different topics. Prereq: PHYS 2811 or permission of instructor. **Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PHYS 6840 - Independent Study: PHYS

Summer 2010 Registration **PHYS 6840**

Note: Students must check with a faculty member before taking this course. **Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1001 - Music Appreciation

Summer 2010 Registration **PMUS 1001**

Explores the style of music in the major compositional periods, including contemporary pop styles. This course will not satisfy any degree requirements for music majors. For non-music majors who want to learn how to listen to music with greater understanding and pleasure. **Semester Hours:** 3to 3 **GT Pathways Category Key:** GT-AH1
Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1020 - Beginning Musicianship

Summer 2010 Registration **PMUS 1020**

Provides basic musical and theoretical skills to students who do not have the proficiency to enroll in Theory I and Ear Training I. Major concepts include an introduction to music fundamentals, basic ear training, introduction to sight singing and an applied understanding of the keyboard. This course will not satisfy any degree requirements for Music majors. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1023 - Piano Class I

Summer 2010 Registration **PMUS 1023**

This course focuses on beginning note reading in both treble and bass clefs, learning one octave major key scales, basic harmonization, and beginning improvisation. Students perform in both individual and group settings. Note: This course is restricted to Music-Majors only. Prereq: Acceptance to the MEIS program **Semester Hours:** 1to 1
Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1024 - Piano Class II

Summer 2010 Registration **PMUS 1024**

Continuation of PMUS 1023. This course focuses on more advanced note reading, technique, chord vocabulary, sight reading, and improvisation. Introduction of minor scales. Performances in both individual and group settings. Note: This course is restricted to Music-Majors only. Prereq: Acceptance to the MEIS program, PMUS 1023 or approval of instructor **Semester Hours:** 1to 1
Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1025 - Piano Class III

Summer 2010 Registration **PMUS 1025**

Continuation of PMUS 1024. This course assumes general fluency in major and minor scales. Focus on expanding chord vocabulary, sight reading, transposition, and performing more advanced repertoire. Performances in both individual and group

settings. Note: This course is restricted to Music-Majors only. Prereq: Acceptance to the MEIS Program, PMUS 1023 and PMUS 1024, or approval of instructor. **Semester Hours: 1to 1**

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1026 - Piano Class IV

Summer 2010 Registration **PMUS 1026**

Continuation of PMUS 1025. This course assumes fluency in major and minor scales. Focus on harmonizing with complex chords, playing by ear, improvisation, and playing repertoire in broader range of key signatures. Students perform in both individual and group settings. Note: This course is restricted to Music-Majors only. Course meets in Roland Piano Lab. Prereq: Acceptance to the MEIS program, PMUS 1023, PMUS 1024 and PMUS 1025, or approval of instructor. **Semester Hours: 1to 1**

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1040 - Class Guitar

Summer 2010 Registration **PMUS 1040**

Designed to provide each student with a basic knowledge of the fretboard. The course material focuses on beginning note reading, basic chord forms and elementary improvisation. Students have the opportunity to perform in both individual and group settings. **Semester Hours: 1to 1**

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1041 - Class Guitar II

Summer 2010 Registration **PMUS 1041**

This group guitar class is designed to go beyond PMUS 1040 and provide students with an advanced knowledge of the fretboard. The course material focuses on advanced position note reading, complex chord forms and scale vocabulary. Students have the opportunity to perform in both individual and group settings. Prereq: PMUS 1040. **Semester Hours: 1to 1**

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1050 - Voice Class I

Summer 2010 Registration **PMUS 1050**

Fundamentals of voice production: posture, breath management and support, tone, resonance, diction, phrasing and interpretation. Development of technique, confidence, and control through group and solo singing. Development of repertoire that includes contemporary and commercial vocal styles. **Semester Hours: 1to 1**

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1060 - Voice Class II

Summer 2010 Registration **PMUS 1060**

Fundamentals of voice production: posture, breath management and support, tone, resonance, diction, phrasing and interpretation. Extension of PMUS 1050, with opportunity to continue to develop individual skills in singing. Development of technique, confidence, and control through group and solo singing. Development of repertoire that includes contemporary and commercial vocal styles. Prereq: PMUS 1050. **Semester Hours:** 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1093 - Commercial Guitar Styles and Theory - Harmony

Summer 2010 Registration **PMUS 1093**

A comprehensive guitar course that focuses on harmonic theory specific to the guitar fingerboard. Topics include: chord voicing and inversions, jazz and commercial accompaniment styles including walking bass, bossa nova, funk and finger picking. **Semester Hours:** 2to 2

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1094 - Commercial Guitar Styles and Theory - Melody

Summer 2010 Registration **PMUS 1094**

A comprehensive guitar course that focuses on harmonic theory specific to the guitar fingerboard. Topics include: tetrachords, scales, modes, arpeggios, finger technique development and improvisation. **Semester Hours:** 2to 2

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1100 - Music Theory I

Summer 2010 Registration **PMUS 1100**

Study of harmonic procedures as derived from the common practice period, and their relationship to contemporary concepts. Coreq: PMUS 1110 and PMUS 1023. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1110 - Ear Training and Sight Singing I

Summer 2010 Registration **PMUS 1110**

Laboratory course designed to help students listen to music analytically and to apply the harmonic principles learned in PMUS 1100 to the performance of music. Coreq: PMUS 1100 and PMUS 1023. **Semester Hours:** 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1200 - Music Theory II

Summer 2010 Registration **PMUS 1200**

Continuation of PMUS 1100. Prereq: PMUS 1110 and PMUS 1100. Coreq: PMUS 1210 and PMUS 1023. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1210 - Ear Training and Sight Singing II

Summer 2010 Registration **PMUS 1210**

Laboratory course designed to help students listen to music analytically and to apply the harmonic principles learned in PMUS 1200 to the performance of music. Prereq: PMUS 1100 and PMUS 1110. Coreq: PMUS 1200 and PMUS 1023. **Semester Hours:** 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1310 - Sight Reading and Improvisation

Summer 2010 Registration **PMUS 1310**

Explores the techniques and concepts of instrumental jazz/commercial improvisation and beginning sight reading. Major concepts include understanding and interpreting the construction of jazz harmonic nomenclature and the mastery of the melodic elements of improvisation. Prereqs: PMUS 1100, PMUS 1110, PMUS 1200, PMUS 1210, PMUS 1023. **Semester Hours:** 2to 2

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1400 - Group Applied Lessons

Summer 2010 Registration **PMUS 1400**

Consists of group music lessons of up to four students per group. The course meets for one hour per week. 45 minutes will be in group format and 15 minutes will be rotating private instruction. Note: PMUS 1400 is only available to majors in the Music Industry Studies degree program. Coreq: PMUS 1500 and at least 7 non-applied lesson credits. **Semester Hours:** 2to 2

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1410 - Percussion I Ensemble

Summer 2010 Registration **PMUS 1410**

Beginning Ensemble. Focus on basic percussion techniques and introductory ensemble playing utilizing Afro-Cuban literature. Comprised of percussion instruments of both definite and indefinite pitch. Introduces rhythmic sight-reading. Develops collaborative learning, aural skills and interactive multicultural awareness. Prereq: Audition or meeting

with ensemble faculty.**Semester Hours:** 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1420 - UCD A Cappella Voices Ensemble

Summer 2010 Registration **PMUS 1420**

Beginning Ensemble. A cappella choir. This course will focus on choral singing to further the student's musical and vocal skills. Emphasis will be on successful preparation for the advanced a cappella groups. Prereq: Audition or meeting with ensemble

faculty.**Semester Hours:** 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1430 - Solo Vocal Jazz Ensemble

Summer 2010 Registration **PMUS 1430**

Beginning Ensemble. Focus on basic performance and stylistic skills in the jazz language. Students will learn basic and jazz vocal techniques and skills and their application in study and performance. Students will perform in solo and duo settings. Prereq: Audition or meeting with ensemble faculty.**Semester Hours:** 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1500 - General Recital

Summer 2010 Registration **PMUS 1500**

May be taken on a pass/fail basis only. Co-requisite for all applied music courses for music majors and minors. Attendance at musical performances is required.**Semester Hours:** 0to 0

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1501 - Applied Music Instruction

Summer 2010 Registration **PMUS 1501**

Private instruction in electric and acoustic bass, banjo, bassoon, clarinet, bass clarinet, flute, French horn, guitar, oboe, percussion, piano, jazz piano, saxophone, synthesizer, trombone, trumpet, tuba, violin, viola, cello and voice. Open only to accepted music majors enrolled for a minimum of 7 semester credit hours of non-applied courses.

Prereq: Students must be accepted as an audition-based music major. Instructor permission. Coreq: PMUS 1500, 2000/4000 and at least 7 non-applied lesson credits.**Semester Hours:** 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1502 - Applied Electric Bass

Summer 2010 Registration **PMUS 1502**

Private music lessons for audition-based music majors. Lessons emphasize developing fundamental technique, learning and performing standard repertoire, understanding the foundations of musicality, sight reading and developing rhythmic accuracy. Students perform in a general recital and jury. Note: Students must be accepted as an audition-based music major. Instructor permission. Coreq: PMUS 1500, enrollment in an ensemble and at least 7 non-applied lesson credits. **Semester Hours:** 2to 2
Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1503 - Applied Music Instruction

Summer 2010 Registration **PMUS 1503**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1511 - Applied Music Instruction

Summer 2010 Registration **PMUS 1511**

Semester Hours: 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1512 - Applied String Bass

Summer 2010 Registration **PMUS 1512**

Private music lessons for audition-based music majors. Lessons emphasize developing fundamental technique, learning and performing standard repertoire, understanding the foundations of musicality, sight reading and developing rhythmic accuracy. Students perform in a general recital and jury. Note: Students must be accepted as an audition-based music major. Instructor permission. Coreq: PMUS 1500, enrollment in an ensemble and at least 7 non-applied lesson credits. **Semester Hours:** 2to 2
Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1513 - Applied Music Instruction

Summer 2010 Registration **PMUS 1513**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1521 - Applied Music Instruction

Summer 2010 Registration **PMUS 1521**

Semester Hours: 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1522 - Applied Bassoon

Summer 2010 Registration **PMUS 1522**

Private music lessons for audition-based music majors. Lessons emphasize developing fundamental technique, learning and performing standard repertoire, understanding the foundations of musicality, sight reading and developing rhythmic accuracy. Students perform in a general recital and jury. Note: Students must be accepted as an audition-based music major. Instructor permission. Coreq: PMUS 1500, enrollment in an ensemble and at least 7 non-applied lesson credits. **Semester Hours:** 2to 2
Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1523 - Applied Music Instruction

Summer 2010 Registration **PMUS 1523**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1531 - Applied Music Instruction

Summer 2010 Registration **PMUS 1531**

Semester Hours: 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1532 - Applied Clarinet

Summer 2010 Registration **PMUS 1532**

Private music lessons for audition-based music majors. Lessons emphasize developing fundamental technique, learning and performing standard repertoire, understanding the foundations of musicality, sight reading and developing rhythmic accuracy. Students perform in a general recital and jury. Note: Students must be accepted as an audition-based music major. Instructor permission. Coreq: PMUS 1500, enrollment in an ensemble and at least 7 non-applied lesson credits. **Semester Hours:** 2to 2
Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1533 - App Mus: Clarinet

Summer 2010 Registration **PMUS 1533**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1541 - Applied Music Instruction

Summer 2010 Registration **PMUS 1541**

Semester Hours: 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1542 - Applied Bass Clarinet

Summer 2010 Registration **PMUS 1542**

Private music lessons for audition-based music majors. Lessons emphasize developing fundamental technique, learning and performing standard repertoire, understanding the foundations of musicality, sight reading and developing rhythmic accuracy. Students perform in a general recital and jury. Note: Students must be accepted as an audition-based music major. Instructor permission. Coreq: PMUS 1500, enrollment in an ensemble and at least 7 non-applied lesson credits. **Semester Hours:** 2to 2
Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1543 - Applied Music Instruction

Summer 2010 Registration **PMUS 1543**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1551 - Applied Music Instruction

Summer 2010 Registration **PMUS 1551**

Semester Hours: 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1552 - Applied Flute

Summer 2010 Registration **PMUS 1552**

Private music lessons for audition-based music majors. Lessons emphasize developing fundamental technique, learning and performing standard repertoire, understanding the foundations of musicality, sight reading and developing rhythmic accuracy. Students perform in a general recital and jury. Note: Students must be accepted as an audition-based music major. Instructor permission. Coreq: PMUS 1500, enrollment in an ensemble and at least 7 non-applied lesson credits. **Semester Hours:** 2to 2
Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1553 - Applied Music Instruction

Summer 2010 Registration **PMUS 1553**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1562 - Applied French Horn

Summer 2010 Registration **PMUS 1562**

Private music lessons for audition-based music majors. Lessons emphasize developing fundamental technique, learning and performing standard repertoire, understanding the foundations of musicality, sight reading and developing rhythmic accuracy. Students perform in a general recital and jury. Note: Students must be accepted as an audition-based music major. Instructor permission. Coreq: PMUS 1500, enrollment in an ensemble and at least 7 non-applied lesson credits. **Semester Hours:** 2to 2
Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1571 - Applied Music Instruction

Summer 2010 Registration **PMUS 1571**

Semester Hours: 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1572 - Applied Guitar

Summer 2010 Registration **PMUS 1572**

Private music lessons for audition-based music majors. Lessons emphasize developing fundamental technique, learning and performing standard repertoire, understanding the foundations of musicality, sight reading and developing rhythmic accuracy. Students perform in a general recital and jury. Note: Students must be accepted as an audition-based music major. Instructor permission. Coreq: PMUS 1500, enrollment in an ensemble and at least 7 non-applied lesson credits. **Semester Hours:** 2to 2
Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1573 - Applied Music Instruction

Summer 2010 Registration **PMUS 1573**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1581 - Applied Music Instruction

Summer 2010 Registration **PMUS 1581**

Semester Hours: 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1582 - Applied Banjo

Summer 2010 Registration **PMUS 1582**

Private music lessons for audition-based music majors. Lessons emphasize developing

fundamental technique, learning and performing standard repertoire, understanding the foundations of musicality, sight reading and developing rhythmic accuracy. Students perform in a general recital and jury. Note: Students must be accepted as an audition-based music major. Instructor permission. Coreq: PMUS 1500, enrollment in an ensemble and at least 7 non-applied lesson credits. **Semester Hours:** 2to 2
Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1583 - Applied Music Instruction

Summer 2010 Registration **PMUS 1583**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1600 - Topics in Performance Music

Summer 2010 Registration **PMUS 1600**

Various topics related to music performance. **Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1612 - Applied Drum Kit

Summer 2010 Registration **PMUS 1612**

Private music lessons for audition-based music majors. Lessons emphasize developing fundamental technique, learning and performing standard repertoire, understanding the foundations of musicality, sight reading and developing rhythmic accuracy. Students perform in a general recital and jury. Note: Students must be accepted as an audition-based music major. Instructor permission. Coreq: PMUS 1500, enrollment in an ensemble and at least 7 non-applied lesson credits. **Semester Hours:** 2to 2
Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1621 - Applied Music Instruction

Summer 2010 Registration **PMUS 1621**

Semester Hours: 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1622 - Applied Oboe

Summer 2010 Registration **PMUS 1622**

Private music lessons for audition-based music majors. Lessons emphasize developing fundamental technique, learning and performing standard repertoire, understanding the foundations of musicality, sight reading and developing rhythmic accuracy. Students perform in a general recital and jury. Note: Students must be accepted as an audition-based music major. Instructor permission. Coreq: PMUS 1500, enrollment in an

ensemble and at least 7 non-applied lesson credits. **Semester Hours:** 2to 2
Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1623 - Applied Music Instruction

Summer 2010 Registration **PMUS 1623**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1631 - Applied Music Instruction

Summer 2010 Registration **PMUS 1631**

Semester Hours: 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1632 - Applied World Percussion

Summer 2010 Registration **PMUS 1632**

Private music lessons for audition-based music majors. Lessons emphasize developing fundamental technique, learning and performing standard repertoire, understanding the foundations of musicality, sight reading and developing rhythmic accuracy. Students perform in a general recital and jury. Note: Students must be accepted as an audition-based music major. Instructor permission. Coreq: PMUS 1500, enrollment in an ensemble and at least 7 non-applied lesson credits. **Semester Hours:** 2to 2
Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1633 - Applied Music Instruction

Summer 2010 Registration **PMUS 1633**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1641 - Applied Music Instruction

Summer 2010 Registration **PMUS 1641**

Semester Hours: 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1642 - Applied Piano

Summer 2010 Registration **PMUS 1642**

Private music lessons for audition-based music majors. Lessons emphasize developing fundamental technique, learning and performing standard repertoire, understanding the foundations of musicality, sight reading and developing rhythmic accuracy. Students

perform in a general recital and jury. Note: Students must be accepted as an audition-based music major. Instructor permission. Coreq: PMUS 1500, enrollment in an ensemble and at least 7 non-applied lesson credits. **Semester Hours:** 2to 2
Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1643 - Applied Music Instruction

Summer 2010 Registration **PMUS 1643**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1651 - Applied Music Instruction

Summer 2010 Registration **PMUS 1651**

Semester Hours: 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1652 - Applied Jazz Piano

Summer 2010 Registration **PMUS 1652**

Private music lessons for audition-based music majors. Lessons emphasize developing fundamental technique, learning and performing standard repertoire, understanding the foundations of musicality, sight reading and developing rhythmic accuracy. Students perform in a general recital and jury. Note: Students must be accepted as an audition-based music major. Instructor permission. Coreq: PMUS 1500, enrollment in an ensemble and at least 7 non-applied lesson credits. **Semester Hours:** 2to 2
Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1653 - Applied Music Instruction

Summer 2010 Registration **PMUS 1653**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1661 - Applied Music Instruction

Summer 2010 Registration **PMUS 1661**

Semester Hours: 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1662 - Applied Saxophone

Summer 2010 Registration **PMUS 1662**

Private music lessons for audition-based music majors. Lessons emphasize developing

fundamental technique, learning and performing standard repertoire, understanding the foundations of musicality, sight reading and developing rhythmic accuracy. Students perform in a general recital and jury. Note: Students must be accepted as an audition-based music major. Instructor permission. Coreq: PMUS 1500, enrollment in an ensemble and at least 7 non-applied lesson credits. **Semester Hours:** 2to 2
Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1663 - Applied Music Instruction

Summer 2010 Registration **PMUS 1663**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1671 - Applied Music Instruction

Summer 2010 Registration **PMUS 1671**

Semester Hours: 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1672 - Applied Synthesizer

Summer 2010 Registration **PMUS 1672**

Private music lessons for audition-based music majors. Lessons emphasize developing fundamental technique, learning and performing standard repertoire, understanding the foundations of musicality, sight reading and developing rhythmic accuracy. Students perform in a general recital and jury. Note: Students must be accepted as an audition-based music major. Instructor permission. Coreq: PMUS 1500, enrollment in an ensemble and at least 7 non-applied lesson credits. **Semester Hours:** 2to 2
Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1673 - Applied Music Instruction

Summer 2010 Registration **PMUS 1673**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1681 - Applied Music Instruction

Summer 2010 Registration **PMUS 1681**

Semester Hours: 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1682 - Applied Trombone

Summer 2010 Registration **PMUS 1682**

Private music lessons for audition-based music majors. Lessons emphasize developing fundamental technique, learning and performing standard repertoire, understanding the foundations of musicality, sight reading and developing rhythmic accuracy. Students perform in a general recital and jury. Note: Students must be accepted as an audition-based music major. Instructor permission. Coreq: PMUS 1500, enrollment in an ensemble and at least 7 non-applied lesson credits. **Semester Hours:** 2to 2
Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1683 - Applied Music Instruction

Summer 2010 Registration **PMUS 1683**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1691 - Applied Music Instruction

Summer 2010 Registration **PMUS 1691**

Semester Hours: 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1692 - Applied Trumpet

Summer 2010 Registration **PMUS 1692**

Private music lessons for audition-based music majors. Lessons emphasize developing fundamental technique, learning and performing standard repertoire, understanding the foundations of musicality, sight reading and developing rhythmic accuracy. Students perform in a general recital and jury. Note: Students must be accepted as an audition-based music major. Instructor permission. Coreq: PMUS 1500, enrollment in an ensemble and at least 7 non-applied lesson credits. **Semester Hours:** 2to 2
Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1693 - Applied Music Instruction

Summer 2010 Registration **PMUS 1693**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1700 - Applied Music Instruction

Summer 2010 Registration **PMUS 1700**

Private, one-on-one instrumental or vocal lessons. Half-an-hour per week for duration of semester. Note: Open to all students, but intended for non-Music majors. Music majors may not use PMUS 1700 to satisfy Applied Music requirement. Instructor permission

required. PMUS 1700 tuition rates differ from all other MEIS classes. Contact the College of Arts & Media Advising Office for additional information on tuition, registration, etc. PMUS 1700 is a Continuing and Professional Education course. Prereq: Instructor permission. **Semester Hours:** 2to 2

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1701 - Applied Music Instruction

Summer 2010 Registration **PMUS 1701**

Semester Hours: 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1702 - Applied Violin

Summer 2010 Registration **PMUS 1702**

Private music lessons for audition-based music majors. Lessons emphasize developing fundamental technique, learning and performing standard repertoire, understanding the foundations of musicality, sight reading and developing rhythmic accuracy. Students perform in a general recital and jury. Note: Students must be accepted as an audition-based music major. Instructor permission. Coreq: PMUS 1500, enrollment in an ensemble and at least 7 non-applied lesson credits. **Semester Hours:** 2to 2

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1703 - Applied Music Instruction

Summer 2010 Registration **PMUS 1703**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1711 - Applied Music Instruction

Summer 2010 Registration **PMUS 1711**

Semester Hours: 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1712 - Applied Viola

Summer 2010 Registration **PMUS 1712**

Private music lessons for audition-based music majors. Lessons emphasize developing fundamental technique, learning and performing standard repertoire, understanding the foundations of musicality, sight reading and developing rhythmic accuracy. Students perform in a general recital and jury. Note: Students must be accepted as an audition-based music major. Instructor permission. Coreq: PMUS 1500, enrollment in an

ensemble and at least 7 non-applied lesson credits. **Semester Hours:** 2to 2
Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1713 - Applied Music Instruction

Summer 2010 Registration **PMUS 1713**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1721 - Applied Music Instruction

Summer 2010 Registration **PMUS 1721**

Semester Hours: 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1722 - Applied Cello

Summer 2010 Registration **PMUS 1722**

Private music lessons for audition-based music majors. Lessons emphasize developing fundamental technique, learning and performing standard repertoire, understanding the foundations of musicality, sight reading and developing rhythmic accuracy. Students perform in a general recital and jury. Note: Students must be accepted as an audition-based music major. Instructor permission. Coreq: PMUS 1500, enrollment in an ensemble and at least 7 non-applied lesson credits. **Semester Hours:** 2to 2
Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1723 - Applied Music Instruction

Summer 2010 Registration **PMUS 1723**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1731 - Applied Music Instruction

Summer 2010 Registration **PMUS 1731**

Semester Hours: 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1732 - Applied Voice

Summer 2010 Registration **PMUS 1732**

Private music lessons for audition-based music majors. Lessons emphasize developing fundamental technique, learning and performing standard repertoire, understanding the foundations of musicality, sight reading and developing rhythmic accuracy. Students

perform in a general recital and jury. Note: Students must be accepted as an audition-based music major. Instructor permission. Coreq: PMUS 1500, enrollment in an ensemble and at least 7 non-applied lesson credits. **Semester Hours:** 2to 2
Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1733 - Applied Music Instruction

Summer 2010 Registration **PMUS 1733**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1741 - Applied Instruction

Summer 2010 Registration **PMUS 1741**

Private instruction in electric and acoustic bass, banjo, bassoon, clarinet, bass clarinet, flute, French horn, guitar, oboe, percussion, piano, jazz piano, saxophone, synthesizer, trombone, trumpet, tuba, violin, viola, cello and voice. Open only to accepted music majors enrolled for a minimum of 7 semester credit hours of non-applied courses.

Prereq: Students must be accepted as a music major. Coreq: Students must be registered for a 2-credit hour applied lesson. **Semester Hours:** 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1742 - Applied Tuba

Summer 2010 Registration **PMUS 1742**

Private music lessons for audition-based music majors. Lessons emphasize developing fundamental technique, learning and performing standard repertoire, understanding the foundations of musicality, sight reading and developing rhythmic accuracy. Students perform in a general recital and jury. Note: Students must be accepted as an audition-based music major. Instructor permission. Coreq: PMUS 1500, enrollment in an ensemble and at least 7 non-applied lesson credits. **Semester Hours:** 2to 2

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1743 - Applied Music Instruction

Summer 2010 Registration **PMUS 1743**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1762 - Applied Euphonium

Summer 2010 Registration **PMUS 1762**

Private music lessons for audition-based music majors. Lessons emphasize developing fundamental technique, learning and performing standard repertoire, understanding the

foundations of musicality, sight reading and developing rhythmic accuracy. Students perform in a general recital and jury. Note: Students must be accepted as an audition-based music major. Instructor permission. Coreq: PMUS 1500, enrollment in an ensemble and at least 7 non-applied lesson credits. **Semester Hours:** 2to 2
Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1801 - MIS Applied Electric Bass

Summer 2010 Registration **PMUS 1801**

Private music lessons for Music Industry Studies majors. Lessons emphasize developing fundamental technique, learning and performing standard repertoire, understanding the foundations of musicality, sight reading and developing rhythmic accuracy. Note: Only available to non audition based music majors in the Music Industry Studies emphasis area. Coreq: PMUS 1500 and at least 7 non-applied lesson credits. Prereq: Acceptance to the MEIS program **Semester Hours:** 2to 2
Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1802 - MIS Applied String Bass

Summer 2010 Registration **PMUS 1802**

Private music lessons for Music Industry Studies majors. Lessons emphasize developing fundamental technique, learning and performing standard repertoire, understanding the foundations of musicality, sight reading and developing rhythmic accuracy. Note: Only available to non audition based music majors in the Music Industry Studies emphasis area. Coreq: PMUS 1500 and at least 7 non-applied lesson credits. Prereq: Acceptance to the MEIS program **Semester Hours:** 2to 2
Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1803 - MIS Applied Guitar

Summer 2010 Registration **PMUS 1803**

Private music lessons for Music Industry Studies majors. Lessons emphasize developing fundamental technique, learning and performing standard repertoire, understanding the foundations of musicality, sight reading and developing rhythmic accuracy. Note: Only available to non audition based music majors in the Music Industry Studies emphasis area. Coreq: PMUS 1500 and at least 7 non-applied lesson credits. Prereq: Acceptance to the MEIS program **Semester Hours:** 2to 2
Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1804 - MIS Applied Percussion

Summer 2010 Registration **PMUS 1804**

Private music lessons for Music Industry Studies majors. Lessons emphasize developing fundamental technique, learning and performing standard repertoire, understanding the

foundations of musicality, sight reading and developing rhythmic accuracy. Note: Only available to non audition based music majors in the Music Industry Studies emphasis area. Coreq: PMUS 1500 and at least 7 non-applied lesson credits. Prereq: Acceptance to the MEIS program.**Semester Hours:** 2to 2

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1805 - MIS Applied Drum Kit

Summer 2010 Registration **PMUS 1805**

Private music lessons for Music Industry Studies majors. Lessons emphasize developing fundamental technique, learning and performing standard repertoire, understanding the foundations of musicality, sight reading and developing rhythmic accuracy. Note: Only available to non audition based music majors in the Music Industry Studies emphasis area. Coreq: PMUS 1500 and at least 7 non-applied lesson credits. Prereq: Acceptance to the MEIS program.**Semester Hours:** 2to 2

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1806 - MIS Applied Piano

Summer 2010 Registration **PMUS 1806**

Private music lessons for Music Industry Studies majors. Lessons emphasize developing fundamental technique, learning and performing standard repertoire, understanding the foundations of musicality, sight reading and developing rhythmic accuracy. Note: Only available to non audition based music majors in the Music Industry Studies emphasis area. Coreq: PMUS 1500 and at least 7 non-applied lesson credits. Prereq: Acceptance to the MEIS program.**Semester Hours:** 2to 2

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1807 - MIS Applied Jazz Piano

Summer 2010 Registration **PMUS 1807**

Private music lessons for Music Industry Studies majors. Lessons emphasize developing fundamental technique, learning and performing standard repertoire, understanding the foundations of musicality, sight reading and developing rhythmic accuracy. Note: Only available to non audition based music majors in the Music Industry Studies emphasis area. Coreq: PMUS 1500 and at least 7 non-applied lesson credits. Prereq: Acceptance to the MEIS program.**Semester Hours:** 2to 2

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1808 - MIS Applied Voice

Summer 2010 Registration **PMUS 1808**

Private music lessons for Music Industry Studies majors. Lessons emphasize developing fundamental technique, learning and performing standard repertoire, understanding the

foundations of musicality, sight reading and developing rhythmic accuracy. Note: Only available to non audition based music majors in the Music Industry Studies emphasis area. Coreq: PMUS 1500 and at least 7 non-applied lesson credits. Prereq: Acceptance to the MEIS program.**Semester Hours:** 2to 2

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1809 - MIS Applied Synthesizer

Summer 2010 Registration **PMUS 1809**

Private music lessons for Music Industry Studies majors. Lessons emphasize developing fundamental technique, learning and performing standard repertoire, understanding the foundations of musicality, sight reading and developing rhythmic accuracy. Note: Only available to non audition based music majors in the Music Industry Studies emphasis area. Coreq: PMUS 1500 and at least 7 non-applied lesson credits. Prereq: Acceptance to the MEIS program.**Semester Hours:** 2to 2

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1810 - MIS Applied Trumpet

Summer 2010 Registration **PMUS 1810**

Private music lessons for Music Industry Studies majors. Lessons emphasize developing fundamental technique, learning and performing standard repertoire, understanding the foundations of musicality, sight reading and developing rhythmic accuracy. Note: Only available to non audition based music majors in the Music Industry Studies emphasis area. Coreq: PMUS 1500 and at least 7 non-applied lesson credits. Prereq: Acceptance to the MEIS program.**Semester Hours:** 2to 2

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1811 - MIS Applied Trombone

Summer 2010 Registration **PMUS 1811**

Private music lessons for Music Industry Studies majors. Lessons emphasize developing fundamental technique, learning and performing standard repertoire, understanding the foundations of musicality, sight reading and developing rhythmic accuracy. Note: Only available to non audition based music majors in the Music Industry Studies emphasis area. Coreq: PMUS 1500 and at least 7 non-applied lesson credits. Prereq: Acceptance to the MEIS program**Semester Hours:** 2to 2

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1812 - MIS Applied Tuba

Summer 2010 Registration **PMUS 1812**

Private music lessons for Music Industry Studies majors. Lessons emphasize developing fundamental technique, learning and performing standard repertoire, understanding the

foundations of musicality, sight reading and developing rhythmic accuracy. Note: Only available to non audition based music majors in the Music Industry Studies emphasis area. Coreq: PMUS 1500 and at least 7 non-applied lesson credits. Prereq: Acceptance to the MEIS program.**Semester Hours:** 2to 2

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1813 - MIS Applied French Horn

Summer 2010 Registration **PMUS 1813**

Private music lessons for Music Industry Studies majors. Lessons emphasize developing fundamental technique, learning and performing standard repertoire, understanding the foundations of musicality, sight reading and developing rhythmic accuracy. Note: Only available to non audition based music majors in the Music Industry Studies emphasis area. Coreq: PMUS 1500 and at least 7 non-applied lesson credits. Prereq: Acceptance to the MEIS program.**Semester Hours:** 2to 2

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1814 - MIS Applied Euphonium

Summer 2010 Registration **PMUS 1814**

Private music lessons for Music Industry Studies majors. Lessons emphasize developing fundamental technique, learning and performing standard repertoire, understanding the foundations of musicality, sight reading and developing rhythmic accuracy. Note: Only available to non audition based music majors in the Music Industry Studies emphasis area. Coreq: PMUS 1500 and at least 7 non-applied lesson credits. Prereq: Acceptance to the MEIS program.**Semester Hours:** 2to 2

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1815 - MIS Applied Banjo

Summer 2010 Registration **PMUS 1815**

Private music lessons for Music Industry Studies majors. Lessons emphasize developing fundamental technique, learning and performing standard repertoire, understanding the foundations of musicality, sight reading and developing rhythmic accuracy. Note: Only available to non audition based music majors in the Music Industry Studies emphasis area. Coreq: PMUS 1500 and at least 7 non-applied lesson credits. Prereq: Acceptance to the MEIS program.**Semester Hours:** 2to 2

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1816 - MIS Applied Bassoon

Summer 2010 Registration **PMUS 1816**

Private music lessons for Music Industry Studies majors. Lessons emphasize developing fundamental technique, learning and performing standard repertoire, understanding the

foundations of musicality, sight reading and developing rhythmic accuracy. Note: Only available to non audition based music majors in the Music Industry Studies emphasis area. Coreq: PMUS 1500 and at least 7 non-applied lesson credits. Prereq: Acceptance to the MEIS program.**Semester Hours:** 2to 2

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1817 - MIS Applied Clarinet

Summer 2010 Registration **PMUS 1817**

Private music lessons for Music Industry Studies majors. Lessons emphasize developing fundamental technique, learning and performing standard repertoire, understanding the foundations of musicality, sight reading and developing rhythmic accuracy. Note: Only available to non audition based music majors in the Music Industry Studies emphasis area. Coreq: PMUS 1500 and at least 7 non-applied lesson credits. Prereq: Acceptance to the MEIS program.**Semester Hours:** 2to 2

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1818 - MIS Applied Flute

Summer 2010 Registration **PMUS 1818**

Private music lessons for Music Industry Studies majors. Lessons emphasize developing fundamental technique, learning and performing standard repertoire, understanding the foundations of musicality, sight reading and developing rhythmic accuracy. Note: Only available to non audition based music majors in the Music Industry Studies emphasis area. Coreq: PMUS 1500 and at least 7 non-applied lesson credits. Prereq: Acceptance to the MEIS program.**Semester Hours:** 2to 2

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1819 - MIS Applied Saxophone

Summer 2010 Registration **PMUS 1819**

Private music lessons for Music Industry Studies majors. Lessons emphasize developing fundamental technique, learning and performing standard repertoire, understanding the foundations of musicality, sight reading and developing rhythmic accuracy. Note: Only available to non audition based music majors in the Music Industry Studies emphasis area. Coreq: PMUS 1500 and at least 7 non-applied lesson credits. Prereq: Acceptance to the MEIS program.**Semester Hours:** 2to 2

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1820 - MIS Applied Oboe

Summer 2010 Registration **PMUS 1820**

Private music lessons for Music Industry Studies majors. Lessons emphasize developing fundamental technique, learning and performing standard repertoire, understanding the

foundations of musicality, sight reading and developing rhythmic accuracy. Note: Only available to non audition based music majors in the Music Industry Studies emphasis area. Coreq: PMUS 1500 and at least 7 non-applied lesson credits. Prereq: Acceptance to the MEIS program.**Semester Hours:** 2to 2

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1821 - MIS Applied Cello

Summer 2010 Registration **PMUS 1821**

Private music lessons for Music Industry Studies majors. Lessons emphasize developing fundamental technique, learning and performing standard repertoire, understanding the foundations of musicality, sight reading and developing rhythmic accuracy. Note: Only available to non audition based music majors in the Music Industry Studies emphasis area. Coreq: PMUS 1500 and at least 7 non-applied lesson credits. Prereq: Acceptance to the MEIS program.**Semester Hours:** 2to 2

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1822 - MIS Applied Viola

Summer 2010 Registration **PMUS 1822**

Private music lessons for Music Industry Studies majors. Lessons emphasize developing fundamental technique, learning and performing standard repertoire, understanding the foundations of musicality, sight reading and developing rhythmic accuracy. Note: Only available to non audition based music majors in the Music Industry Studies emphasis area. Coreq: PMUS 1500 and at least 7 non-applied lesson credits. Prereq: Acceptance to the MEIS program.**Semester Hours:** 2to 2

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 1823 - MIS Applied Violin

Summer 2010 Registration **PMUS 1823**

Private music lessons for Music Industry Studies majors. Lessons emphasize developing fundamental technique, learning and performing standard repertoire, understanding the foundations of musicality, sight reading and developing rhythmic accuracy. Note: Only available to non audition based music majors in the Music Industry Studies emphasis area. Coreq: PMUS 1500 and at least 7 non-applied lesson credits. Prereq: Acceptance to the MEIS program.**Semester Hours:** 2to 2

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 2100 - Music Theory III

Summer 2010 Registration **PMUS 2100**

Exposes students to the theoretical aspects of Western European classical music from the Baroque period to the Classical period. Emphasis is placed on the melodic aspects

of classical music including the creation of melody and the combining of melodies into polyphonic structures. Prereq: PMUS 1200 and PMUS 1210. Coreq: PMUS 2110 and PMUS 1023. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 2110 - Ear Training and Sight Singing III

Summer 2010 Registration **PMUS 2110**

A laboratory course designed to help students listen to music analytically and to apply the harmonic principles learned in PMUS 2100 to the performance of music. Prereq: PMUS 1200 and PMUS 1210. Coreq: PMUS 2100 and PMUS 1023. **Semester Hours:** 1to 1 **When Offered:** FALL

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 2120 - Introduction to Arranging and Orchestration

Summer 2010 Registration **PMUS 2120**

This course will focus on techniques, technologies and strategies for contemporary arranging and orchestration in a number of diverse musical settings. Score reading, transposition, ranges, orchestration and composition will be covered. Using notational software, students will create original arrangements for ensembles varying in instrumentation and genre. Prereq: PMUS 1100 and 1200. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 2200 - Contemporary Styles

Summer 2010 Registration **PMUS 2200**

Surveys classical, jazz, and popular styles of the 20th century. Prereq: PMUS 2100. **Semester Hours:** 3to 3 **When Offered:** SPRING
Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 2410 - Percussion II Ensemble

Summer 2010 Registration **PMUS 2410**

Intermediate Ensemble. Focus on percussion techniques and ensemble playing utilizing Afro-Cuban literature. Comprised of percussion instruments of both definite and indefinite pitch. Assumes basic rhythmic sight-reading ability. Introduces theoretical concepts. Develops collaborative learning, aural skills and interactive multicultural awareness. Prereq: Audition or meeting with ensemble faculty. **Semester Hours:** 1to 1
Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 2420 - Electro/Acoustic Ensemble

Summer 2010 Registration **PMUS 2420**

Intermediate Ensemble. This course will study established methods used as agents of musical creativity in the practice of improvised music. Focus on real-time musical collaboration utilizing musical vocabularies from a wide range of sources.

Instrumentation of many kinds may be utilized. Prereq: Audition or meeting with ensemble faculty. **Semester Hours:** 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 2430 - Pop/Rock Ensemble

Summer 2010 Registration **PMUS 2430**

Intermediate Ensemble. This course will focus on group rehearsals of contemporary music with challenging technical and vocal requirements. Students will gain experience in transcribing and creating simple arrangements, learning adequate musicality, performing presentation and group cooperation. Prereq: Audition or meeting with ensemble faculty. **Semester Hours:** 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 2440 - Chamber Ensemble

Summer 2010 Registration **PMUS 2440**

Intermediate Ensemble. Mixed instrumental group for string, wind, brass, piano, and percussion players. Students will develop sight-reading and improvisation skills and perform student originals and arrangements including repertoire from the Baroque period through the Avant-Garde with no stylistic limitations. Prereq: Audition or meeting with ensemble faculty. **Semester Hours:** 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 2502 - Applied Electric Bass

Summer 2010 Registration **PMUS 2502**

Private music lessons for audition-based music majors. Lessons emphasize developing proficient technique, learning and performing advanced repertoire, demonstrating musicality, developing rhythmic accuracy and improvising. Students perform in a general recital and jury. Note: Students must be accepted as an audition-based music major.

Instructor permission. Coreq: PMUS 1500, enrollment in an ensemble and at least 7 non-applied lesson credits. Prereq: PMUS 1502 (Two semesters). **Semester Hours:** 2to 2

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 2512 - Applied String Bass

Summer 2010 Registration **PMUS 2512**

Private music lessons for audition-based music majors. Lessons emphasize developing

proficient technique, learning and performing advanced repertoire, demonstrating musicality, developing rhythmic accuracy and improvising. Students perform in a general recital and jury. Note: Students must be accepted as an audition-based music major. Instructor permission. Coreq: PMUS 1500, enrollment in an ensemble and at least 7 non-applied lesson credits. Prereq: PMUS 1512 (Two semesters). **Semester Hours:** 2to 2

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 2522 - Applied Bassoon

Summer 2010 Registration **PMUS 2522**

Private music lessons for audition-based music majors. Lessons emphasize developing proficient technique, learning and performing advanced repertoire, demonstrating musicality, developing rhythmic accuracy and improvising. Students perform in a general recital and jury. Note: Students must be accepted as an audition-based music major. Instructor permission. Coreq: PMUS 1500, enrollment in an ensemble and at least 7 non-applied lesson credits. Prereq: PMUS 1522 (Two semesters). **Semester Hours:** 2to 2

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 2532 - Applied Clarinet

Summer 2010 Registration **PMUS 2532**

Private music lessons for audition-based music majors. Lessons emphasize developing proficient technique, learning and performing advanced repertoire, demonstrating musicality, developing rhythmic accuracy and improvising. Students perform in a general recital and jury. Note: Students must be accepted as an audition-based music major. Instructor permission. Coreq: PMUS 1500, enrollment in an ensemble and at least 7 non-applied lesson credits. Prereq: PMUS 1532 (Two semesters). **Semester Hours:** 2to 2

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 2542 - Applied Bass Clarinet

Summer 2010 Registration **PMUS 2542**

Private music lessons for audition-based music majors. Lessons emphasize developing proficient technique, learning and performing advanced repertoire, demonstrating musicality, developing rhythmic accuracy and improvising. Students perform in a general recital and jury. Note: Students must be accepted as an audition-based music major. Instructor permission. Coreq: PMUS 1500, enrollment in an ensemble and at least 7 non-applied lesson credits. Prereq: PMUS 1542 (Two semesters). **Semester Hours:** 2to 2

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 2552 - Applied Flute

Summer 2010 Registration **PMUS 2552**

Private music lessons for audition-based music majors. Lessons emphasize developing proficient technique, learning and performing advanced repertoire, demonstrating musicality, developing rhythmic accuracy and improvising. Students perform in a general recital and jury. Note: Students must be accepted as an audition-based music major. Instructor permission. Coreq: PMUS 1500, enrollment in an ensemble and at least 7 non-applied lesson credits. Prereq: PMUS 1552 (Two semesters). **Semester Hours:** 2to 2

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 2562 - Applied French Horn

Summer 2010 Registration **PMUS 2562**

Private music lessons for audition-based music majors. Lessons emphasize developing proficient technique, learning and performing advanced repertoire, demonstrating musicality, developing rhythmic accuracy and improvising. Students perform in a general recital and jury. Note: Students must be accepted as an audition-based music major. Instructor permission. Coreq: PMUS 1500, enrollment in an ensemble and at least 7 non-applied lesson credits. Prereq: PMUS 1562 (Two semesters). **Semester Hours:** 2to 2

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 2572 - Applied Guitar

Summer 2010 Registration **PMUS 2572**

Private music lessons for audition-based music majors. Lessons emphasize developing proficient technique, learning and performing advanced repertoire, demonstrating musicality, developing rhythmic accuracy and improvising. Students perform in a general recital and jury. Note: Students must be accepted as an audition-based music major. Instructor permission. Coreq: PMUS 1500, enrollment in an ensemble and at least 7 non-applied lesson credits. Prereq: PMUS 1572 (Two semesters). **Semester Hours:** 2to 2

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 2582 - Applied Banjo

Summer 2010 Registration **PMUS 2582**

Private music lessons for audition-based music majors. Lessons emphasize developing proficient technique, learning and performing advanced repertoire, demonstrating musicality, developing rhythmic accuracy and improvising. Students perform in a general recital and jury. Note: Students must be accepted as an audition-based music major. Instructor permission. Coreq: PMUS 1500, enrollment in an ensemble and at least 7

non-applied lesson credits. Prereq: PMUS 1582 (Two semesters). **Semester Hours:** 2to 2

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 2612 - Applied Drum Kit

Summer 2010 Registration **PMUS 2612**

Private music lessons for audition-based music majors. Lessons emphasize developing proficient technique, learning and performing advanced repertoire, demonstrating musicality, developing rhythmic accuracy and improvising. Students perform in a general recital and jury. Note: Students must be accepted as an audition-based music major. Instructor permission. Coreq: PMUS 1500, enrollment in an ensemble and at least 7 non-applied lesson credits. Prereq: PMUS 1612 (Two semesters). **Semester Hours:** 2to 2

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 2622 - Applied Oboe

Summer 2010 Registration **PMUS 2622**

Private music lessons for audition-based music majors. Lessons emphasize developing proficient technique, learning and performing advanced repertoire, demonstrating musicality, developing rhythmic accuracy and improvising. Students perform in a general recital and jury. Note: Students must be accepted as an audition-based music major. Instructor permission. Coreq: PMUS 1500, enrollment in an ensemble and at least 7 non-applied lesson credits. Prereq: PMUS 1622 (Two semesters). **Semester Hours:** 2to 2

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 2632 - Applied World Percussion

Summer 2010 Registration **PMUS 2632**

Private music lessons for audition-based music majors. Lessons emphasize developing proficient technique, learning and performing advanced repertoire, demonstrating musicality, developing rhythmic accuracy and improvising. Students perform in a general recital and jury. Note: Students must be accepted as an audition-based music major. Instructor permission. Coreq: PMUS 1500, enrollment in an ensemble and at least 7 non-applied lesson credits. Prereq: PMUS 1632 (Two semesters). **Semester Hours:** 2to 2

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 2642 - Applied Piano

Summer 2010 Registration **PMUS 2642**

Private music lessons for audition-based music majors. Lessons emphasize developing

proficient technique, learning and performing advanced repertoire, demonstrating musicality, developing rhythmic accuracy and improvising. Students perform in a general recital and jury. Note: Students must be accepted as an audition-based music major. Instructor permission. Coreq: PMUS 1500, enrollment in an ensemble and at least 7 non-applied lesson credits. Prereq: PMUS 1642 (Two semesters). **Semester Hours:** 2to 2
Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 2652 - Applied Jazz Piano

Summer 2010 Registration **PMUS 2652**

Private music lessons for audition-based music majors. Lessons emphasize developing proficient technique, learning and performing advanced repertoire, demonstrating musicality, developing rhythmic accuracy and improvising. Students perform in a general recital and jury. Note: Students must be accepted as an audition-based music major. Instructor permission. Coreq: PMUS 1500, enrollment in an ensemble and at least 7 non-applied lesson credits. Prereq: PMUS 1652 (Two semesters). **Semester Hours:** 2to 2
Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 2662 - Applied Saxophone

Summer 2010 Registration **PMUS 2662**

Private music lessons for audition-based music majors. Lessons emphasize developing proficient technique, learning and performing advanced repertoire, demonstrating musicality, developing rhythmic accuracy and improvising. Students perform in a general recital and jury. Note: Students must be accepted as an audition-based music major. Instructor permission. Coreq: PMUS 1500, enrollment in an ensemble and at least 7 non-applied lesson credits. Prereq: PMUS 1662 (Two semesters). **Semester Hours:** 2to 2
Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 2672 - Applied Synthesizer

Summer 2010 Registration **PMUS 2672**

Private music lessons for audition-based music majors. Lessons emphasize developing proficient technique, learning and performing advanced repertoire, demonstrating musicality, developing rhythmic accuracy and improvising. Students perform in a general recital and jury. Note: Students must be accepted as an audition-based music major. Instructor permission. Coreq: PMUS 1500, enrollment in an ensemble and at least 7 non-applied lesson credits. Prereq: PMUS 1672 (Two semesters). **Semester Hours:** 2to 2
Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 2682 - Applied Trombone

Summer 2010 Registration **PMUS 2682**

Private music lessons for audition-based music majors. Lessons emphasize developing proficient technique, learning and performing advanced repertoire, demonstrating musicality, developing rhythmic accuracy and improvising. Students perform in a general recital and jury. Note: Students must be accepted as an audition-based music major. Instructor permission. Coreq: PMUS 1500, enrollment in an ensemble and at least 7 non-applied lesson credits. Prereq: PMUS 1682 (Two semesters). **Semester Hours:** 2to 2

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 2692 - Applied Trumpet

Summer 2010 Registration **PMUS 2692**

Private music lessons for audition-based music majors. Lessons emphasize developing proficient technique, learning and performing advanced repertoire, demonstrating musicality, developing rhythmic accuracy and improvising. Students perform in a general recital and jury. Note: Students must be accepted as an audition-based music major. Instructor permission. Coreq: PMUS 1500, enrollment in an ensemble and at least 7 non-applied lesson credits. Prereq: PMUS 1692 (Two semesters). **Semester Hours:** 2to 2

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 2702 - Applied Violin

Summer 2010 Registration **PMUS 2702**

Private music lessons for audition-based music majors. Lessons emphasize developing proficient technique, learning and performing advanced repertoire, demonstrating musicality, developing rhythmic accuracy and improvising. Students perform in a general recital and jury. Note: Students must be accepted as an audition-based music major. Instructor permission. Coreq: PMUS 1500, enrollment in an ensemble and at least 7 non-applied lesson credits. Prereq: PMUS 1702 (Two semesters). **Semester Hours:** 2to 2

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 2712 - Applied Viola

Summer 2010 Registration **PMUS 2712**

Private music lessons for audition-based music majors. Lessons emphasize developing proficient technique, learning and performing advanced repertoire, demonstrating musicality, developing rhythmic accuracy and improvising. Students perform in a general recital and jury. Note: Students must be accepted as an audition-based music major. Instructor permission. Coreq: PMUS 1500, enrollment in an ensemble and at least 7

non-applied lesson credits. Prereq: PMUS 1712 (Two semesters). **Semester Hours:** 2to 2

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 2722 - Applied Cello

Summer 2010 Registration **PMUS 2722**

Private music lessons for audition-based music majors. Lessons emphasize developing proficient technique, learning and performing advanced repertoire, demonstrating musicality, developing rhythmic accuracy and improvising. Students perform in a general recital and jury. Note: Students must be accepted as an audition-based music major. Instructor permission. Coreq: PMUS 1500, enrollment in an ensemble and at least 7 non-applied lesson credits. Prereq: PMUS 1722 (Two semesters). **Semester Hours:** 2to 2

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 2732 - Applied Voice

Summer 2010 Registration **PMUS 2732**

Private music lessons for audition-based music majors. Lessons emphasize developing proficient technique, learning and performing advanced repertoire, demonstrating musicality, developing rhythmic accuracy and improvising. Students perform in a general recital and jury. Note: Students must be accepted as an audition-based music major. Instructor permission. Coreq: PMUS 1500, enrollment in an ensemble and at least 7 non-applied lesson credits. Prereq: PMUS 1732 (Two semesters). **Semester Hours:** 2to 2

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 2742 - Applied Tuba

Summer 2010 Registration **PMUS 2742**

Private music lessons for audition-based music majors. Lessons emphasize developing proficient technique, learning and performing advanced repertoire, demonstrating musicality, developing rhythmic accuracy and improvising. Students perform in a general recital and jury. Note: Students must be accepted as an audition-based music major. Instructor permission. Coreq: PMUS 1500, enrollment in an ensemble and at least 7 non-applied lesson credits. Prereq: PMUS 1742 (Two semesters). **Semester Hours:** 2to 2

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 2750 - Functional Guitar Skills: Acoustic Guitar Styles

Summer 2010 Registration **PMUS 2750**

This course will consist of diverse semester modules addressing specific styles and

applications. Each module will include a time-line study relating the guitar to important musical and historical events and include analysis, performance and teaching of essential twentieth century guitar literature. Prereq: PMUS 1093, 1094 or permission of instructor. **Semester Hours:** 2to 2

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 2751 - Functional Guitar Skills: Essential Studio Guitarist

Summer 2010 Registration **PMUS 2751**

This course will consist of diverse semester modules addressing specific styles and applications. Each module will include a time-line study relating the guitar to important musical and historical events and include analysis, performance and teaching of essential twentieth century guitar literature. Prereq: PMUS 1093, 1094 or permission of instructor. **Semester Hours:** 2to 2

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 2752 - Functional Guitar Skills: World Guitar Styles

Summer 2010 Registration **PMUS 2752**

This course will consist of diverse semester modules addressing specific styles and applications. Each module will include a time-line study relating the guitar to important musical and historical events and include analysis, performance and teaching of essential twentieth century guitar literature. Prereq: PMUS 1093, PMUS 1094 or permission of instructor. **Semester Hours:** 2to 2

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 2753 - Functional Guitar Skills: American Guitar Styles

Summer 2010 Registration **PMUS 2753**

This course will consist of diverse semester modules addressing specific styles and applications. Each module will include a time-line study relating the guitar to important musical and historical events and include analysis, performance and teaching of essential twentieth century guitar literature. Prereq: PMUS 1093, 1094 or permission of instructor. **Semester Hours:** 2to 2

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 2762 - Applied Euphonium

Summer 2010 Registration **PMUS 2762**

Private music lessons for audition-based music majors. Lessons emphasize developing proficient technique, learning and performing advanced repertoire, demonstrating musicality, developing rhythmic accuracy and improvising. Students perform in a general recital and jury. Note: Students must be accepted as an audition-based music major. Instructor permission. Coreq: PMUS 1500, enrollment in an ensemble and at least 7

non-applied lesson credits. Prereq: PMUS 1762 (Two semesters). **Semester Hours:** 2to 2

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 3010 - Commercial Singing I

Summer 2010 Registration **PMUS 3010**

Fundamentals of voice production: posture, breath management and support, tone, resonance, diction, phrasing and interpretation. Development of contemporary solo vocal repertoire (pop, rock, jazz, rhythm and blues) and traditional styles. Training in all aspects of vocal performance needed for live performance and recording sessions (microphone technique, stage presence, appropriate vocal styles and delivery). Development of solid understanding of vocal technique and its application to all vocal styles. **Semester Hours:** 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 3020 - Commercial Singing II

Summer 2010 Registration **PMUS 3020**

Fundamentals of voice production: posture, breath management and support, tone, resonance, diction, phrasing and interpretation. Extension of PMUS 3010, with opportunity to continue to develop individual skills in commercial solo singing. Development of contemporary solo vocal repertoire (pop, rock, jazz, rhythm and blues) and traditional styles. Training in all aspects of vocal performance needed for live performance and recording sessions (microphone technique, stage presence, appropriate vocal styles and delivery). Development of solid understanding of vocal technique and its application to all vocal styles. Prereq: PMUS 3010. **Semester Hours:** 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 3110 - Social and Political Implications of American Music

Summer 2010 Registration **PMUS 3110**

Examines and describes the social meaning of American music with particular reference to the roles of major ethnic groups in the creation of this music, and the way that the music reveals attitudes toward these groups. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 3210 - Introduction to Teaching Private Music Lessons

Summer 2010 Registration **PMUS 3210**

Prepares students to teach private music lessons. Includes a survey of teaching styles from around the world, exercises, guest lectures, practical guidance for establishing a

teaching studio and student research presentations. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 3300 - Advanced Jazz Improvisation

Summer 2010 Registration **PMUS 3300**

Explores the techniques and concepts of instrumental jazz/commercial improvisation and sight reading. Major concepts include understanding and interpreting the construction of jazz harmonic nomenclature and the mastery of the melodic elements of improvisation. Prereq: PMUS 1310 or permission of the instructor. **Semester Hours:** 2to 2

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 3410 - Percussion III Ensemble

Summer 2010 Registration **PMUS 3410**

Advanced Ensemble. Focus on percussion techniques and ensemble playing utilizing Afro-Cuban literature. Comprised of percussion instruments of both definite and indefinite pitch. Assumes intermediate rhythmic sight-reading ability. Develops collaborative learning and awareness of drumming as universal language. Prereq: Audition or meeting with ensemble faculty. **Semester Hours:** 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 3420 - UCD 7 Ensemble

Summer 2010 Registration **PMUS 3420**

Advanced Ensemble. Small group a cappella choir focusing on competitive performances and lead singing through vocal group rehearsals of pop, rock, world music, and jazz genres. Students will learn to apply sound and microphone techniques for live performances. Prereq: Audition or meeting with ensemble faculty. **Semester Hours:** 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 3430 - Jazz Combo Ensemble

Summer 2010 Registration **PMUS 3430**

Advanced Ensemble. Instrumental jazz group. This course will focus on group rehearsals of bebop, swing, funk, & fusion. Prereq: Audition or meeting with ensemble faculty. **Semester Hours:** 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 3440 - Latin Ensemble

Summer 2010 Registration **PMUS 3440**

Advanced Ensemble. This ensemble performs Salsa and Afro-Caribbean music. Ensemble time is spent rehearsing repertoire and learning about Latin music concepts.

Prereq: Audition or meeting with ensemble faculty. **Semester Hours:** 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 3450 - Singer/Songwriter Ensemble

Summer 2010 Registration **PMUS 3450**

Advanced Ensemble. Focus on student compositions of original songs with lyrics and instrumental accompaniment including creation of lead sheets for band performances. Individual and group songwriting is explored. Students participate in community-building activities including community engagement and a songwriting retreat. Prereq: Audition or meeting with ensemble faculty. **Semester Hours:** 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 3501 - Applied Instruction

Summer 2010 Registration **PMUS 3501**

Private instruction in electric and acoustic bass, bassoon, clarinet, bass clarinet, flute, French horn, guitar, oboe, percussion, piano, jazz piano, saxophone, synthesizer, trombone, trumpet, violin, viola, violin cello, and voice. Open only to accepted music majors enrolled for a minimum of seven semester credit hours of nonapplied courses. **Semester Hours:** 2to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 3502 - Applied Electric Bass

Summer 2010 Registration **PMUS 3502**

Private music lessons for audition-based music majors. Lessons emphasize perfecting musical technique, memorizing and performing repertoire, demonstrating a high level of musicality, cultivating superior performance practice, identifying musical goals and preparing and performing a junior recital. Note: Students must be an audition-based music major and accepted to performance emphasis. Instructor permission. Coreq: PMUS 1500, enrollment in an ensemble and at least 7 non-applied lesson credits.

Prereq: PMUS 1502 and PMUS 2502 (two semesters each), and successful completion of sophomore proficiency. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 3503 - App Music Instruction

Summer 2010 Registration **PMUS 3503**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 3512 - Applied String Bass

Summer 2010 Registration **PMUS 3512**

Private music lessons for audition-based music majors. Lessons emphasize perfecting musical technique, memorizing and performing repertoire, demonstrating a high level of musicality, cultivating superior performance practice, identifying musical goals and preparing and performing a junior recital. Note: Students must be an audition-based music major and accepted to performance emphasis. Instructor permission. Coreq: PMUS 1500, enrollment in an ensemble and at least 7 non-applied lesson credits.

Prereq: PMUS 1512 and PMUS 2512 (two semesters each), and successful completion of sophomore proficiency. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 3513 - App Music Instruction

Summer 2010 Registration **PMUS 3513**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 3522 - Applied Bassoon

Summer 2010 Registration **PMUS 3522**

Private music lessons for audition-based music majors. Lessons emphasize perfecting musical technique, memorizing and performing repertoire, demonstrating a high level of musicality, cultivating superior performance practice, identifying musical goals and preparing and performing a junior recital. Note: Students must be an audition-based music major and accepted to performance emphasis. Instructor permission. Coreq: PMUS 1500, enrollment in an ensemble and at least 7 non-applied lesson credits.

Prereq: PMUS 1522 and PMUS 2522 (two semesters each), and successful completion of sophomore proficiency. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 3523 - App Music Instruction

Summer 2010 Registration **PMUS 3523**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 3532 - Applied Clarinet

Summer 2010 Registration **PMUS 3532**

Private music lessons for audition-based music majors. Lessons emphasize perfecting musical technique, memorizing and performing repertoire, demonstrating a high level of musicality, cultivating superior performance practice, identifying musical goals and

preparing and performing a junior recital. Note: Students must be an audition-based music major and accepted to performance emphasis. Instructor permission. Coreq: PMUS 1500, enrollment in an ensemble and at least 7 non-applied lesson credits. Prereq: PMUS 1532 and PMUS 2532 (two semesters each), and successful completion of sophomore proficiency.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 3533 - App Music Instruction

Summer 2010 Registration **PMUS 3533**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 3542 - Applied Bass Clarinet

Summer 2010 Registration **PMUS 3542**

Private music lessons for audition-based music majors. Lessons emphasize perfecting musical technique, memorizing and performing repertoire, demonstrating a high level of musicality, cultivating superior performance practice, identifying musical goals and preparing and performing a junior recital. Note: Students must be an audition-based music major and accepted to performance emphasis. Instructor permission. Coreq: PMUS 1500, enrollment in an ensemble and at least 7 non-applied lesson credits. Prereq: PMUS 1542 and PMUS 2542 (two semesters each), and successful completion of sophomore proficiency**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 3543 - App Music Instruction

Summer 2010 Registration **PMUS 3543**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 3551 - Applied Flute

Summer 2010 Registration **PMUS 3551**

Semester Hours: 2to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 3552 - Applied Flute

Summer 2010 Registration **PMUS 3552**

Private music lessons for audition-based music majors. Lessons emphasize perfecting musical technique, memorizing and performing repertoire, demonstrating a high level of musicality, cultivating superior performance practice, identifying musical goals and

preparing and performing a junior recital. Note: Students must be an audition-based music major and accepted to performance emphasis. Instructor permission. Coreq: PMUS 1500, enrollment in an ensemble and at least 7 non-applied lesson credits. Prereq: PMUS 1552 and PMUS 2552 (two semesters each), and successful completion of sophomore proficiency. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 3553 - App Music Instruction

Summer 2010 Registration **PMUS 3553**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 3562 - Applied French Horn

Summer 2010 Registration **PMUS 3562**

Private music lessons for audition-based music majors. Lessons emphasize perfecting musical technique, memorizing and performing repertoire, demonstrating a high level of musicality, cultivating superior performance practice, identifying musical goals and preparing and performing a junior recital. Note: Students must be an audition-based music major and accepted to performance emphasis. Instructor permission. Coreq: PMUS 1500, enrollment in an ensemble and at least 7 non-applied lesson credits. Prereq: PMUS 1562 and PMUS 2562 (two semesters each), and successful completion of sophomore proficiency. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 3571 - Applied Guitar

Summer 2010 Registration **PMUS 3571**

Semester Hours: 2to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 3572 - Applied Guitar

Summer 2010 Registration **PMUS 3572**

Private music lessons for audition-based music majors. Lessons emphasize perfecting musical technique, memorizing and performing repertoire, demonstrating a high level of musicality, cultivating superior performance practice, identifying musical goals and preparing and performing a junior recital. Note: Students must be an audition-based music major and accepted to performance emphasis. Instructor permission. Coreq: PMUS 1500, enrollment in an ensemble and at least 7 non-applied lesson credits. Prereq: PMUS 1572 and PMUS 2572 (two semesters each), and successful completion of sophomore proficiency. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 3573 - App Music Instruction

Summer 2010 Registration **PMUS 3573**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 3582 - Applied Banjo

Summer 2010 Registration **PMUS 3582**

Private music lessons for audition-based music majors. Lessons emphasize perfecting musical technique, memorizing and performing repertoire, demonstrating a high level of musicality, cultivating superior performance practice, identifying musical goals and preparing and performing a junior recital. Note: Students must be an audition-based music major and accepted to performance emphasis. Instructor permission. Coreq: PMUS 1500, enrollment in an ensemble and at least 7 non-applied lesson credits.

Prereq: PMUS 1582 and PMUS 2582 (two semesters each), and successful completion of sophomore proficiency. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 3583 - App Music Instruction

Summer 2010 Registration **PMUS 3583**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 3612 - Applied Drum Kit

Summer 2010 Registration **PMUS 3612**

Private music lessons for audition-based music majors. Lessons emphasize perfecting musical technique, memorizing and performing repertoire, demonstrating a high level of musicality, cultivating superior performance practice, identifying musical goals and preparing and performing a junior recital. Note: Students must be an audition-based music major and accepted to performance emphasis. Instructor permission. Coreq: PMUS 1500, enrollment in an ensemble and at least 7 non-applied lesson credits.

Prereq: PMUS 1612 and PMUS 2612 (two semesters each), and successful completion of sophomore proficiency. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 3622 - Applied Oboe

Summer 2010 Registration **PMUS 3622**

Private music lessons for audition-based music majors. Lessons emphasize perfecting musical technique, memorizing and performing repertoire, demonstrating a high level of musicality, cultivating superior performance practice, identifying musical goals and

preparing and performing a junior recital. Note: Students must be an audition-based music major and accepted to performance emphasis. Instructor permission. Coreq: PMUS 1500, enrollment in an ensemble and at least 7 non-applied lesson credits. Prereq: PMUS 1622 and PMUS 2622 (two semesters each), and successful completion of sophomore proficiency. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 3623 - App Music Instruction

Summer 2010 Registration **PMUS 3623**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 3631 - Applied Percussion

Summer 2010 Registration **PMUS 3631**

Semester Hours: 2to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 3632 - Applied World Percussion

Summer 2010 Registration **PMUS 3632**

Private music lessons for audition-based music majors. Lessons emphasize perfecting musical technique, memorizing and performing repertoire, demonstrating a high level of musicality, cultivating superior performance practice, identifying musical goals and preparing and performing a junior recital. Note: Students must be an audition-based music major and accepted to performance emphasis. Instructor permission. Coreq: PMUS 1500, enrollment in an ensemble and at least 7 non-applied lesson credits. Prereq: PMUS 1632 and PMUS 2632 (two semesters each), and successful completion of sophomore proficiency. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 3633 - App Music Instruction

Summer 2010 Registration **PMUS 3633**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 3641 - Applied Piano

Summer 2010 Registration **PMUS 3641**

Semester Hours: 2to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 3642 - Applied Piano

Summer 2010 Registration **PMUS 3642**

Private music lessons for audition-based music majors. Lessons emphasize perfecting musical technique, memorizing and performing repertoire, demonstrating a high level of musicality, cultivating superior performance practice, identifying musical goals and preparing and performing a junior recital. Note: Students must be an audition-based music major and accepted to performance emphasis. Instructor permission. Coreq: PMUS 1500, enrollment in an ensemble and at least 7 non-applied lesson credits.

Prereq: PMUS 1642 and PMUS 2642 (two semesters each), and successful completion of sophomore proficiency. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 3643 - App Music Instruction

Summer 2010 Registration **PMUS 3643**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 3651 - Applied Piano (JAZZ)

Summer 2010 Registration **PMUS 3651**

Semester Hours: 2to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 3652 - Applied Jazz Piano

Summer 2010 Registration **PMUS 3652**

Private music lessons for audition-based music majors. Lessons emphasize perfecting musical technique, memorizing and performing repertoire, demonstrating a high level of musicality, cultivating superior performance practice, identifying musical goals and preparing and performing a junior recital. Note: Students must be an audition-based music major and accepted to performance emphasis. Instructor permission. Coreq: PMUS 1500, enrollment in an ensemble and at least 7 non-applied lesson credits.

Prereq: PMUS 1652 and PMUS 2652 (two semesters each), and successful completion of sophomore proficiency. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 3653 - App Music Instruction

Summer 2010 Registration **PMUS 3653**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 3662 - Applied Saxophone

Summer 2010 Registration **PMUS 3662**

Private music lessons for audition-based music majors. Lessons emphasize perfecting musical technique, memorizing and performing repertoire, demonstrating a high level of musicality, cultivating superior performance practice, identifying musical goals and preparing and performing a junior recital. Note: Students must be an audition-based music major and accepted to performance emphasis. Instructor permission. Coreq: PMUS 1500, enrollment in an ensemble and at least 7 non-applied lesson credits.

Prereq: PMUS 1662 and PMUS 2662 (two semesters each), and successful completion of sophomore proficiency. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 3663 - App Music Instruction

Summer 2010 Registration **PMUS 3663**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 3671 - Applied Synthesizer

Summer 2010 Registration **PMUS 3671**

Semester Hours: 2to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 3672 - Applied Synthesizer

Summer 2010 Registration **PMUS 3672**

Private music lessons for audition-based music majors. Lessons emphasize perfecting musical technique, memorizing and performing repertoire, demonstrating a high level of musicality, cultivating superior performance practice, identifying musical goals and preparing and performing a junior recital. Note: Students must be an audition-based music major and accepted to performance emphasis. Instructor permission. Coreq: PMUS 1500, enrollment in an ensemble and at least 7 non-applied lesson credits.

Prereq: PMUS 1672 and PMUS 2672 (two semesters each), and successful completion of sophomore proficiency. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 3673 - App Music Instruction

Summer 2010 Registration **PMUS 3673**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 3681 - Applied Trombone

Summer 2010 Registration **PMUS 3681**

Semester Hours: 2to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 3682 - Applied Trombone

Summer 2010 Registration **PMUS 3682**

Private music lessons for audition-based music majors. Lessons emphasize perfecting musical technique, memorizing and performing repertoire, demonstrating a high level of musicality, cultivating superior performance practice, identifying musical goals and preparing and performing a junior recital. Note: Students must be an audition-based music major and accepted to performance emphasis. Instructor permission. Coreq: PMUS 1500, enrollment in an ensemble and at least 7 non-applied lesson credits.

Prereq: PMUS 1682 and PMUS 2682 (two semesters each), and successful completion of sophomore proficiency. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 3683 - App Music Instruction

Summer 2010 Registration **PMUS 3683**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 3691 - Applied Trumpet

Summer 2010 Registration **PMUS 3691**

Semester Hours: 2to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 3692 - Applied Trumpet

Summer 2010 Registration **PMUS 3692**

Private music lessons for audition-based music majors. Lessons emphasize perfecting musical technique, memorizing and performing repertoire, demonstrating a high level of musicality, cultivating superior performance practice, identifying musical goals and preparing and performing a junior recital. Note: Students must be an audition-based music major and accepted to performance emphasis. Instructor permission. Coreq: PMUS 1500, enrollment in an ensemble and at least 7 non-applied lesson credits.

Prereq: PMUS 1692 and PMUS 2692 (two semesters each), and successful completion of sophomore proficiency. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 3693 - App Music Instruction

Summer 2010 Registration **PMUS 3693**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 3701 - Applied Violin

Summer 2010 Registration **PMUS 3701**

Semester Hours: 2to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 3702 - Applied Violin

Summer 2010 Registration **PMUS 3702**

Private music lessons for audition-based music majors. Lessons emphasize perfecting musical technique, memorizing and performing repertoire, demonstrating a high level of musicality, cultivating superior performance practice, identifying musical goals and preparing and performing a junior recital. Note: Students must be an audition-based music major and accepted to performance emphasis. Instructor permission. Coreq: PMUS 1500, enrollment in an ensemble and at least 7 non-applied lesson credits. Prereq: PMUS 1702 and PMUS 2702 (two semesters each), and successful completion of sophomore proficiency. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 3703 - App Music Instruction

Summer 2010 Registration **PMUS 3703**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 3712 - Applied Viola

Summer 2010 Registration **PMUS 3712**

Private music lessons for audition-based music majors. Lessons emphasize perfecting musical technique, memorizing and performing repertoire, demonstrating a high level of musicality, cultivating superior performance practice, identifying musical goals and preparing and performing a junior recital. Note: Students must be an audition-based music major and accepted to performance emphasis. Instructor permission. Coreq: PMUS 1500, enrollment in an ensemble and at least 7 non-applied lesson credits. Prereq: PMUS 1712 and PMUS 2712 (two semesters each), and successful completion of sophomore proficiency. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 3713 - App Music Instruction

Summer 2010 Registration **PMUS 3713**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 3722 - Applied Cello

Summer 2010 Registration **PMUS 3722**

Private music lessons for audition-based music majors. Lessons emphasize perfecting musical technique, memorizing and performing repertoire, demonstrating a high level of musicality, cultivating superior performance practice, identifying musical goals and preparing and performing a junior recital. Note: Students must be an audition-based music major and accepted to performance emphasis. Instructor permission. Coreq: PMUS 1500, enrollment in an ensemble and at least 7 non-applied lesson credits.

Prereq: PMUS 1722 and PMUS 2722 (two semesters each), and successful completion of sophomore proficiency. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 3723 - App Music Instruction

Summer 2010 Registration **PMUS 3723**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 3731 - Applied Voice

Summer 2010 Registration **PMUS 3731**

Semester Hours: 2to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 3732 - Applied Voice

Summer 2010 Registration **PMUS 3732**

Private music lessons for audition-based music majors. Lessons emphasize perfecting musical technique, memorizing and performing repertoire, demonstrating a high level of musicality, cultivating superior performance practice, identifying musical goals and preparing and performing a junior recital. Note: Students must be an audition-based music major and accepted to performance emphasis. Instructor permission. Coreq: PMUS 1500, enrollment in an ensemble and at least 7 non-applied lesson credits.

Prereq: PMUS 1732 and PMUS 2732 (two semesters each), and successful completion of sophomore proficiency. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 3733 - App Music Instruction

Summer 2010 Registration **PMUS 3733**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 3741 - Applied Tuba

Summer 2010 Registration **PMUS 3741**

Semester Hours: 2to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 3742 - Applied Tuba

Summer 2010 Registration **PMUS 3742**

Private music lessons for audition-based music majors. Lessons emphasize perfecting musical technique, memorizing and performing repertoire, demonstrating a high level of musicality, cultivating superior performance practice, identifying musical goals and preparing and performing a junior recital. Note: Students must be an audition-based music major and accepted to performance emphasis. Instructor permission. Coreq: PMUS 1500, enrollment in an ensemble and at least 7 non-applied lesson credits. Prereq: PMUS 1742 and PMUS 2742 (two semesters each), and successful completion of sophomore proficiency. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 3743 - App Music Instruction

Summer 2010 Registration **PMUS 3743**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 3753 - Applied Music Instruction: Euphonium

Summer 2010 Registration **PMUS 3753**

Private instruction in euphonium. Open only to accepted music majors enrolled for a minimum of 7 semester hours of non-applied courses. Prereq: Students must be accepted as an audition-based music major. Coreq: PMUS 1500, PMUS 2000, PMUS 4000 and at least 7 non-applied lesson credits. Cross-listed with PMUS 1752. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 3762 - Applied Euphonium

Summer 2010 Registration **PMUS 3762**

Private music lessons for audition-based music majors. Lessons emphasize perfecting musical technique, memorizing and performing repertoire, demonstrating a high level of musicality, cultivating superior performance practice, identifying musical goals and preparing and performing a junior recital. Note: Students must be an audition-based music major and accepted to performance emphasis. Instructor permission. Coreq: PMUS 1500, enrollment in an ensemble and at least 7 non-applied lesson credits. Prereq: PMUS 1762 and PMUS 2762 (two semesters each), and successful completion of sophomore proficiency. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 3820 - Music History Modules

Summer 2010 Registration **PMUS 3820**

A set of three different five-week music style surveys. These surveys introduce concert, popular, and ethnic idioms sequentially, so the student may choose to enroll in one to three sections. **Semester Hours:** 1to 1
Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 3830 - History and Literature of Music I

Summer 2010 Registration **PMUS 3830**

This course provides a historical perspective of Western music literature from the medieval through the classical era. Prereq: Any semester of music theory. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 3831 - History and Literature of Music II

Summer 2010 Registration **PMUS 3831**

This course provides a historical perspective of Western music literature from the Romantic era through the present day. Prereq: Any semester of music theory. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 3840 - Independent Study: PMUS

Summer 2010 Registration **PMUS 3840**

Semester Hours: 1to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 4060 - Analysis

Summer 2010 Registration **PMUS 4060**

The study of music of the Classical and Romantic periods through analysis. Prereq: PMUS 2100. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 4200 - Senior Recital

Summer 2010 Registration **PMUS 4200**

This course is for music performance students to prepare for their capstone senior recital and to prepare materials for their required portfolio. Prereq: Permission of instructor. **Semester Hours:** 2to 2

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 4410 - Claim Jumpers Ensemble

Summer 2010 Registration **PMUS 4410**

Signature Ensemble. The Claim Jumpers will focus on group rehearsals of significant traditional jazz literature, masterworks of classic jazz of the 1920's, and creativity within the traditional jazz genre at the highest level. Prereq: Audition or meeting with ensemble faculty. **Semester Hours:** 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 4420 - Ninth Street Singers Ensemble

Summer 2010 Registration **PMUS 4420**

Signature Ensemble. Elite a cappella mixed choir. This course will focus on group rehearsals of various genres of vocal ensemble music, including pop, rock, jazz, musical theater, and gospel. Prereq: Audition or meeting with ensemble faculty. **Semester Hours:** 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 4430 - Guitar Ensemble

Summer 2010 Registration **PMUS 4430**

Signature Ensemble. Advance jazz guitar group. This course will focus on group rehearsals of bebop and fusion. Prereq: Audition or meeting with ensemble faculty. **Semester Hours:** 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 4502 - Applied Electric Bass

Summer 2010 Registration **PMUS 4502**

Private music lessons for audition-based music majors. Lessons emphasize perfecting musical technique, memorizing professional-level repertoire, demonstrating an expert

level of musicality, analyzing repertoire, achieving a musical identity, cultivating superior performance practice and preparing and performing a senior recital. Note: Students must be accepted as an audition-based music major. Instructor permission. Coreq: PMUS 1500, enrollment in an ensemble and at least 7 non-applied lesson credits. Prereq: PMUS 1502, PMUS 2502, PMUS 3502 (two semesters each), and successful completion of Junior Recital. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 4512 - Applied String Bass

Summer 2010 Registration **PMUS 4512**

Private music lessons for audition-based music majors. Lessons emphasize perfecting musical technique, memorizing professional-level repertoire, demonstrating an expert level of musicality, analyzing repertoire, achieving a musical identity, cultivating superior performance practice and preparing and performing a senior recital. Note: Students must be accepted as an audition-based music major. Instructor permission. Coreq: PMUS 1500, enrollment in an ensemble and at least 7 non-applied lesson credits. Prereq: PMUS 1512, PMUS 2512, PMUS 3512 (two semesters each), and successful completion of Junior Recital. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 4522 - Applied Bassoon

Summer 2010 Registration **PMUS 4522**

Private music lessons for audition-based music majors. Lessons emphasize perfecting musical technique, memorizing professional-level repertoire, demonstrating an expert level of musicality, analyzing repertoire, achieving a musical identity, cultivating superior performance practice and preparing and performing a senior recital. Note: Students must be accepted as an audition-based music major. Instructor permission. Coreq: PMUS 1500, enrollment in an ensemble and at least 7 non-applied lesson credits. Prereq: PMUS 1522, PMUS 2522, PMUS 3522 (two semesters each), and successful completion of Junior Recital. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 4532 - Applied Clarinet

Summer 2010 Registration **PMUS 4532**

Private music lessons for audition-based music majors. Lessons emphasize perfecting musical technique, memorizing professional-level repertoire, demonstrating an expert level of musicality, analyzing repertoire, achieving a musical identity, cultivating superior performance practice and preparing and performing a senior recital. Note: Students must be accepted as an audition-based music major. Instructor permission. Coreq: PMUS 1500, enrollment in an ensemble and at least 7 non-applied lesson credits. Prereq: PMUS 1532, PMUS 2532, PMUS 3532 (two semesters each), and successful

completion of Junior Recital.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 4542 - Applied Bass Clarinet

Summer 2010 Registration **PMUS 4542**

Private music lessons for audition-based music majors. Lessons emphasize perfecting musical technique, memorizing professional-level repertoire, demonstrating an expert level of musicality, analyzing repertoire, achieving a musical identity, cultivating superior performance practice and preparing and performing a senior recital. Note: Students must be accepted as an audition-based music major. Instructor permission. Coreq: PMUS 1500, enrollment in an ensemble and at least 7 non-applied lesson credits. Prereq: PMUS 1542, PMUS 2542, PMUS 3542 (two semesters each), and successful completion of Junior Recital.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 4552 - Applied Flute

Summer 2010 Registration **PMUS 4552**

Private music lessons for audition-based music majors. Lessons emphasize perfecting musical technique, memorizing professional-level repertoire, demonstrating an expert level of musicality, analyzing repertoire, achieving a musical identity, cultivating superior performance practice and preparing and performing a senior recital. Note: Students must be accepted as an audition-based music major. Instructor permission. Coreq: PMUS 1500, enrollment in an ensemble and at least 7 non-applied lesson credits. Prereq: PMUS 1552, PMUS 2552, PMUS 3552 (two semesters each), and successful completion of Junior Recital.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 4562 - Applied French Horn

Summer 2010 Registration **PMUS 4562**

Private music lessons for audition-based music majors. Lessons emphasize perfecting musical technique, memorizing professional-level repertoire, demonstrating an expert level of musicality, analyzing repertoire, achieving a musical identity, cultivating superior performance practice and preparing and performing a senior recital. Note: Students must be accepted as an audition-based music major. Instructor permission. Coreq: PMUS 1500, enrollment in an ensemble and at least 7 non-applied lesson credits. Prereq: PMUS 1562, PMUS 2562, PMUS 3562 (two semesters each), and successful completion of Junior Recital.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 4572 - Applied Guitar

Summer 2010 Registration **PMUS 4572**

Private music lessons for audition-based music majors. Lessons emphasize perfecting musical technique, memorizing professional-level repertoire, demonstrating an expert level of musicality, analyzing repertoire, achieving a musical identity, cultivating superior performance practice and preparing and performing a senior recital. Note: Students must be accepted as an audition-based music major. Instructor permission. Coreq: PMUS 1500, enrollment in an ensemble and at least 7 non-applied lesson credits. Prereq: PMUS 1572, PMUS 2572, PMUS 3572 (two semesters each), and successful completion of Junior Recital. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 4582 - Applied Banjo

Summer 2010 Registration **PMUS 4582**

Private music lessons for audition-based music majors. Lessons emphasize perfecting musical technique, memorizing professional-level repertoire, demonstrating an expert level of musicality, analyzing repertoire, achieving a musical identity, cultivating superior performance practice and preparing and performing a senior recital. Note: Students must be accepted as an audition-based music major. Instructor permission. Coreq: PMUS 1500, enrollment in an ensemble and at least 7 non-applied lesson credits. Prereq: PMUS 1582, PMUS 2582, PMUS 3582 (two semesters each), and successful completion of Junior Recital. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 4600 - Topics in Music

Summer 2010 Registration **PMUS 4600**

Cross-listed with PMUS 5600. **Semester Hours:** 1to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 4612 - Applied Drum Kit

Summer 2010 Registration **PMUS 4612**

Private music lessons for audition-based music majors. Lessons emphasize perfecting musical technique, memorizing professional-level repertoire, demonstrating an expert level of musicality, analyzing repertoire, achieving a musical identity, cultivating superior performance practice and preparing and performing a senior recital. Note: Students must be accepted as an audition-based music major. Instructor permission. Coreq: PMUS 1500, enrollment in an ensemble and at least 7 non-applied lesson credits. Prereq: PMUS 1612, PMUS 2612, PMUS 3612 (two semesters each), and successful completion of Junior Recital. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 4622 - Applied Oboe

Summer 2010 Registration **PMUS 4622**

Private music lessons for audition-based music majors. Lessons emphasize perfecting musical technique, memorizing professional-level repertoire, demonstrating an expert level of musicality, analyzing repertoire, achieving a musical identity, cultivating superior performance practice and preparing and performing a senior recital. Note: Students must be accepted as an audition-based music major. Instructor permission. Coreq: PMUS 1500, enrollment in an ensemble and at least 7 non-applied lesson credits. Prereq: PMUS 1622, PMUS 2622, PMUS 3622 (two semesters each), and successful completion of Junior Recital. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 4632 - Applied World Percussion

Summer 2010 Registration **PMUS 4632**

Private music lessons for audition-based music majors. Lessons emphasize perfecting musical technique, memorizing professional-level repertoire, demonstrating an expert level of musicality, analyzing repertoire, achieving a musical identity, cultivating superior performance practice and preparing and performing a senior recital. Note: Students must be accepted as an audition-based music major. Instructor permission. Coreq: PMUS 1500, enrollment in an ensemble and at least 7 non-applied lesson credits. Prereq: PMUS 1632, PMUS 2632, PMUS 3632 (two semesters each), and successful completion of Junior Recital. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 4642 - Applied Piano

Summer 2010 Registration **PMUS 4642**

Private music lessons for audition-based music majors. Lessons emphasize perfecting musical technique, memorizing professional-level repertoire, demonstrating an expert level of musicality, analyzing repertoire, achieving a musical identity, cultivating superior performance practice and preparing and performing a senior recital. Note: Students must be accepted as an audition-based music major. Instructor permission. Coreq: PMUS 1500, enrollment in an ensemble and at least 7 non-applied lesson credits. Prereq: PMUS 1642, PMUS 2642, PMUS 3642 (two semesters each), and successful completion of Junior Recital. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 4652 - Applied Jazz Piano

Summer 2010 Registration **PMUS 4652**

Private music lessons for audition-based music majors. Lessons emphasize perfecting musical technique, memorizing professional-level repertoire, demonstrating an expert

level of musicality, analyzing repertoire, achieving a musical identity, cultivating superior performance practice and preparing and performing a senior recital. Note: Students must be accepted as an audition-based music major. Instructor permission. Coreq: PMUS 1500, enrollment in an ensemble and at least 7 non-applied lesson credits. Prereq: PMUS 1652, PMUS 2652, PMUS 3652 (two semesters each), and successful completion of Junior Recital. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 4662 - Applied Saxophone

Summer 2010 Registration **PMUS 4662**

Private music lessons for audition-based music majors. Lessons emphasize perfecting musical technique, memorizing professional-level repertoire, demonstrating an expert level of musicality, analyzing repertoire, achieving a musical identity, cultivating superior performance practice and preparing and performing a senior recital. Note: Students must be accepted as an audition-based music major. Instructor permission. Coreq: PMUS 1500, enrollment in an ensemble and at least 7 non-applied lesson credits. Prereq: PMUS 1662, PMUS 2662, PMUS 3662 (two semesters each), and successful completion of Junior Recital. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 4672 - Applied Synthesizer

Summer 2010 Registration **PMUS 4672**

Private music lessons for audition-based music majors. Lessons emphasize perfecting musical technique, memorizing professional-level repertoire, demonstrating an expert level of musicality, analyzing repertoire, achieving a musical identity, cultivating superior performance practice and preparing and performing a senior recital. Note: Students must be accepted as an audition-based music major. Instructor permission. Coreq: PMUS 1500, enrollment in an ensemble and at least 7 non-applied lesson credits. Prereq: PMUS 1672, PMUS 2672, PMUS 3672 (two semesters each), and successful completion of Junior Recital. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 4682 - Applied Trombone

Summer 2010 Registration **PMUS 4682**

Private music lessons for audition-based music majors. Lessons emphasize perfecting musical technique, memorizing professional-level repertoire, demonstrating an expert level of musicality, analyzing repertoire, achieving a musical identity, cultivating superior performance practice and preparing and performing a senior recital. Note: Students must be accepted as an audition-based music major. Instructor permission. Coreq: PMUS 1500, enrollment in an ensemble and at least 7 non-applied lesson credits. Prereq: PMUS 1682, PMUS 2682, PMUS 3682 (two semesters each), and successful

completion of Junior Recital. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 4692 - Applied Trumpet

Summer 2010 Registration **PMUS 4692**

Private music lessons for audition-based music majors. Lessons emphasize perfecting musical technique, memorizing professional-level repertoire, demonstrating an expert level of musicality, analyzing repertoire, achieving a musical identity, cultivating superior performance practice and preparing and performing a senior recital. Note: Students must be accepted as an audition-based music major. Instructor permission. Coreq: PMUS 1500, enrollment in an ensemble and at least 7 non-applied lesson credits. Prereq: PMUS 1692, PMUS 2692, PMUS 3692 (two semesters each), and successful completion of Junior Recital. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 4702 - Applied Violin

Summer 2010 Registration **PMUS 4702**

Private music lessons for audition-based music majors. Lessons emphasize perfecting musical technique, memorizing professional-level repertoire, demonstrating an expert level of musicality, analyzing repertoire, achieving a musical identity, cultivating superior performance practice and preparing and performing a senior recital. Note: Students must be accepted as an audition-based music major. Instructor permission. Coreq: PMUS 1500, enrollment in an ensemble and at least 7 non-applied lesson credits. Prereq: PMUS 1702, PMUS 2702, PMUS 3702 (two semesters each), and successful completion of Junior Recital. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 4712 - Applied Viola

Summer 2010 Registration **PMUS 4712**

Private music lessons for audition-based music majors. Lessons emphasize perfecting musical technique, memorizing professional-level repertoire, demonstrating an expert level of musicality, analyzing repertoire, achieving a musical identity, cultivating superior performance practice and preparing and performing a senior recital. Note: Students must be accepted as an audition-based music major. Instructor permission. Coreq: PMUS 1500, enrollment in an ensemble and at least 7 non-applied lesson credits. Prereq: PMUS 1712, PMUS 2712, PMUS 3712 (two semesters each), and successful completion of Junior Recital. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 4722 - Applied Cello

Summer 2010 Registration **PMUS 4722**

Private music lessons for audition-based music majors. Lessons emphasize perfecting musical technique, memorizing professional-level repertoire, demonstrating an expert level of musicality, analyzing repertoire, achieving a musical identity, cultivating superior performance practice and preparing and performing a senior recital. Note: Students must be accepted as an audition-based music major. Instructor permission. Coreq: PMUS 1500, enrollment in an ensemble and at least 7 non-applied lesson credits. Prereq: PMUS 1722, PMUS 2722, PMUS 3722 (two semesters each), and successful completion of Junior Recital. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 4732 - Applied Voice

Summer 2010 Registration **PMUS 4732**

Private music lessons for audition-based music majors. Lessons emphasize perfecting musical technique, memorizing professional-level repertoire, demonstrating an expert level of musicality, analyzing repertoire, achieving a musical identity, cultivating superior performance practice and preparing and performing a senior recital. Note: Students must be accepted as an audition-based music major. Instructor permission. Coreq: PMUS 1500, enrollment in an ensemble and at least 7 non-applied lesson credits. Prereq: PMUS 1732, PMUS 2732, PMUS 3732 (two semesters each), and successful completion of Junior Recital. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 4742 - Applied Tuba

Summer 2010 Registration **PMUS 4742**

Private music lessons for audition-based music majors. Lessons emphasize perfecting musical technique, memorizing professional-level repertoire, demonstrating an expert level of musicality, analyzing repertoire, achieving a musical identity, cultivating superior performance practice and preparing and performing a senior recital. Note: Students must be accepted as an audition-based music major. Instructor permission. Coreq: PMUS 1500, enrollment in an ensemble and at least 7 non-applied lesson credits. Prereq: PMUS 1742, PMUS 2742, PMUS 3742 (two semesters each), and successful completion of Junior Recital. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 4762 - Applied Euphonium

Summer 2010 Registration **PMUS 4762**

Private music lessons for audition-based music majors. Lessons emphasize perfecting musical technique, memorizing professional-level repertoire, demonstrating an expert level of musicality, analyzing repertoire, achieving a musical identity, cultivating superior performance practice and preparing and performing a senior recital. Note: Students must

be accepted as an audition-based music major. Instructor permission. Coreq: PMUS 1500, enrollment in an ensemble and at least 7 non-applied lesson credits. Prereq: PMUS 1762, PMUS 2762, PMUS 3762 (two semesters each), and successful completion of Junior Recital. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 4840 - Independent Study: PMUS

Summer 2010 Registration **PMUS 4840**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PMUS 5600 - Topics in Music

Summer 2010 Registration **PMUS 5600**

Cross-listed with PMUS 4600. **Semester Hours:** 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 1001 - Introduction to Political Science: The Quest for Freedom and Justice

Summer 2010 Registration **P SC 1001**

Introduces the study of politics, its human importance, and its relationship to social institutions. Analysis of the relationship between individual political behavior and characteristics of the political system. Development of key concepts such as power, legitimacy, authority, political socialization, and revolution. Note: Required of all PSCI majors. **Semester Hours:** 3to 3 **GT Pathways Category Key:** GT-SS1

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 1101 - American Political System

Summer 2010 Registration **P SC 1101**

General introduction to the American political system with emphasis upon citizen involvement, the relationships among the various levels and branches of government, formal and informal institutions, processes, and behavior. Note: Required of all PSCI majors. **Semester Hours:** 3to 3 **GT Pathways Category Key:** GT-SS1

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 1111 - Freshman Seminar

Summer 2010 Registration **P SC 1111**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 2001 - Topics in Political Science

Summer 2010 Registration P SC 2001

Covers different areas of politics. Note: May be taken more than once for credit when topics vary. **Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 2006 - Global Political Issues

Summer 2010 Registration P SC 2006

Studies global political issues, exploring the broad forces at play in the world: international economics, national interests, military power, nationalism, ethnicity, the environment and human rights. Discussion of world events and underlying global issues, incorporating analytical tools used by political scientists. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 2840 - Independent Study

Summer 2010 Registration P SC 2840

An opportunity for lower division students who demonstrate academic potential to pursue the study of some subject of interest in greater detail, with supervision from a faculty member in the department. Subjects chosen and arrangements for assignments to be made between student and faculty. Prereq: One semester of course work at Downtown Denver Campus. **Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 2939 - Internship/Cooperative Education

Summer 2010 Registration P SC 2939

Experiences involving application of specific, relevant concepts and skills in supervised employment situations. Prereq: 15 hours of 2.75 GPA. **Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 3000 - Topics: Conference Participation

Summer 2010 Registration P SC 3000

Semester Hours: 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 3002 - Topics in Political Science

Summer 2010 Registration P SC 3002

Covers different areas of politics. Note: May be taken more than once for credit when

topics vary. **Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 3011 - Research Methods

Summer 2010 Registration P SC 3011

Design of political/social research, both qualitative and quantitative. Applications of statistical techniques and procedures to social and political phenomena. Use of computer and the Internet. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 3022 - Introduction to Comparative Politics

Summer 2010 Registration P SC 3022

Comparison of the basic political features of selected countries with focus on political behavior, institutions and political cultures. Themes examined include development, democratization, social movements, political instability and globalization. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 3034 - Race, Gender, Law and Public Policy

Summer 2010 Registration P SC 3034

Historical overview of race and gender relations in the U.S. and an examination of the treatment of issues of race and gender in the judicial system and public policy. Cross-listed with WGST 3034. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 3035 - Political Movements: Race and Gender

Summer 2010 Registration P SC 3035

Examines the emergence, growth, and decline of social movements for race and gender equality. Discussion of political issues of race and gender in the 1990s. Cross-listed with WGST 3035. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 3042 - Introduction to International Relations

Summer 2010 Registration P SC 3042

Basic background and theories of international relations with focus on the interaction between nation states, international organizations, regimes and transnational movements. Themes examined include foreign policy conduct, international security and political economy, human rights and environmental management. **Semester Hours:** 3to

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 3064 - Power and Empowerment in the United States

Summer 2010 Registration **P SC 3064**

Introduces U.S. political economy. Analysis of the political and economic forces and structures that shape the opportunities available to the American people. Among topics included are reciprocal impacts of government and business, the federal budget, taxation, lobbying and special interests, community organizing, and elections. **Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 3125 - Introduction to Latin American Society

Summer 2010 Registration **P SC 3125**

Explores the central characteristics of political-economic systems and cultures of Latin America. Prepares students to follow developments in the region with greater understanding and to pursue advanced study. **Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 3214 - Federal Law and American Indians

Summer 2010 Registration **P SC 3214**

Examines the legal and political history of the U.S. in relation to American Indian Nations. Focuses on specific laws and Supreme Court cases in federal Indian law, with analysis of U.S. policy. There will be some comparison with Indian policies of other countries. Cross-listed with ETST 3216. **Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 3333 - Utopian Transformations

Summer 2010 Registration **P SC 3333**

Explores cutting-edge theory and practice in social change that transcends traditional left-right divisions and merely incremental reform. Utopian and transformative experiments studied include communes, worker cooperatives, neighborhood organizing, and green parties. Note: Service-learning option can fulfill major requirement. **Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 3347 - Film and Politics

Summer 2010 Registration **P SC 3347**

Presents historical and contemporary films to introduce students to critical evaluation of

film as a political medium. Whether designed as propaganda or entertainment, films shape and reflect critical issues in our political and social culture. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 3535 - Modern Capitalist States

Summer 2010 Registration P SC 3535

An examination of various models of Western advanced capitalist states: Laissez-faire, pluralist, welfare state, Marxist, and postindustrial. Student research for purposes of testing the alternative models. Emphasis on the U.S. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 3840 - Independent Study: PSCI

Summer 2010 Registration P SC 3840

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 3914 - The Urban Citizen

Summer 2010 Registration P SC 3914

Course emphasis is community, the individual, and the good life. Experiential learning and classroom discussions about capacities of urban citizens. Focus is on social, political, and economic resources that individuals command, issues of equality and inequality, and possibilities of constructive change. Prereq: A willingness to spend a semester working and studying together as a team in both the classroom and the community. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 3939 - Internship/Cooperative Education

Summer 2010 Registration P SC 3939

Designed experiences involving application of political concepts and skills in supervised employment situations. Prereq: Junior or senior standing and 3.0 GPA. **Semester Hours:** 1to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4002 - Topics in Political Science

Summer 2010 Registration P SC 4002

Specialized areas of politics. Note: May be taken more than once for credit when topics vary. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4009 - Politics of the Budgetary Process

Summer 2010 Registration **P SC 4009**

Develops each student's understanding of budgeting and financial management in the public and nonprofit sectors. An overview of public sector and nonprofit fiscal management is provided, along with thorough exploration of the political influences that affect financial decision-making. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4011 - GIS in Political Science

Summer 2010 Registration **P SC 4011**

Computer lab course developing methodological skills in Geographic Information Systems (GIS) in political contexts. Geospatial computerized mapping skills are important in political fields such as urban planning, electoral analysis, environmental justice, demographics, public health, and criminal justice. Designed for beginners. Cross-listed with PSCI 5011. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4014 - Media and Politics

Summer 2010 Registration **P SC 4014**

Explores the impact of the news media on the American political system, including public policy and citizen participation, and addresses trends in news coverage and media ownership, and their impact on public opinion. Prereq: PSCI 1001 and 1101 or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4024 - Legislatures and Legislation

Summer 2010 Registration **P SC 4024**

Structure and organization of legislatures, informal influences, and the process of statute law making. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4025 - Local Governance and Globalization

Summer 2010 Registration **P SC 4025**

Introduces international political economy, consequences of globalization for localities, interplay between wealth and power among nations, multinational corporations, NGOs and the UN, and impact of their actions on local governments. Topics include development, aid, trade, outsourcing, eco-sustainability and global equity. Prereq:

Graduate standing or permission of instructor. Cross-listed with PSCI 5025. **Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4034 - Political Parties and Pressure Groups

Summer 2010 Registration P SC 4034

Democrats, Republicans, third parties, and pressure groups in the United States. Analysis of pressure politics and political behavior. Impact of parties and pressure groups on the public good. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4044 - The Presidency

Summer 2010 Registration P SC 4044

An overview of the historical, constitutional, and functional aspects of the presidency. Focuses on the powers and vulnerabilities of the presidency and on the style and politics of the current president. Prereq: PSCI 1101. Cross-listed with PSCI 5044. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4057 - Religion and Politics

Summer 2010 Registration P SC 4057

Exploration of: (1) theoretical perspectives on the relationship between religion and politics; (2) causes of and justifications for the historical development of the Western separation of "church" and state; (3) contemporary responses to and analyses of this separation; and (4) several current debates about public policy in America that reveal tensions between these two spheres. Cross-listed with PSCI 5057 and RLST 4500, 5500. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4074 - Urban Politics

Summer 2010 Registration P SC 4074

The crisis and the promise of U.S. cities. Nature and roots of critical urban problems. Citizen involvement in urban decision making. Government as problem and as solution. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4084 - Local Government and Administration

Summer 2010 Registration P SC 4084

Policy and administrative challenges faced by local government in the 21st century. Emphasis on cities under federalism, alternative forms of city governance, and new

challenges from increasingly diverse constituents. Issues of poverty, public safety, health, transportation, environment, corruption, and accountability. Cross-listed with PSCI 5084. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4085 - Comparative Public Policy

Summer 2010 Registration P SC 4085

Comparison of public policy making in such areas as health care, environment, family assistance, and employment in the United States and at least two other countries.

Prereq: Graduate standing or permission of instructor. Cross-listed with PSCI 5085. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4094 - Seminar: American Politics

Summer 2010 Registration P SC 4094

Foundations of U.S. politics and contemporary political issues. Federal/state/community relations. Relationship among the three branches of the Federal government. Colorado controversies arising under the U.S. Constitution. Cross-listed with PSCI 5014. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4105 - Comparative Politics: Europe

Summer 2010 Registration P SC 4105

An intensive and comparative analysis of the political systems and processes of Europe. Emphasis on political culture and economy; executive-legislative relationships; electoral systems; political parties and interest groups; political conflict and citizen participation; and the impact of social changes on political institutions. Cross-listed with PSCI 5105. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4115 - Third World Politics

Summer 2010 Registration P SC 4115

Examines the factors challenging political stability in low income nations and the prospects for democracy and economic development. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4124 - Denver Politics

Summer 2010 Registration P SC 4124

Surveys Denver's dominant political and economic forces and community agendas that

compete with the downtown growth machine. Examines urban renewal strategies, gentrification and grass-roots resistance, and the role of officials in shaping Denver's distribution of wealth and life-opportunities. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4126 - Introduction to International Political Economy

Summer 2010 Registration **P SC 4126**

A short introduction to international economy, including classic readings of international political economy (such as Smith, Ricardo, Marx, Lenin), and more recent work on globalization, applying related theories to the current world economy. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4144 - Indigenous Political Systems

Summer 2010 Registration **P SC 4144**

Surveys political theory and practice in indigenous societies in the Americas. Examines the impact of indigenous political thought on Euro-American politics, especially the U.S. Constitution, and explores the contemporary impact of indigenous people on current politics. Cross-listed with ETST 4144. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4146 - Indigenous Politics

Summer 2010 Registration **P SC 4146**

Surveys the status of the world's native peoples and nations, and the role of law and politics in the future of indigenous peoples in the global arena. Examines questions of human rights, economic development, and international law and politics. Prereq: PSCI 1001. Cross-listed with PSCI 5145 and ETST 4146. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4155 - Political Systems of the Middle East and North Africa

Summer 2010 Registration **P SC 4155**

Comparative analysis of political processes in the Middle East and North Africa. Islamic political theory and its contemporary manifestations. The role of nationalism and the quest for modernity in the political development of this region. Parties and programmed modernization in transitional politics. Violent and nonviolent change. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4156 - The Arab-Israeli Peace Process

Summer 2010 Registration **P SC 4156**

Critical analysis of Arab and Israeli perspectives on the on-going peace negotiations in the Middle East. Historical background and religious-cultural aspects of current problems. Prereq: Upper division standing. Cross-listed with ETST 4156. **Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4165 - Islamic Politics and Culture

Summer 2010 Registration **P SC 4165**

Comprehensive, in-depth study of Islam and Muslims. Islam is viewed as a "way of life" with social, economic, psychological, spiritual, and political implications. Among topics to be examined are: women in Islam, Jihad, fundamentalism, Islamic movements, Islam and the West. Cross-listed with RLST 3100. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4175 - Politics and Governments of the Pacific Rim

Summer 2010 Registration **P SC 4175**

Examines the domestic governments and political economies of selected Pacific Rim countries--especially Japan, Korea, Taiwan, China, Singapore, and Malaysia--and of these countries involvement in the international political economy and U.S. foreign policy. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4185 - Corruption in the U.S. and Abroad

Summer 2010 Registration **P SC 4185**

Explores the causes and consequences of administrative and political corruption in developed and developing countries, and evaluates various anti-corruption strategies. Prereq: PSCI 1001 or 3022. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4186 - East Asia in World Affairs

Summer 2010 Registration **P SC 4186**

Political and economic systems and foreign policies of East Asian powers, such as China, Japan, Taiwan, South Korea and Hong Kong; interactions of these powers and their collective economic and political roles in world affairs; major theoretical approaches to the study of East Asian powers. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4195 - Political Systems of Sub-Saharan Africa

Summer 2010 Registration **P SC 4195**

Analysis of major types of political systems in sub-Saharan Africa and intensive case studies of selected countries exemplifying each type. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4206 - Social Movements, NGOs and Global Politics

Summer 2010 Registration **P SC 4206**

Examines global social movements and NGOs as new political actors within world politics; how international relations' theoretical perspectives have addressed these actors; and the forms of interaction between these actors and institutions of global governance. Cross-listed with PSCI 5206. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4207 - Theories of Social and Political Change

Summer 2010 Registration **P SC 4207**

Conservative, radical, and incremental approaches to change. Role of psychological and sociological factors in political change. Comparative perspectives on change. Self-perpetuation processes of power systems and their vulnerabilities. Requisites of system maintenance and system change. Selected case studies. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4215 - Women's Rights, Human Rights: Global Perspectives

Summer 2010 Registration **P SC 4215**

Explores the global feminist movement's campaign to "engender" human rights. Examination of women's human-rights issues and the critique of this campaign as representing cultural imperialism. Prereq: Six hours of political science or instructor permission. Cross-listed with WGST 4215. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4216 - International Politics: Human Rights

Summer 2010 Registration **P SC 4216**

The system of nation states, concepts of national interest, goals of foreign policies, conduct of diplomacy, and the bearing of these elements on the problem of human rights. Presentation and evaluation of the solutions that have been offered for the securing of justice and the maintenance of peace. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4217 - Human Rights in Theory and Practice

Summer 2010 Registration **P SC 4217**

Explores the ideas of human rights and the practical efforts to actualize rights in society. Students study the theories of rights and the evolution of rights in history, as well as work with a service organization. Cross-listed with PSCI 5217. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4225 - Democracy and Democratization

Summer 2010 Registration **P SC 4225**

Examines the conditions under which countries turn from authoritarianism towards democracy and become stable democratic regimes. Also examines the impact of foreign and international factors on new democracies. Cross-listed with PSCI 5225. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4226 - The United Nations in World Affairs

Summer 2010 Registration **P SC 4226**

Current operation and future potential of the United Nations as a complex actor in world affairs, both expressing conflicting interests of its participants and promoting universal goals, including world peace, human rights, and environmental protection. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4235 - Politics and Markets in Latin America

Summer 2010 Registration **P SC 4235**

Explores political economic development in Latin America within the context of the world system. Includes the study of colonization, land tenure, foreign investment, authoritarianism, militarism, social and revolutionary movements, human rights and democratization. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4236 - American Foreign Policy

Summer 2010 Registration **P SC 4236**

Examines the postwar events, controversies, and most recent challenges in U.S. foreign policy. Analyses of the major sources of U.S. foreign policy, such as ideology, national interests, and national power. Attention to the pattern and process of foreign policy-making. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4237 - American National Security

Summer 2010 Registration **P SC 4237**

Examines American national security, utilizing an interdisciplinary analysis of its domestic historical development and its function in the current global context. **Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4248 - Gender, Globalization and Development

Summer 2010 Registration **P SC 4248**

Analyzes the effects of globalization on the gendered processes of international development and strategies to empower women to achieve gender justice across race, class and national divisions. Cross-listed with PSCI 5245 and WGST 4248. **Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4266 - International Law

Summer 2010 Registration **P SC 4266**

Investigates the body of law that regulates relations between nations and provides a framework for solving common problems and disputes between nations. Prereq: Upper division political science major. Cross-listed with PSCI 5266. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4274 - Conflict Resolution and Public Consent Building

Summer 2010 Registration **P SC 4274**

Alternative strategies for resolving or mediating conflicts facing public or nonprofit organizations and for building public consent, with emphasis on personal, interpersonal, organizational, interest-group, cross-cultural, and roots of conflict and bases for consent. Cross-listed with PSCI 5274. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4276 - Conflicts and Rights in International Law

Summer 2010 Registration **P SC 4276**

Explores contending interpretations and practices in international law regarding issues such as the legitimacy of humanitarian intervention, efficacy of truth commissions, tensions between truth and justice in cases of genocide and war crimes, and legal changes needed to devise viable rules. Cross-listed with PSCI 5276. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4286 - International Relations: War or Peace?

Summer 2010 Registration **P SC 4286**

Presents alternative theoretical frameworks for the explanation of war and peace. Investigations of the efficacy of international law, just-war norms and the UN in preventing or containing conflict. Prereq: PSCI 1001. Cross-listed with PSCI 5286. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4324 - Politics, Public Policy and Leadership

Summer 2010 Registration **P SC 4324**

Role of politics in public and nonprofit sectors. Theories of administration and policy-making, emphasizing the role of leadership in public outcomes. Hands-on approach to case studies and use of students' policy experiences in practical application of theories. Cross-listed with PSCI 5324. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4326 - Advanced International Political Economy: Globalization

Summer 2010 Registration **P SC 4326**

Engages the current debate about globalization. Conceptualizes globalization and evaluates the pros and cons of global trade and finance for developed and developing countries. Develops a model for a sustainable and just global economy. Prereq: PSCI 4126. Cross-listed with PSCI 5326. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4330 - U.S. Health Policy

Summer 2010 Registration **P SC 4330**

The role of public health policy as legislated at the federal and state levels. Individual health policy (e.g. social security and managed care) and public health policy (e.g. mandatory immunizations, HIV testing, air and water quality). **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4354 - Environmental Politics

Summer 2010 Registration **P SC 4354**

Political, legal, and economic forces in environmental law and policy. Special emphasis on air and water pollution and on threats to public and agricultural land. Environmental groups and their opponents. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4365 - Global Ecological Crises

Summer 2010 Registration **P SC 4365**

Overview of global ecological problems such as climate change, transboundary pollutions, and loss of bio-diversity in an attempt to understand the political, economic, and cultural forces behind these problems and the status of legal and policy initiatives to address them. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4374 - Public Priorities for the 21st Century

Summer 2010 Registration **P SC 4374**

Identification of and planning for social, political, and economic trends in American society likely to transform governmental, nonprofit, and private entities. Rigorous examination of and debate on competing priorities such as liberty, security, welfare, equality, diversity, growth and ecology. Cross-listed with PSCI 5374. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4407 - Early Political Thought

Summer 2010 Registration **P SC 4407**

Main currents of political thought in their historical setting from Plato to Machiavelli, with a critical evaluation of those elements of continuing worth. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4414 - Organizational Change Agents

Summer 2010 Registration **P SC 4414**

Explores strategies for changing public and nonprofit organizations and of ways leadership abilities can be used for this purpose. Analysis of obstacles to organizational change and of methods for overcoming them. Principles of change applied to real-life contexts. Cross-listed with PSCI 5514. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4417 - Modern Political Thought

Summer 2010 Registration **P SC 4417**

Main currents of political thought in their historical setting from the 17th century to the present. Development of the student's own political theory. PSCI 4407 is not a prerequisite for PSCI 4417. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4427 - Law, Politics and Justice

Summer 2010 Registration **P SC 4427**

Analysis of the relationship of politics, law, and justice, particularly the degree to which moral norms and political concerns should and do influence legal standards and their perceived legitimacy. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4437 - Coercion and the State

Summer 2010 Registration **P SC 4437**

An analysis of: (1) the historical emergence of the modern state; (2) the theoretical justifications for the concentration of political power and the activist state; (3) the internationalization of the European state system; and (4) anarchist and Fourth World challenges. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4444 - Contemporary Culture and Politics in America

Summer 2010 Registration **P SC 4444**

Intellectual and experiential investigation of the interplay of culture and politics in American society, as manifested in literature, social and political philosophy, psychological writings and trends, radical movements, popular culture, and daily behavior. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4446 - Advanced Indigenous Peoples' Politics

Summer 2010 Registration **P SC 4446**

Builds upon the theoretical and applied foundations of PSCI 4146. Intensive study of international legal and political developments are examined, particularly in the United Nations and the Organization of American States systems. Prereq: PSCI 4144 or 4146 or permission of instructor. Cross-listed with PSCI 5446. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4457 - American Political Thought

Summer 2010 Registration **P SC 4457**

American law, politics, and conflict. History and development of American political theories and ideas from Native American roots through the colonial period to the present. Political theory and practice in the U.S. today. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4477 - Constitutional Law I

Summer 2010 Registration **P SC 4477**

Nature and scope of the following American constitutional principles as developed by the U.S. Supreme Court: federalism, jurisdiction of the federal courts, separation of powers, the taxing power, and the commerce power. Case method. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4487 - Constitutional Law II

Summer 2010 Registration **P SC 4487**

Continuation of PSCI 4477, with emphasis on the war powers of the president, citizenship, the Bill of Rights, and the Civil War amendments. (Case method.) Note: PSCI 4477 is not a prerequisite for PSCI 4487. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4494 - Judicial Politics

Summer 2010 Registration **P SC 4494**

Examines principal actors in the legal system: police, lawyers, judges, citizens. About half of this course is devoted to the study of judicial behavior, especially at the Supreme Court level. Political and personal influences on judicial behavior. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4505 - The Post-Soviet World: Origins and Present Condition

Summer 2010 Registration **P SC 4505**

Central and East Europe, Russia, and Central Asia, from earliest times to the present. Equal emphasis on economics, culture and politics. Particular attention to recent developments in the former Soviet Union. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4545 - Immigration Politics

Summer 2010 Registration **P SC 4545**

Introduces students to central theories of migration and a survey of immigration law and policy in the 20th century. Highlights experiences of Mexican and Latin American immigrants and related topics, including: U.S.-Mexican foreign relations, bilingual education, undocumented immigration and globalization. Cross-listed with PSCI 5545. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4554 - Chicano and Latino Politics

Summer 2010 Registration **P SC 4554**

Analysis of the social, cultural, and economic factors that affect political behavior of

Latinos. Special attention is paid to the Mexican American cultural heritage and to relations between Mexican Americans and Anglo Americans. Cross-listed with ETST 4558.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4555 - International Women's Resistance

Summer 2010 Registration P SC 4555

Examines local and international struggles of women to build peace and justice by resisting systems of inequality such as colonialism, racism, patriarchy, globalization, and religious intolerance. Cross-listed with PSCI 5555, ETST 4555 and WGST

4555.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4564 - Gender and Politics

Summer 2010 Registration P SC 4564

Analysis of the political experience of women and of strategies for change. Emphasis on the U.S. Cross-listed with WGST 4564.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4605 - Politics and Governments of South Asia

Summer 2010 Registration P SC 4605

Studies the political systems of Bangladesh, India, Pakistan, Sri Lanka and Nepal. The impact of British rule on the development of political institutions on the subcontinent as well as problems of political development at all levels.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4615 - Politics and Government of China

Summer 2010 Registration P SC 4615

Political and governmental changes within China, from the 19th century to the present. Primary emphasis on contemporary political systems and sociopolitical problems.

China's struggle for independence and economic development. The Chinese revolutions, Maoist communism, and the post-Maoist period.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4644 - Ethical Responsibilities of Leaders

Summer 2010 Registration P SC 4644

Explores concepts of ethical decision making within the context of public leadership in both the public and non-profit sectors. Universal and individual ethical standards are

examined. Cross-listed with PSCI 5644. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4645 - Comparative Political Leadership

Summer 2010 Registration P SC 4645

Comparative study of historical, socio-cultural, and psychological bases of political leadership. Leadership types in peasant societies, empires, and revolutionary movements. Dilemmas of democratic versus authoritarian leadership in modernizing and industrial states. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4726 - Russian and Chinese Foreign Policy

Summer 2010 Registration P SC 4726

Foreign policies of Russia and China; relations with Western powers and the Third World; interaction of domestic developments and foreign policy; role of national interest, ideology, and elite personalities. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4736 - The Middle East in World Affairs

Summer 2010 Registration P SC 4736

Evolution and revolution in the Middle East. The character of nationalism in the area. Analysis of inter-regional and international problems affecting the Middle East, with special emphasis on current Arab-Israeli relations. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4757 - Legal Reasoning and Writing

Summer 2010 Registration P SC 4757

Introduces the fundamentals of legal reasoning and legal argumentation through intensive class discussion, formal debate and writing. Attention is given to the relationship between case and statutory law and their application in trial and appeals courts in the United States. Prereq: ENGL 1020, 2030, and any one 3000-level English/writing course or COMM 3120. Cross-listed with PSCI 5747, COMM 4750, 5750. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4807 - Revolution and Political Violence

Summer 2010 Registration P SC 4807

Study, discussion, and evaluation of alternative frameworks for the analysis of revolution and political violence. The theoretical material is firmly couched in case situations such

as Western, class, colonial, urban, international, historical, racial, religious, and intergenerational violence. The class develops its own theoretical model(s). **Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4827 - Women and the Law

Summer 2010 Registration P SC 4827

Examines the role of the courts in the development of public policy toward women; how the legal system affects the economic power, family roles, safety and political participation of women. Cross-listed with ETST 4827 and WGST 4827. **Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4837 - Contemporary Issues in Civil Liberties

Summer 2010 Registration P SC 4837

Conflicting rights of individuals and groups in several areas of civil liberties, including religious groups, free speech, sexual freedom, racial quotas, and anti-governmental actions and publications. This course includes case law, readings, guest speakers and case discussions. Cross-listed with PSCI 5837. **Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4840 - Independent Study: PSCI

Summer 2010 Registration P SC 4840

An opportunity for advanced students with good scholastic records, and with appropriate courses completed, to pursue independently the study of some subject of special interest to them. Subjects chosen and arrangements made to suit the needs of each student. Note: Primarily for seniors. Prereq: 15 semester hours in political science and permission of instructor. **Semester Hours: 1to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4934 - CU at the Capitol

Summer 2010 Registration P SC 4934

Examines current year legislative session of Colorado General Assembly. Study of various elected leaders; Colorado party system; Governor-Assembly relations; citizen and lobbyist influence; corruption and virtue in politics; current affairs. Each student will be placed in a state government internship. **Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4995 - Travel Study Topics

Summer 2010 Registration **P SC 4995**

Students study various topics at an off-campus location, either a foreign country or another city or region in the United States, led by a Downtown Denver Campus instructor. Prereq: PSCI 1001 or 3022 or permission of instructor. Cross-listed with PSCI 5995. **Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 4996 - The Middle East at Hand

Summer 2010 Registration **P SC 4996**

Designed to provide students with an in-depth examination of the contemporary Palestinian, Jordanian, and Israeli societies and thus allow students to enhance understanding of the connection between geographical and topographical features of the region and the politics of conflict and cooperation. Prereq: Good standing at the junior level or above and having had 3-6 hours in a CLAS major. Cross-listed with PSCI 5996. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 5000 - State of the Discipline

Summer 2010 Registration **P SC 5000**

Introduces graduate study in political science. Provides an overview of theories and methods in the four fields of American politics, political theory, comparative politics and international relations. Guest lectures by department faculty. Prereq: Graduate standing or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 5005 - Political Theory After 9/11

Summer 2010 Registration **P SC 5005**

The events of 9/11 brought into sharp focus dilemmas in international politics, including the responses to American hegemony, return of religion, nature of "terrorism" and implications for democracy. This course explores diverse interpretations of these challenges offered by major political theorists. Prereq: Graduate standing or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 5007 - Beyond Political Correctness

Summer 2010 Registration **P SC 5007**

Explores and critiques "political correctness" defined as "ideological narrowing, intolerance and silencing of dissent." Analysis of origins, dynamics and consequences of PC with emphasis on its advantages and disadvantages for practitioners. Foundational

works, illustrative cases and contemporary voices. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 5008 - Graduate Topics in Political Science

Summer 2010 Registration P SC 5008

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 5009 - Politics of the Budgetary Process

Summer 2010 Registration P SC 5009

Explores budgeting and financial management in the public and nonprofit sectors. An overview of public sector and nonprofit fiscal management is provided, along with thorough exploration of the political influences that affect financial decision-making.

Note: Offered as a special topics course in an intensive three-weekend format, which is reflected in the syllabus. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 5011 - GIS in Political Science

Summer 2010 Registration P SC 5011

Computer lab course developing methodological skills in Geographic Information Systems (GIS) in political contexts. Geospatial computerized mapping skills are important in political fields such as urban planning, electoral analysis, environmental justice, demographics, public health, and criminal justice. Designed for beginners.

Cross-listed with PSCI 4011. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 5013 - Philosophical Problems in the Social Sciences

Summer 2010 Registration P SC 5013

Explores the fundamentals of the conduct of inquiry; concept formation and theory construction in the social sciences; issues related to value judgments and objectivity, social praxis, human nature and political choice. Cross-listed with SSCI 5013. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 5014 - Seminar: American Politics

Summer 2010 Registration P SC 5014

Foundations of U.S. politics and contemporary political issues. Federal/state/community relations. Relationship among the three branches of the Federal government. Colorado controversies arising under the U.S. Constitution. Cross-listed with PSCI 4094. **Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 5024 - State Politics: Focus on Colorado

Summer 2010 Registration P SC 5024

Analysis of unique aspects of Colorado government and politics. Political comparison of Colorado with other states. Preparation and discussion of research papers. **Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 5025 - Local Governance and Globalization

Summer 2010 Registration P SC 5025

Introduces international political economy, consequences of globalization for localities, interplay between wealth and power among nations, multinational corporations, NGOs and the UN, and impact of their actions on local governments. Topics include development, aid, trade, outsourcing, eco-sustainability and global equity. Prereq: Graduate standing or permission of instructor. Cross-listed with PSCI 4025. **Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 5044 - The Presidency

Summer 2010 Registration P SC 5044

An overview of the historical, constitutional, and functional aspects of the presidency. Focuses on the powers and vulnerabilities of the presidency and on the style and politics of the current president. Prereq: Graduate status or permission of instructor. Cross-listed with PSCI 4044. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 5054 - The Legislative Process

Summer 2010 Registration P SC 5054

An intensive examination of the structures and interactions through which laws are made in the United States. The major emphasis is the national level, but considerable attention is devoted to state legislatures and local lawmaking bodies. Impact of money and interest groups. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 5057 - Religion and Politics

Summer 2010 Registration P SC 5057

Exploration of: (1) theoretical perspectives on the relationship between religion and

politics; (2) causes of and justifications for the historical development of the Western separation of "church" and state; (3) contemporary responses to and analyses of this separation; and (4) several current debates about public policy in America that reveal tensions between these two spheres. Cross-listed with PSCI 4057, and RLST 4500, 5500. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 5084 - Local Government and Administration

Summer 2010 Registration P SC 5084

Policy and administrative challenges faced by local government in the 21st Century. Emphasis on cities under federalism, alternative forms of city governance, and new challenges from increasingly diverse constituents. Issues of poverty, public safety, health, transportation, environment, corruption and accountability. Cross-listed with PSCI 4084. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 5085 - Comparative Public Policy

Summer 2010 Registration P SC 5085

Comparison of public policy making in such areas as health care, environment, family assistance, and employment in the United States and at least two other countries. Prereq: Graduate standing or permission of instructor. Cross-listed with PSCI 4085. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 5094 - Seminar: Urban Politics

Summer 2010 Registration P SC 5094

An intensive analysis and research of major aspects of politics and government in metropolitan areas. Impact of corporations and higher levels of government on cities. Opportunities for, and barriers to, citizen participation. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 5105 - Comparative Politics: Europe

Summer 2010 Registration P SC 5105

Examination and writing of research papers on selected topics of industrial democracies, especially those of Europe. Cross-listed with PSCI 4105. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 5135 - Seminar: Political Economy of Latin America

Summer 2010 Registration **P SC 5135**

Focuses on the political economies and cultures of Latin America. Particular attention is given to the impact of the export-led growth strategy on social and political development. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 5145 - Indigenous Politics

Summer 2010 Registration **P SC 5145**

Surveys the status of the world's native peoples and nations, and the role of law and politics in the future of indigenous peoples in the global arena. Examines questions of human rights, economic development, and international law and politics. Prereq: Graduate status or permission of instructor. Cross-listed with PSCI 4146 and ETST 4146. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 5206 - Social Movements, NGOs and Global Politics

Summer 2010 Registration **P SC 5206**

Examines global social movements and NGOs as new political actors within world politics; how international relations' theoretical perspectives have addressed these actors; and the forms of interaction between these actors and institutions of global governance. Cross-listed with PSCI 4206. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 5216 - Seminar: International Relations

Summer 2010 Registration **P SC 5216**

Introduces contending theories, empirical studies, and research methods in the field. Writing and discussion of comprehensive research papers in the field of international power politics and alternative attempts at controlling conflicts among nations. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 5217 - Human Rights in Theory and Practice

Summer 2010 Registration **P SC 5217**

Explores the ideas of human rights and the practical efforts to actualize rights in society. Students study the theories of rights and the evolution of rights in history, as well as work with a service organization. Cross-listed with PSCI 4217. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 5225 - Democracy and Democratization

Summer 2010 Registration **P SC 5225**

Examines the conditions under which countries turn from authoritarianism towards democracy and become stable democratic regimes. Also examines the impact of foreign and international factors on new democracies. Cross-listed with PSCI 4225. **Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 5236 - Seminar: American Foreign Policy

Summer 2010 Registration **P SC 5236**

Examines selected methodological and substantive problems. Particular emphasis on elements of national decision making, America's adaptation to the changing world, and opportunities for student contributions through research and discussion. **Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 5238 - Seminar: Comparative Foreign Policy

Summer 2010 Registration **P SC 5238**

Examination of the effects of leaders, groups, institutions, strategic cultures and external influences on national foreign policy-making processes, and comparative analysis of foreign policy-making of great and emerging powers. Prereq: graduate standing. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 5245 - Gender, Globalization and Development

Summer 2010 Registration **P SC 5245**

Analyzes the effects of globalization on the gendered processes of international development and strategies to empower women to achieve gender justice across race, class and national divisions. Cross-listed with PSCI 4248 and WGST 4248. **Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 5256 - Seminar: National Question and Self-Determination

Summer 2010 Registration **P SC 5256**

Designed to provide students with a broad theoretical and empirical understanding of the causes of ethnic conflicts and to assess different strategies of conflict resolution. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 5266 - International Law

Summer 2010 Registration **P SC 5266**

Investigates the body of law that regulates relations between nations and provides a framework for solving common problems and disputes between nations. Prereq: Upper division political science major. Cross-listed with PSCI 4266. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 5274 - Conflict Resolution and Public Consent Building

Summer 2010 Registration **P SC 5274**

Alternative strategies for resolving or mediating conflicts facing public or nonprofit organizations and for building public consent, with emphasis on personal, interpersonal, organizational, interest-group, cross-cultural, and roots of conflict and bases for consent. Cross-listed with PSCI 4274. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 5276 - Conflicts and Rights in International Law

Summer 2010 Registration **P SC 5276**

Explores contending interpretations and practices in international law regarding issues such as the legitimacy of humanitarian intervention, efficacy of truth commissions, tensions between truth and justice in cases of genocide and war crimes, and legal changes needed to devise viable rules. Cross-listed with PSCI 4276. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 5286 - International Relations: War or Peace?

Summer 2010 Registration **P SC 5286**

Presents alternative theoretical frameworks for the explanation of war and peace. Investigations of the efficacy of international law, just-war norms and the UN in preventing or containing conflict. Prereq: Graduate status or permission of instructor. Cross-listed with PSCI 4286. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 5324 - Politics, Public Policy and Leadership

Summer 2010 Registration **P SC 5324**

Role of politics in public and nonprofit sectors. Theories of administration and policy-making, emphasizing the role of leadership in public outcomes. Hands-on approach to case studies and use of students' policy experiences in practical application of theories. Cross-listed with PSCI 4324. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 5326 - Advanced International Political Economy: Globalization

Summer 2010 Registration P SC 5326

Engages the current debate about globalization. Conceptualizes globalization and evaluates the pros and cons of global trade and finance for developed and developing countries. Develops a model for a sustainable and just global economy. Cross-listed with PSCI 4326. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 5354 - Seminar: Environmental Politics and Policy

Summer 2010 Registration P SC 5354

Consideration of competing models of the policy process in natural-resources decision making. Focus on selected case studies. Impact of environmental and pro-growth forces on the political process. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 5374 - Public Priorities for the 21st Century

Summer 2010 Registration P SC 5374

Identification of and planning for social, political, and economic trends in American society likely to transform governmental, nonprofit and private entities. Rigorous examination of and debate on competing priorities such as liberty, security, welfare, equality, diversity, growth and ecology. Cross-listed with PSCI 4374. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 5414 - Organizational Change Agents

Summer 2010 Registration P SC 5414

Explores of strategies for changing public and nonprofit organizations and of ways leadership abilities can be used for this purpose. Analysis of obstacles to organizational change and of methods for overcoming them. Principles of change applied to real-life contexts. Cross-listed with PSCI 4414. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 5417 - Seminar: Practical Utopias

Summer 2010 Registration P SC 5417

Explores of utopian theories applied in real-world experiments and political movements, including communes, worker cooperatives, neighborhood organizing and Green parties. One or more field trips and a final retreat during which the class will develop its own

practical-utopian model(s). **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 5446 - Advanced Indigenous Peoples' Politics

Summer 2010 Registration P SC 5446

Builds upon the theoretical and applied foundations of PSCI 4146. Intensive study of international legal and political developments are examined, particularly in the United Nations and the Organization of American States systems. Prereq: PSCI 4144 or 4146 or permission of instructor. Cross-listed with PSCI 4446. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 5457 - Seminar: American Political Thought

Summer 2010 Registration P SC 5457

An intensive research in and presentation of competing ideas in the development of American political thought and practice, beginning with those of the Iroquois Confederacy and the founders of the United States Constitution. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 5468 - Research Methods in Political Science

Summer 2010 Registration P SC 5468

Analysis and evaluation of research methods, techniques, and empirical materials in political science application to Internet research. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 5477 - The U.S. Constitution: Law and Politics

Summer 2010 Registration P SC 5477

An intensive analysis of the most recent doctrinal developments in the areas of federal jurisdiction, federalism, separation of powers, commerce, taxing and war powers, civil liberties and civil rights. Prereq: PSCI 4477 or 4487 or permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 5545 - Immigration Politics

Summer 2010 Registration P SC 5545

Introduces students to central theories of migration and a survey of immigration law and policy in the 20th century. Highlights experiences of Mexican and Latin American immigrants and related topics, including U.S.-Mexican foreign relations, bilingual education, undocumented immigration and globalization. Cross-listed with PSCI

4545.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 5555 - International Women's Resistance

Summer 2010 Registration P SC 5555

Examines local and international struggles of women to build peace and justice by resisting systems of inequality such as colonialism, racism, patriarchy, globalization, and religious intolerance. Prereq: Graduate status or permission of instructor. Cross-listed with PSCI 4555, WGST 4555 and ETST 4555.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 5615 - Seminar: Chinese Development

Summer 2010 Registration P SC 5615

Discussion of readings about China. Analysis of several of the following: party-government relations, ideology and political behavior, leadership, diplomacy, political and economic development and post-Mao reforms.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 5644 - Ethical Responsibilities of Leaders

Summer 2010 Registration P SC 5644

Explores concepts of ethical decision making within the context of public leadership in both the public and non-profit sectors. Universal and individual ethical standards are examined. Cross-listed with PSCI 4644.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 5726 - Seminar on U.S. and China Relations

Summer 2010 Registration P SC 5726

Detailed examination of historical context and current issues in U.S./China relations. Emphasis on post-1949 period, with particular attention to post-1978 relations and issues. Prereq: Graduate status or permission of instructor.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 5747 - Legal Reasoning and Writing

Summer 2010 Registration P SC 5747

Introduces the fundamentals of legal reasoning and legal argumentation through intensive class discussion, formal debate and writing. Attention is given to the relationship between case and statutory law and their application in trial and appeals courts in the United States. Cross-listed with PSCI 4757, COMM 4750, 5750.**Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 5807 - Seminar: Conflict Behavior and the Politics of Violence

Summer 2010 Registration P SC 5807

Theoretical and empirical analysis of conflict behavior with special emphasis on the explanation of political violence. Revolution, international warfare, and urban unrest are studied as forms of political violence, and the role of systematic empirical research is emphasized in the development of general theories of intergroup conflict. **Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 5827 - Seminar: Political Psychology

Summer 2010 Registration P SC 5827

Role of personality variables in political attitudes, behavior, and system maintenance and change; human nature as a parameter; political relevance of psychoanalytic, behaviorist, humanistic and social psychology; alienation, ethnocentrism, dogmatism, and aggression as political variables. Prereq: Political science or psychology background. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 5830 - Grant Writing for Nonprofits

Summer 2010 Registration P SC 5830

Designed to help current and future professionals in the nonprofit sector understand the social, political, and economic context and mechanics of pursuing grants, government contracts, and other funding for nonprofit organizations. Cross-listed with SSCI 5830. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 5837 - Contemporary Issues in Civil Liberties

Summer 2010 Registration P SC 5837

Conflicting rights of individuals and groups in several areas of civil liberties, including religious groups, free speech, sexual freedom, racial quotas, and anti-governmental actions and publications. This course includes case law, readings, guest speakers and case discussions. Cross-listed with PSCI 4837. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 5840 - Independent Study: PSCI

Summer 2010 Registration P SC 5840

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 5914 - Community Development

Summer 2010 Registration P SC 5914

The theory and practice of community-sensitive development. Global forces challenge communities, alternatively, with floods and droughts of international capital. By collaborating with a non-profit community-based organization, this class examines how communities develop progressive methods of engaging global forces. Prereq: Graduate standing or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 5939 - Cooperative Education

Summer 2010 Registration P SC 5939

Semester Hours: 1to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 5950 - Master's Thesis

Summer 2010 Registration P SC 5950

Semester Hours: 1to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 5960 - Master's Project

Summer 2010 Registration P SC 5960

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 5995 - Travel Study Topics

Summer 2010 Registration P SC 5995

Students study various topics at an off-campus location, either a foreign country or another city or region in the United States, led by a Downtown Denver Campus instructor. Prereq: PSCI 1001 or 3022 or permission of instructor. Cross-listed with PSCI 4995. **Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 5996 - The Middle East at Hand

Summer 2010 Registration **P SC 5996**

Designed to provide students with an in-depth examination of the contemporary Palestinian, Jordanian, and Israeli societies and thus allow students to enhance understanding of the connection between geographical and topographical features of the region and the politics of conflict and cooperation. Prereq: Good standing at the junior level or above and having had 3-6 hours in a CLAS major. Cross-listed with PSCI 4996. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSCI 6840 - Independent Study: PSCI

Summer 2010 Registration **P SC 6840**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 1000 - Introduction to Psychology I

Summer 2010 Registration **PSY 1000**

Introduces the scientific study of behavior, including an overview of the biological basis of behavior, sensation or perception, states of consciousness, learning and memory, thinking and language, intelligence, motivation and emotion. **Semester Hours:** 3to 3

GT Pathways Category Key: GT-SS3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 1005 - Introduction to Psychology II

Summer 2010 Registration **PSY 1005**

Introduces the scientific study of behavior, including an overview of the history of psychology, development, personality, psychological disorders, therapy, health psychology and social behavior. PSYC 1000 is not a prerequisite for this course. **Semester Hours:** 3to 3

GT Pathways Category Key: GT-SS3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 1111 - Freshman Seminar

Summer 2010 Registration **PSY 1111**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 2050 - Improving Memory

Summer 2010 Registration **PSY 2050**

Applies psychological principles of memory function and process to everyday settings and experiences. Covers topics such as how memory works, principles of memory

improvement, and strategies for effective learning. **Semester Hours:** 2to 2
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 2060 - Psychology Applied to Everyday Life

Summer 2010 Registration PSY 2060

A primer in psychological principles applied to everyday situations. Covers topics such as learning, stress and health, attraction and love, and personality. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 2090 - Statistics and Research Methods

Summer 2010 Registration PSY 2090

Introduces statistics and research methods in the field of psychology. Note: Intended for those who plan to major in psychology. Completion of college algebra or equivalent is recommended. Prereq: PSYC 1000. **Semester Hours:** 4to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 2220 - Biological Basis of Behavior

Summer 2010 Registration PSY 2220

Introduces the biological basis of behavior. This course will feature concepts like neurons, synaptic and hormonal transmission, and physiological set-points. Behavior of simple (invertebrate) and complex organisms (vertebrates) will be related to the activity of specific brain neural networks. Prereq: PSYC 1000 or BIOL 2051. **Semester Hours:** 3to 3 **GT Pathways Category Key:** GT-SC2

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 2939 - Internship/Cooperative Education

Summer 2010 Registration PSY 2939

Experiences involving application of specific, relevant concepts and skills in supervised employment situations. Prereq: 15 hours of 2.75 GPA. **Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 2990 - Topics in Psychology

Summer 2010 Registration PSY 2990

Studies special topics to be selected by the instructor. Note: May be repeated for credit. **Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 3090 - Research Methods in Experimental Psychology

Summer 2010 Registration **PSY 3090**

Lecture and associated laboratory exercises that consider principles of experimental methodology, data collection and interpretation, presentation of results, evaluation of scientific literature, scientific writing, and advanced statistical concepts. Note: Strongly recommended for students who wish to pursue a career in research or professional psychology. Prereq: PSYC 1000, 1005 and 2090. **Semester Hours:** 4to 4
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 3104 - Behavioral Genetics

Summer 2010 Registration **PSY 3104**

Interdisciplinary course on relationships between behavior and heredity, with emphasis on human behavioral genetics. Prereq: General biology or general psychology. Cross-listed with BIOL 3104. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 3135 - Organizational Psychology

Summer 2010 Registration **PSY 3135**

Surveys the behavior of individuals in organizations. Topics include leadership and motivation theories; group dynamics; measuring, understanding, and explaining job attitudes; analyzing and designing jobs; training and organizational development. Prereq: PSYC 1000, 1005 and 2090 or permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 3205 - Human Development I: Child Psychology

Summer 2010 Registration **PSY 3205**

Studies human development covering birth, infancy, toddler, preschool and school-aged child. Covers biological, cognitive and social processes. Prereq: PSYC 1000 or 1005. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 3215 - Human Development II: Adolescence and Adulthood

Summer 2010 Registration **PSY 3215**

Study of human development from adolescence through adulthood and aging. Covers biological, cognitive, and social processes. Prereq: PSYC 1000 or 1005. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 3222 - Principles of Learning and Behavior

Summer 2010 Registration **PSY 3222**

Introduces the scientific study of learning and behavior, focusing on "Behaviorism." Principles of operant and classical conditioning are discussed. A particular emphasis is placed on the relevance and application of these principles to understanding human behavior and psychopathology. Prereq: PSYC 1000. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 3235 - Human Sexuality

Summer 2010 Registration **PSY 3235**

Examines the physiological, psychological, and social psychological bases of human sexuality. Research on the range of sexual behaviors, individual sexual response, sexual development, sexual dysfunction, and variants of sexual orientation. Prereq: PSYC 1000, 1005 and 2090, or permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 3254 - Introduction to Animal Behavior

Summer 2010 Registration **PSY 3254**

Surveys the behavior of nonhuman animals, emphasizing the evolution through natural selection. Prereq: One semester of general biology, biological anthropology, or other course emphasizing evolutionary perspective. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 3262 - Health Psychology

Summer 2010 Registration **PSY 3262**

An overview of the scientific study of attitudes, behaviors, and personality variables related to health and illness. Emphasis is on the interaction of biological, psychological, and social factors that cause illness and influence its treatment and prevention. Prereq: PSYC 1000, 2090 and 2220 or permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 3263 - Hormones and Behavior

Summer 2010 Registration **PSY 3263**

The hormonal regulation of behavior will be the primary focus of this course. Topics include: hormonal basis of sexual differentiation and behavioral differences, parental behavior, biological rhythms, aggression, mood and stress. Prereq: PSYC 1000, 2090 and 2220 or permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 3265 - Drugs, Brain and Behavior

Summer 2010 Registration PSY 3265

Explores the pharmacological, biological, and behavioral basis of drug effects. Topics include mechanisms of drug action, brain reward pathways, role of environment and history on drug effects, and the impact of science on drug abuse and medication development. Prereq: PSYC 1000, 2090 and 2220 or permission of instructor. **Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 3305 - Abnormal Psychology

Summer 2010 Registration PSY 3305

Borderline disorders as extreme variations of the normal personality. Major functional and organic disorders. Theories of mental disorders and methods of psychotherapy. Prereq: PSYC 1000. **Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 3405 - Family Psychology

Summer 2010 Registration PSY 3405

Overview of theory and research pertaining to marital and family structure, functioning and dynamics. Prereq: PSYC 1005. **Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 3505 - Psychology and the Law

Summer 2010 Registration PSY 3505

Examines the legal and extralegal applications of psychology, such as assessment of insanity and competence, psychologists as expert witnesses, accuracy of eyewitness accounts, and issues relating to employment discrimination. Prereq: PSYC 1000, 1005, and 2090 or permission of instructor. **Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 3600 - Topics in Psychology

Summer 2010 Registration PSY 3600

Studies special topics to be selected by the instructor. Note: May be repeated for credit. **Semester Hours: 1to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 3610 - Psychological Trauma

Summer 2010 Registration **PSY 3610**

Overview of psychological trauma, including: history, theoretical application, trauma models, diagnosis and treatment implications. Topics include family violence, child abuse, sexual abuse, and the trauma of war. Prereq: PSYC 1000, 1005 and 2090 or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 3611 - Psychology of Women

Summer 2010 Registration **PSY 3611**

Reviews psychological theories and research of women's social, cultural, emotional and behavioral experience. Examines the sociocultural context of women's experience and explores women's socialization, developmental issues, cognitive abilities and achievement motivation, personality variables, stereotypes, psychological disorders, victimization, intimacy and sexuality. Prereq: PSYC 1000, 1005 and 2090 or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 3612 - Domestic Abuse

Summer 2010 Registration **PSY 3612**

Examines the nature and extent of domestic violence. Personal characteristics and dynamics that contribute to spouse abuse are reviewed. Theories and research in the general field of family violence, victims' and perpetrators' treatment, and child abuse are discussed. Prereq: PSYC 1000, 1005 and 2090 or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 3724 - Developmental Psychobiology

Summer 2010 Registration **PSY 3724**

Explores the biological influences on the development of brain and behavior. Emphasis is on the evolution and development, the role of experience in prenatal and postnatal development, the ontogeny of sensory systems, learning and memory, and the biological bases of language acquisition. Prereq: PSYC 1000/1005 or BIOL 2051/2061. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 3810 - Neuropsychology

Summer 2010 Registration **PSY 3810**

Brain organization and function and its relationship to human memory, language, perception, and other cognitive abilities. Covers the application of clinical neuropsychology to working with individuals that have neurological disorders. Prereq:

PSYC 1000 and 2220 or permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 3822 - Aging, Brain and Behavior

Summer 2010 Registration PSY 3822

Examines the aging process, behavioral changes during senescence and the accompanying changes in the aged brain. Changes that are part of healthy aging are studied, as will age-related brain disorders. Prereq: PSYC 1000, 2090 and 2220 or permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 3939 - Internship/Cooperative Education

Summer 2010 Registration PSY 3939

Designed experiences involving application of specific, relevant concepts and skills in supervised employment situations. Prereq: Junior standing, completion of minimum of 12 hours in psychology with minimum grade of 'C'. **Semester Hours:** 1to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 4054 - Behavioral Neuroscience

Summer 2010 Registration PSY 4054

The morphological, neurochemical and physiological bases of behavior. Emphasis is on structure and function of the brain. Prereq: PSYC 1000, 2090 and 2220 or permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 4101 - Applied Statistics Using SAS and SPSS I

Summer 2010 Registration PSY 4101

Teaches the practical statistical tools social scientists use to analyze real-world problems. It is split into four modules, each taught by a different instructor. The first module introduces SAS and SPSS; modules 2-4 are problem-based and cover topics such as ANOVA, multivariate regression, and cluster analysis. Prereq: Any statistics course. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 4102 - Applied Statistics Using SAS and SPSS II

Summer 2010 Registration PSY 4102

Students use the skills they learned in the previous semester to analyze a social issue of their choosing and present their findings. Note: A continuation of PSYC 4101. In addition to lectures, weekly one-on-one meetings between faculty and students are required.

Prereq: PSYC 4101. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 4144 - Human Cognition

Summer 2010 Registration **PSY 4144**

Studies information processing in humans, with emphasis on memory, thinking and language. Prereq: PSYC 1000. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 4164 - Psychology of Perception

Summer 2010 Registration **PSY 4164**

Studies sensory processes and perceptual variables. Covers processes related to vision, audition, gustation and olfaction. Prereq: PSYC 1000, 2090 and 2220 or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 4415 - Experimental Social Psychology

Summer 2010 Registration **PSY 4415**

Readings and lectures focused on the formulation of researchable problems in social psychology. Prereq: PSYC 1000 and 1005. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 4455 - Theories of Personality

Summer 2010 Registration **PSY 4455**

An in-depth look at several major theories of personality, including those from psychodynamic, behavioral, and humanistic schools of thought. Students are required to think actively and abstractly, and communicate their ideas in papers and classroom contributions. Prereq: PSYC 1000, 1005 and 2090 or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 4485 - Psychology of Cultural Diversity

Summer 2010 Registration **PSY 4485**

Studies diversity in the development of the individual across Asian, Black, Hispanic, and Native American cultures. The experience of self, role of the family, expression of emotions, and psychology of prejudice are emphasized. Prereq: Six semester hours of psychology, sociology, and/or anthropology in any combination. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 4500 - Psychotherapy

Summer 2010 Registration **PSY 4500**

Overview of the major systems of psychotherapy, including psychoanalysis, person-centered therapy, family therapy, cognitive or behavioral approaches, and relationships among the various approaches. Prereq: 12 hours in psychology, including PSYC 1005 and 2090. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 4511 - History of Psychology

Summer 2010 Registration **PSY 4511**

Development of psychological theories since 500 B.C. Schools of psychology and their adherents. Readings of primary and secondary sources. Prereq: PSYC 1000 and 1005 plus 6 additional credit hours in psychology (12 hours total). **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 4645 - Industrial Psychology

Summer 2010 Registration **PSY 4645**

Surveys the field of industrial psychology. Organizational structure, communication networks, personnel selection, training, stress, and human relations are examined.

Prereq: PSYC 1000, 1005 and 2090 or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 4730 - Clinical Psychology: Ethics and Issues

Summer 2010 Registration **PSY 4730**

An in-depth exploration of the values and ideas that guide professional practice in psychology, including professional codes of conduct and philosophical ethical principles. Topics include confidentiality, informed consent, competence, integrity and respect.

Prereq: 12 hours in psychology, including PSYC 1005 and 2090. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 4803 - Principles of Psychological Testing

Summer 2010 Registration **PSY 4803**

Principles underlying construction, validation, and use of tests of ability, intelligence, and personality and of attitude surveys. Covers statistical topics such as content and construct validity, item analysis, and reliability analysis. Prereq: A prior course in statistics. Cross-listed with PSYC 5803. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 4840 - Independent Study: PSYC

Summer 2010 Registration PSY 4840

Prereq: Permission of instructor. **Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 4939 - Cooperative Education

Summer 2010 Registration PSY 4939

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 4990 - Topics in Psychology

Summer 2010 Registration PSY 4990

Advanced study of special topics to be selected by the instructor. May be repeated for credit. Prereq: Permission of instructor. Cross-listed with PSYC 5990. **Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 5360 - Psychotherapy I

Summer 2010 Registration PSY 5360

Surveys some of the major schools of psychotherapy, including cognitive and cognitive-behavioral therapies as well as motivational interviewing. Coverage also includes therapy techniques, process of therapy, and treatment-outcome research. Prereq: Admission to the Psychology MA, Clinical program or the Clinical Health Psychology Ph.D. program or with permission of instructor and graduate program director. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 5700 - Clinical Research Methods

Summer 2010 Registration PSY 5700

Principles of research methodology in clinical psychology. Major topics include research ethics, subject recruitment, ethnic and cultural considerations, selecting and evaluating research measures, epidemiology and comorbidity, taxonomic and outcome research and research design. Prereq: Admission to the Psychology MA, Clinical program or the Clinical Health Psychology Ph.D. program or with permission of instructor and graduate program director. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 5713 - Advanced Statistics

Summer 2010 Registration **PSY 5713**

Experimental design and analysis of controlled interventions and evaluations. Emphasis on multifactor analysis of variance, orthogonal contrasts, post-hoc tests, multiple regression, and analysis of co-variance. Prereq: Admission to the Psychology MA, Clinical program or the Clinical Health Psychology Ph.D. program or with permission of instructor and graduate program director. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 5730 - Clinical Psychology: Ethics and Issues

Summer 2010 Registration **PSY 5730**

An in-depth exploration of the values and ethical ideas that guide professional practice in psychology, including philosophical ethical principles and professional codes of conduct. Specific topics include confidentiality, informed consent, competence, and respect for persons. Students are expected to be able to think about and communicate difficult ethical concepts in the form of class participation and a major paper. Prereq: Admission to the Psychology MA, Clinical program or the Clinical Health Psychology Ph.D. program or with permission of instructor and graduate program director. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 5803 - Principles of Psychological Testing

Summer 2010 Registration **PSY 5803**

Principles underlying construction, validation, and use of tests of ability, intelligence, and personality and of attitude surveys. Covers statistical topics such as content and construct validity, item analysis, and reliability analysis. Prereq: Admission to psychology graduate program. Cross-listed with PSYC 4803. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 5840 - Independent Study: PSYC

Summer 2010 Registration **PSY 5840**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 5939 - Internship/Cooperative Education

Summer 2010 Registration **PSY 5939**

Semester Hours: 1to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 5990 - Topics in Psychology

Summer 2010 Registration **PSY 5990**

Advanced study of special topics to be selected by the instructor. Note: May be repeated for credit. Prereq: Permission of instructor. Cross-listed with PSYC 4990. **Semester**

Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 6200 - Developmental Psychopathology

Summer 2010 Registration **PSY 6200**

The study and prediction of maladaptive behaviors and processes across time. Students develop a sophisticated understanding of important concepts related to emotional and behavioral problems in children and adolescents, including DSM-IV-TR diagnostic criteria and the basic tenets of successful intervention. Prereq: Admission to the Psychology MA, Clinical program or the Clinical Health Psychology Ph.D. program or with permission of instructor and graduate program director. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 6410 - Theories of Assessment

Summer 2010 Registration **PSY 6410**

Presents issues in psychological assessment, including validity, reliability, clinical judgment, ethics, cultural diversity and specific assessment methods. Particular focus on psychological assessment in a medical setting. Prereq: Admission to the Psychology MA, Clinical program or the Clinical Health Psychology Ph.D. program or with permission of instructor and graduate program director. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 6420 - Applied Assessment

Summer 2010 Registration **PSY 6420**

Administering, interpreting and writing reports for diverse assessment tools in the context of health psychology assessment. Prereq: Admission to the Psychology MA, Clinical program or the Clinical Health Psychology Ph.D. program or with permission of instructor and program director. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 6500 - Adult Psychopathology

Summer 2010 Registration **PSY 6500**

Key features of major mental disorders in adult populations. Includes classification, DSM diagnosis, epidemiology, course and prognosis, age/culture/gender features, etiology and biological bases. Prereq: Admission to Psychology MA, Clinical program or the Clinical Health Psychology Ph.D. program or with permission of instructor and graduate

program director. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 6840 - Independent Study

Summer 2010 Registration PSY 6840

A structured experience, planned and implemented with the assistance of a sponsoring faculty member in ongoing programs of research or other scholarly activity. Prereq:

Admission to the graduate program in psychology. **Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 6841 - Independent Study: PSYC

Summer 2010 Registration PSY 6841

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 6910 - Research Practicum

Summer 2010 Registration PSY 6910

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 6930 - Clinical Internship

Summer 2010 Registration PSY 6930

Clinical experience in a setting which provides supervision by qualified professionals. Students participate in assessment, intervention, and/or evaluation and research.

Prereq: Completion of 24 hours of course work in the UCD Psychology MA, Clinical program. **Semester Hours:** 1to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 6950 - Master's Thesis

Summer 2010 Registration PSY 6950

Semester Hours: 1to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 7144 - Learning, Memory and Cognition

Summer 2010 Registration PSY 7144

Overview of contemporary psychological theories and research in human learning, memory and cognition. Prereq: Admission to the Clinical Health Psychology Ph.D. Program or with permission of instructor and graduate program director. **Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 7205 - Advanced Developmental Psychology

Summer 2010 Registration **PSY 7205**

A survey of neurobiological, cognitive, social and cultural processes in human development from conception through adulthood. Prereq: Admission to the Clinical Health Psychology Ph.D. Program or with permission of instructor and graduate program director.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 7262 - Health Psychology I

Summer 2010 Registration **PSY 7262**

Part I of a 2-course sequence. Presents crucial aspects of health psychology and behavioral medicine, including theoretical models, anatomy and physiology epidemiology, health promotion and primary prevention of medical problems. Prereq: Admission to the Clinical Health Psychology Ph.D. Program or with permission of instructor and graduate program director.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 7360 - Psychotherapy II

Summer 2010 Registration **PSY 7360**

Theoretical approaches and techniques used in research, assessment and treatment of major forms of psychopathology, including anxiety, depression, schizophrenia and substance abuse, as well as marital problems and childhood disorders. Prereq: Admission to the Clinical Health Psychology Ph.D. Program or with permission of instructor and graduate program director.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 7400 - Child Assessment

Summer 2010 Registration **PSY 7400**

Psychometric theory and practice in assessment of children with focus on the diagnostics, the WISC-III, and personality assessment. Prereq: Admission to the Clinical Health Psychology Ph.D. program or with permission of instructor and graduate program director.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 7485 - Diversity in Clinical Psychology

Summer 2010 Registration **PSY 7485**

Designed to foster understanding of diversity and its implications for clinical practice, research, and mental health policy. Students will learn to orient to the worldviews of clients from diverse backgrounds and to tailor their interventions to competently serve individuals in a pluralistic society. Prereq: Admission to the Clinical Health Psychology Ph.D. program or with permission of instructor and graduate program director. **Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 7490 - Topics in Health Psychology Summer Lecture Series

Summer 2010 Registration **PSY 7490**

Weekly lectures given by Clinical Health Psychology department faculty, advanced graduate students, alumni and area professionals on selected topics in the field. Note: This course is required for first, second and third-year graduate students. Prereq: Admission to the Clinical Health Psychology Ph.D. Program. **Semester Hours: 1to 1**
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 7511 - Historical and Philosophical Foundations of Psychology

Summer 2010 Registration **PSY 7511**

Philosophical and historical antecedents to contemporary psychology, with particular emphasis on clinical psychology. Prereq: Admission to the Clinical Health Psychology Ph.D. Program or with permission of instructor and graduate program director. **Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 7520 - Experimental Psychopathology

Summer 2010 Registration **PSY 7520**

Theories of etiology of major psychopathologies, including: personality disorders, anxiety disorders, affective disorders, substance use disorders and schizophrenia and other psychoses. Prereq: Admission to the Clinical Health Psychology Ph.D. program or with permission of instructor and graduate program director. **Semester Hours: 3to 3**
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 7710 - Multivariate Statistics

Summer 2010 Registration **PSY 7710**

Topics include canonical analysis, discriminate function analysis, and multiple regression. Prereq: Admission to the Clinical Health Psychology Ph.D. program or with permission of instructor and graduate program director. **Semester Hours: 3to 3**
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 7830 - Clinical Interviewing

Summer 2010 Registration **PSY 7830**

Students practice interviewing and develop skills, including the ability to listen actively, to critique their own work and the work of others, and to think carefully about issues that arise in clinical work with clients. Prereq: Admission to the Psychology MA, Clinical program or the Clinical Health Psychology Ph.D. program or with permission of instructor and graduate program director. **Semester Hours:** 1to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 7910 - Clinical Practicum

Summer 2010 Registration **PSY 7910**

Clinical experience under supervision of licensed, doctoral-level professionals. Students participate in assessment, intervention, and/or evaluation and research in a variety of settings. Note: All field placements must be approved by the Director of Clinical Training (DCT) in advance of registration. Prereq: Completion of 24 hours of course work in the UCD Clinical Health Psychology PhD program. **Semester Hours:** 1to 6
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 8100 - Clinical Behavioral Medicine

Summer 2010 Registration **PSY 8100**

Presents basic assessment and psychotherapeutic techniques used for patients with various disorders, focusing on cognitive-behavioral methods and the unique needs of patients experiencing chronic disease. Prereq: Admission to the Clinical Health Psychology Ph.D. Program or with permission of instructor and graduate program director. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 8200 - Teaching Skills Seminar

Summer 2010 Registration **PSY 8200**

Basic principles and strategies of good teaching. Explores research and theory for teaching at the college level. Prereq: Admission to the Clinical Health Psychology Ph.D. program or with permission of instructor and graduate program director. **Semester Hours:** 2to 2
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 8262 - Health Psychology II

Summer 2010 Registration **PSY 8262**

Part II of a 2-course sequence. Further aspects of health psychology and behavioral medicine, including health service utilization, patient-provider relationships, social

support, terminal illness and issues related to chronic disease states. Prereq: Admission to the Clinical Health Psychology Ph.D. Program or with permission of instructor and graduate program director. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 8910 - Clinical Health Practicum

Summer 2010 Registration **PSY 8910**

Advanced clinical experience under supervision of licensed, doctoral-level professionals. Students participate in assessment, intervention, and/or evaluation and research in a variety of health care settings to address the interface between physical and psychological functioning. Note: All field placements must be approved by the Director of Clinical Training (DCT) in advance of registration. Prereq: PSYC 7930. **Semester Hours:** 1to 6
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 8938 - Pre-Doctoral Internship

Summer 2010 Registration **PSY 8938**

Intensive full-time clinical experience with supervision by licensed, doctoral-level professionals. Interns participate in assessment, intervention, and/or evaluation and research in a variety of settings. Students apply through the Association of Psychology Postdoctoral and Internship Centers (APPIC) national matching process. Note: All field placements must be approved by the Director of Clinical Training (DCT) in advance of registration. Prereq: Successful defense of the dissertation proposal in Clinical Health Psychology. **Semester Hours:** 1to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PSYC 8990 - Doctoral Dissertation

Summer 2010 Registration **PSY 8990**

Independent research on the doctoral dissertation in Clinical Health Psychology. Prereq: Admission to the Clinical Health Psychology Ph.D. Program. **Semester Hours:** 1to 10
Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 1001 - Introduction To Leadership and Public Service

Summer 2010 Registration **P AD 8990**

This course provides a broad introduction to public service and encourages exploration of personal values and interests related to leadership, community, and life choices. Multiple paths to advancing the public good are explored, including volunteerism, citizenship, and service in government and nonprofits. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 5001 - Introduction to Public Administration and Public Service

Summer 2010 Registration P AD 5001

Examines the fundamental theories, structures, and processes of governance in the United States. Explores the constitutional foundations and functions of legislative, administrative, and legal institutions. Covers topics such as federalism, public-private relations, and comparative public administration. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 5002 - Organizational Management and Change

Summer 2010 Registration P AD 5002

This course provides coverage of those elements which, when combined, create a resilient learning organization. Topics include, but are not limited to, organization theory and design, managing human capital, group development and performance, inter- and intra-group communication, information management, and ethical decision making. These topics are presented within the framework of how to organize people to enhance the delivery of public services. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 5003 - Research and Analytic Methods

Summer 2010 Registration P AD 5003

Examines quantitative research methods used to answer questions and test hypotheses in public and non-profit settings. Methods covered include identifying and reviewing scholarly literature; formulating research questions; selecting appropriate design, data collection and sampling strategies; and analyzing data. Topics include causal and descriptive designs, interview and survey methods, and descriptive and inferential statistics such as chi square and regression. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 5004 - Economics and Public Finance

Summer 2010 Registration P AD 5004

Uses economics to explore public and private sector roles, and the allocation of resources in the public sector. Introduces the concepts of public goods, market failure and externalities. The effects of taxation and subsidies on consumer and firm behavior are analyzed. Also covers cost benefit analysis and national, state, and local budgeting methods. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 5005 - The Policy Process and Democracy

Summer 2010 Registration **P AD 5005**

Provides an introduction to theoretical and applied studies of the policy process. The policy process includes the manner in which (I) issues are conceptualized and brought to the government as problems needing action; (II) policies are designed and selected; and (III) the enacted policies are implemented, monitored, evaluated, and revised. The policy process also includes the study of politics, especially how government and non-government actors interact and exercise power in allocating societal benefits and burdens. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 5006 - Leadership and Professional Ethics

Summer 2010 Registration **P AD 5006**

Examines theories of leadership applied to the public and non-profit sectors and the skills and processes employed by effective leaders. The course also considers ethical theories as applied to problems in the public and non-profit sectors; emphasizes critical thinking to address value conflicts, notably in the context of a pluralistic society; and teaches moral reasoning as a practical professional skill. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 5110 - Seminar in Nonprofit Management

Summer 2010 Registration **P AD 5110**

This course provides an overview of the principles and concepts that are unique to nonprofit management. Topics include executive management, funding diversity, human resource management, marketing, volunteer management and ethics. Students are also given an introduction to the history and the importance of the nonprofit sector. Cross-listed with PUAD 7110. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 5115 - Effective Grant Writing for Nonprofit and Public Sector Managers

Summer 2010 Registration **P AD 5115**

This course is designed to provide students with the knowledge and skills to perform one of the most critical functions for any public or nonprofit sector agency today: gaining funds through proposals. Students learn how to locate and analyze funding opportunities through public and private funders and how to research, plan and write effective and competitive proposals. The course provides theoretical and practical knowledge about persuasive writing, the proposal submission and review process, building effective relationships with funders and how to proceed after post-funding decisions (positive or negative). Cross-listed with PUAD 7115. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 5120 - Nonprofits and Public Policy

Summer 2010 Registration P AD 5120

Examines the intersection of public policy and the nonprofit world and the ways in which each affects the other. The course examines current policy issues that relate to the nonprofit sector such as conversion of nonprofit to for-profit status, regulation of the nonprofit sector, issues of financial management, the role of nonprofits in devolution and privatization of government services, tax exemptions, "charitable choice," donor control, governance and the future of the future of the sector. The course examines the ways nonprofits have affected the policy process and public policies by exploring the factors that shape social movements, nonprofit advocacy, strategies of influence, and the role of nonprofits in social movements such as Civil Rights and the environment. Cross-listed with PUAD 7120. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 5125 - Civil Society and Nongovernmental Organizations

Summer 2010 Registration P AD 5125

This course is designed for students interested in the international nonprofit sector. The course compares non-Western forms of civil society with the American tradition of civil society. Students will learn about the efforts of Nongovernmental Organizations (NGOs) working in Third World countries to influence democracy, free association, and/or increased political and societal pluralism. Additionally, the course will focus on NGO management and governance issues in countries where there are strict controls and limits on the activities of NGOs. Cross-listed with PUAD 7125. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 5130 - Collaboration Across Sectors

Summer 2010 Registration P AD 5130

The blurring of the three economic sectors - government, business and nonprofits-- continues to increase as more partnerships are developed across sectors. This course focuses on collaboration and partnerships involving public, nonprofit and for-profit organizations. Additionally, students are expected to gain an understanding of the issues and policies associated with the bidding, contracting, program delivery and reporting processes when nonprofit organizations are contracted to achieve public sector goals and/or private sector objectives. Cross-listed with PUAD 7130. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 5140 - Nonprofit Financial Management

Summer 2010 Registration P AD 5140

Financial management is one of the core competencies of effective nonprofit managers. Every nonprofit organization needs money to sustain or advance its mission. This course

provides a grounding in financial management for the "non-accountant" by focusing on an array of knowledge and management skill areas necessary for allocating and controlling resources and for analyzing, reporting and protecting the fiscal health of the organization. Topics include key accounting principles, understanding and using financial statements, the budget development process, cash flow analysis, banking relationships, using the audit report, maximizing investment policy and strategy, and understanding the boundaries of tax exemption. Cross-listed with PUAD 7140.**Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 5150 - Understanding and Achieving Funding Diversity

Summer 2010 Registration P AD 5150

Designed to provide a comprehensive overview of funding sources available to nonprofit organizations (e.g., foundation and governmental grants, individual and corporate donations, entrepreneurial sources of revenue and events.), as well as detailed information on how to secure support of the various sources presented. Additionally, students are expected to gain both theoretical and practical knowledge relevant to why it is important to diversify an organization's revenue streams. Cross-listed with PUAD 7150.**Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 5160 - Nonprofit Boards and Executive Leadership

Summer 2010 Registration P AD 5160

The important roles and responsibilities of a voluntary board of directors and the process of governing are often misunderstood. This course explores the special powers of a nonprofit board of directors as framed by and responsive to public policy. From the perspective of organizational behavior and theory, the course examines the leadership role and interplay between board members and the executive director. The examination includes a comparative analysis of different governing models, and explores fundamental questions of board composition, the role of advisor boards, achieving effective board meetings, the realm of liability, using committees, and the board's role in fundraising, among other special subject matter. Cross-listed with PUAD 7160.**Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 5170 - Strategic Management for Nonprofit and Public Managers

Summer 2010 Registration P AD 5170

Designed to train public and nonprofit managers in the effective use of strategic management tools and techniques traditionally used by corporations. Strategic management tools and skills, although traditionally used by business, should not be seen as the exclusive domain of corporations. The course teaches students how to

adapt traditional strategic management capabilities to the particular conditions of public and nonprofit organizations. Cross-listed with PUAD 7170. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 5180 - Social Entrepreneurship

Summer 2010 Registration P AD 5180

Designed to introduce students to the concept of social entrepreneurship. Using nonprofit (and public) organizational examples, students gain an understanding of what it means to be an innovative manager. Students study techniques designed to advance an organization's mission and increase organizational effectiveness, accountability and efficiency through the use of for-profit techniques within a nonprofit context. Cross-listed with PUAD 7180. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 5220 - Managing People in Public and Nonprofit Organizations

Summer 2010 Registration P AD 5220

The study and practice of human resource management to build effective organizations. This course reviews the process of staffing an organization, motivating and managing employees from the initial steps of describing a position and determining compensation to recruiting qualified and diverse applicants, screening and selecting good employees, hiring, training, motivating, developing and providing feedback to employees; and layoffs and promotions. Contemporary issues concerning managerial flexibility and merit pay will be reviewed. Prereq: PUAD 5002 or PUAD 7002. Cross-listed with PUAD 7220. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 5250 - Intergovernmental Management

Summer 2010 Registration P AD 5250

Surveys the basic literature of intergovernmental management and examines the interactive role of managers at federal, state, and local levels of government. Emphasis is placed on current intergovernmental issues. Cross-listed with PUAD 7250. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 5260 - Managing in a Multicultural Society

Summer 2010 Registration P AD 5260

Using a systems approach, diversity within organizations is examined through the construction and review of theories in private, public, and nonprofit organizations. Existing models of managing diversity are examined and analyzed. Cross-listed with

PUAD 7260.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 5271 - Managing Conflict and Change

Summer 2010 Registration P AD 5271

Explores the process of change in organizations, communities, society, and conflicts that arise. Through the use of relevant case studies and role playing exercises, students are provided a practical framework for looking at change and managing conflict associated with change. Cross-listed with PUAD 7271.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 5280 - American Public Service Environment

Summer 2010 Registration P AD 5280

Designed for SPA international students, especially those in their first or second semester, students will compare US culture and its public and nonprofit organizations (NGOs) with those in their home countries. Class sessions include: site visits; guest speakers from public and non-profit organizations; case studies, with an emphasis on applying theory to current issues in public policy and management.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 5310 - Policy Formulation & Implementation

Summer 2010 Registration P AD 5310

Building on PUAD 5005, students learn how policy is developed and implemented in several levels of government - local, state, federal - and within organizations themselves. The course makes use of the case studies to explore the intricacies of developing and implementing policy and the political, economic, and institutional contexts that affect these two states of policy development. Students also consider the different criteria that can be used to judge the effectiveness of programs and policies. Prereq: PUAD 5005 or 7005. Cross-listed with PUAD 7310.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 5320 - Public Policy Analysis

Summer 2010 Registration P AD 5320

Provides training in the systematic analysis of policy and program initiatives using an economics orientation and employing a case method. The course covers benefit-cost analysis, cost-effectiveness analysis, present values, and the treatment of multiple criteria in public sector program analysis. Prereq: PUAD 5003/7003, 5004/7004 and 5005/7005. Cross-listed with PUAD 7320.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 5330 - Intermediate Statistical Analysis

Summer 2010 Registration P AD 5330

Follows PUAD 5003/7003 and is focused on more advanced statistical techniques to be used in research. These techniques include the use of regression in time series analysis; binary response; nonlinear, logistic, and probit models; and factor and path analysis. Evaluating potential problems with model specification and the remedies are included. Students are required to test hypotheses using these models with a data set. Prereq: PUAD 5003 or 7003. Cross-listed with PUAD 7330. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 5350 - Program Evaluation

Summer 2010 Registration P AD 5350

Describes the theory and methodology for the design of social research and demonstration projects and the application of analytic and statistical methods for evaluating public programs. Focus is on the application of evaluation methods and techniques of data interpretation. Report preparation is emphasized. Prereq: PUAD 5003 or PUAD 7003 and PUAD 5005 or PUAD 7005. Cross-listed with PUAD 7350. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 5361 - Advanced Seminar in Public Policy and Management

Summer 2010 Registration P AD 5361

In this seminar, students demonstrate their mastery of the knowledge and skills acquired in core courses, through the conduct of a client-based project. Students in a concentration must undertake a project related to that concentration. Students also make a juried oral presentation of the professional paper which reports project findings. This is the cumulative opportunity for students to apply concepts, theories, and research skills gained in the program to professional practice. (Successful completion of this course is an M.P.A. degree program requirement.) Cross-listed with PUAD 7361. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 5370 - Media and Public Policy

Summer 2010 Registration P AD 5370

Explores the conventions and practices of the print and electronic media in the United States. The course enables students to better understand the place of the media in society, the way the media look at themselves and how journalists confront conflicting values in the performance of their roles. Cross-listed with PUAD 7370. **Semester Hours:**

3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 5380 - Citizen Participation: Theory and Practice

Summer 2010 Registration **P AD 5380**

Tackles the issues of citizen participation and community involvement in theory and practice. Students work in class on understanding the theoretical foundations that are relevant to citizen participation. Students engage in significant out-of-class projects to ground them in the practice of public involvement. Cross-listed with PUAD

7380.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 5410 - Administrative Law

Summer 2010 Registration **P AD 5410**

Examines legal aspects of policy implementation particularly the relationship between courts and administrative agencies. Covers standards of judicial review and agency action; administrative procedure and due process; selected special topics such as rights, liabilities, and immunities of public employees; and administrative discretion and scientific uncertainty. Cross-listed with PUAD 7410.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 5420 - Law and Public Policy

Summer 2010 Registration **P AD 5420**

Examines the relationship between courts and legislative assemblies. Explores how legislators use the policy process to shape and influence the exercise of judicial authority, and how the courts affect the policy process in reviewing the constitutionality of state and federal legislation. Cross-listed with PUAD 7420.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 5430 - Seminar in Legal Research Methods and Public Law Scholarship

Summer 2010 Registration **P AD 5430**

Provides law library-based training in locating and analyzing primary and secondary sources of law. Individualized guidance in understanding and using the content of legal materials in the conduct of public law scholarship and law-based writing. Satisfies the PhD qualitative research methods requirement. Cross-listed with PUAD 7430.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 5440 - Negotiation and Conflict Resolution

Summer 2010 Registration **P AD 5440**

Focuses on concepts and skills necessary to negotiate policy and management decisions and manage internal and external conflicts. Designed to help students understand the dynamics that affect negotiations and to apply the principles and strategies of negotiation in a variety of decision making and dispute resolution contexts.

Cross-listed with PUAD 7440. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 5450 - Law of All-Hazards Management

Summer 2010 Registration **P AD 5450**

This course conveys knowledge of the statutes, regulations and court decisions governing the management of hazards by governmental agencies. It covers local, state and federal agencies as they mitigate, prepare for, respond to and recover from naturally, accidentally and intentionally caused disasters. Cross-listed with PUAD 7450. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 5460 - Political Advocacy

Summer 2010 Registration **P AD 5460**

Designed to address advocacy and lobbying issues for graduate students, in the general area of public policy issues and government problems. Special attention is given to how the advocacy process works in the public sector and policy making bodies and how lobbying techniques and processes can be understood. The general focus of the class is on practical applications at all levels of government with primary attention to state and local government. It is anticipated that guest speakers are invited to attend some of the classes. The guest speaker will have the opportunity to utilize their own academic and professional background, and experiences. Cross-listed with PUAD 7460. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 5501 - Contemporary Issues in Revenue and Tax Administration and Policy

Summer 2010 Registration **P AD 5460**

This course provides a contemporary evaluation of Colorado's tax structure, revenue system, and the state budget. The interaction of politics, the initiative process, the State Constitution, and stakeholders is studied. Cross-listed with PUAD 7501. **Semester Hours:** 3to 3

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 5502 - Public Financial Management and Policy

Summer 2010 Registration **P AD 5502**

Includes topics on investment and spending policy, public borrowing and advancing credit to the public sector; specialties of budgeting and anticipated revenues and costs, accounting for the receipt and disbursement of funds once the budget is enacted, and purchased goods and services; investing idle funds; issuing short-term and long-term debt. Cross-listed with PUAD 7502. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 5503 - Governmental Budgeting

Summer 2010 Registration **P AD 5503**

Focuses on theory and practices of government budgeting, including cycles, formats, political considerations, costing and analytical tasks. Covers both operating and capital budgeting, plus fiscal management issues. Cross-listed with PUAD 7503. **Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 5540 - Organization Development

Summer 2010 Registration **P AD 5540**

Studies the dynamics involved in managing and facilitating change in organizations by application of behavioral science knowledge. Emphasis is placed on both cognitive and experiential learning. A background in organization theory and administrative behavior is required. Cross-listed with PUAD 7540. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 5615 - Health Policy

Summer 2010 Registration **P AD 5615**

Draws upon existing policy models and evaluates the status of health policy formulation and implementation. Health policy topics include Medicaid and Medicare, managed care, health care reform proposals, telemedicine, the non-profit and for-profit role in health.

Cross-listed with PUAD 7615. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 5617 - Health Economics

Summer 2010 Registration **P AD 5617**

Extends students' understanding of basic economic principles to consumer, physician, insurer, and health provider behavior. Current policy topics are analyzed from an economic perspective using published research. Students are required to write a research paper focused on analyzing a health care topic with the application of economic concepts. Prereq: PUAD 5004/7004 or equivalent economic course. Cross-

listed with PUAD 7617.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 5618 - Cost-Benefit Analysis

Summer 2010 Registration P AD 5618

An intermediate-level course on the theory, methods, and application of economic evaluation in the health context. "Economic evaluation" includes cost analysis, cost-benefit analysis (CBA), cost-effectiveness analysis (CEA), and cost-utility analysis. Students are required to conduct an economic evaluation by collecting data and information related to a health area of interest. Prereq: PUAD 5003/7003, 5330/7330, and 5617/7617. Cross-listed with PUAD 7618.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 5625 - Local Government Management

Summer 2010 Registration P AD 5625

Relates the systems, processes, and principles of public management to the local government environment. Public management concepts such as strategic planning, bureaucracy, formal and informal organizational structures, human resource planning, management control, systems theory, and administrative behavior are explored within the context of local government. Cross-listed with PUAD 7625.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 5626 - Local Government Politics and Policy

Summer 2010 Registration P AD 5626

Examines local government from the perspective of politics and public policy making. The course focuses on local government political structures, policy analysis and formulation, political forces in administrative decision making, and the relationships between professional administrators and elected officials. Cross-listed with PUAD 7626.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 5628 - Urban Social Problems

Summer 2010 Registration P AD 5628

Examines local government from the perspective of sociology and group dynamics. Course could include some or all of the following subjects: neighborhoods and community groups, class and race relations, community crime, social service issues, immigration, the underclass in American society, and related urban social problems. Cross-listed with PUAD 7628.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 5631 - Seminar in Environmental Politics and Policy

Summer 2010 Registration P AD 5631

Examines the fundamental principles of politics and policy that shape strategies of environmental protection. Focuses on the role of institutional processes, government organizations and nongovernmental organizations in environmental politics and policy.

Cross-listed with PUAD 7631. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 5632 - Seminar in Environmental Management

Summer 2010 Registration P AD 5632

Examines the practical challenges facing environmental managers today, using a series of case studies. Focuses on the role of institutional processes, government organizations and nongovernmental organizations in the practice of environmental management. Cross-listed with PUAD 7632. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 5633 - Seminar in Natural Resource and Environmental Health Law

Summer 2010 Registration P AD 5633

Administrative law aspects of environmental policy implementation and enforcement, the role of courts in both stimulating and limiting statutory reform, and regulatory innovation. Focus on the legal aspects of both natural resource allocation and management, and environmental protection. Alternatives to traditional processes for environmental dispute resolution. Cross-listed with PUAD 7633. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 5634 - Theories of Sustainable Infrastructure Management

Summer 2010 Registration P AD 5633

This seminar introduces theories of sustainable infrastructure management from a variety of disciplinary perspectives. Students then apply them to resolution of a variety of actual infrastructure management problems. Cross-listed with PUAD 7634. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 5650 - Disaster and Emergency Management Policies

Summer 2010 Registration P AD 5650

Examines policies for the management of hazards, emergencies and disasters. Focuses on a series of case studies concerning major disasters and on management principles drawn from those cases. Examines the role of institutional processes, government organizations and nongovernmental organizations in emergency management. Cross-

listed with PUAD 7650. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 5710 - Public Sector Technology

Summer 2010 Registration P AD 5710

Technology is an integral piece of public administration today. Taking a historical/topical approach, this course examines the relationship between technology and culture; technology's role in economic growth; how technologically-driven prosperity impacts the balance between governments and markets; and the impact of information technologies on e-Government and e-Democracy. Cross-listed with PUAD 7710. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 5910 - Women and Violence: A Sociological Perspective

Summer 2010 Registration P AD 5910

This course is a sociological, feminist analysis of violence against women and girls that addresses the intersection of sexism and other forms of oppression such as racism, classism and heterosexism within historical, cultural, social and institutional contexts. Topics covered focus on overt and covert forms of sexual coercion, harassment and assault, battering and stalking. Cross-listed with PUAD 7910, CRJU 5910 and 7910. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 5920 - Psychology of Violence Against Women

Summer 2010 Registration P AD 5920

This class addresses the contributions and the limitations of current empirical and clinical psychological literatures about domestic violence. Topics covered include: distinguishing among mental health professionals regarding work with DV clients; the psychological impacts of domestic violence; services useful for responding to the needs of women and children; and an introduction to the psychology and treatment of batterers. Cross-listed with PUAD 7920, CRJU 5920 and 7920. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 5930 - Battered Women and the Legal System

Summer 2010 Registration P AD 5930

This course provides a practical understanding of how the following relate to battered women and their children: (a) major developments in federal, state, tribal, administrative, statutory and case law; (b) the role and responses of law enforcement, judges, attorneys, victim assistance providers and other legal system agents; and (c) the role and process of victim advocacy. Cross-listed with PUAD 5930, CRJU 5930 and

7930.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 5940 - Domestic Violence Social Change and Advocacy

Summer 2010 Registration **P AD 5940**

This course provides students information on the theories and strategies behind contemporary social change movements and the skills necessary to organize and implement actions to influence public awareness and policy. The values of American society are complex and require advocates/activists to develop a heightened sense of self, community and an ethical framework while confronting sexism, racism and other forms of oppression. Cross-listed with PUAD 7940, CRJU 5940 and 7940.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 5950 - Interpersonal Violence and Health

Summer 2010 Registration **P AD 5950**

Interpersonal violence is a major health issue. Approximately 20% of emergency room visits by women are attributable to interpersonal violence. This course will provide students with the foundational knowledge and skills necessary for responding to the health care needs of patients experiencing interpersonal violence.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 5960 - Interpersonal Violence and Health

Summer 2010 Registration **P AD 5960**

Interpersonal violence is a major health issue. Approximately 20% of emergency room visits by women are attributable to interpersonal violence. This course will provide students with the foundational knowledge and skills necessary for responding to the health care needs of patients experiencing interpersonal violence.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 5961 - Interpersonal Violence, Health Advocacy and Systems Change

Summer 2010 Registration **P AD 5961**

This course will explore how healthcare professionals can develop successful public and institutional discourses that transform healthcare policies and systems to address the health needs of patients experiencing interpersonal violence. Students will learn methods of advocacy, activism and organizational change that produce positive results including effective education techniques.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 6600 - Special Topics: Public Administration

Summer 2010 Registration P AD 6600

Studies special topics relevant to public administration, such as public/private sector partnerships, community participation, conflict management, regionalism, managing economic options for Colorado, and nonprofit management and marketing. Each semester various topics are studied. Cross-listed with PUAD 7600. **Semester Hours:** 1to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 6840 - Independent Study: PUAD

Summer 2010 Registration P AD 6840

Affords students the opportunity to do independent, creative work. Prereq: Permission of instructor. **Semester Hours:** 1to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 6910 - Field Study in Public Administration

Summer 2010 Registration P AD 6910

For students who have not had government experience. Studies and reports are made while students have full- or part-time administrative traineeships, internships, or similar positions in government agencies or government-related organizations. Prereq: Completion of the common core courses. It is recommended that at least three of the track courses also be completed. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 6950 - Master's Thesis

Summer 2010 Registration P AD 6950

Semester Hours: 3to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 7007 - Qualitative Research Methods

Summer 2010 Registration P AD 7007

Focuses on qualitative research methods that incorporate field work techniques such as observation, interviews, and content analysis. The main objective is to discover practicalities and limitations of ethnographic methods with a comparative methodology perspective. Students are required to conduct a search project. Cross-listed with PUAD 5007. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 7110 - Seminar in Nonprofit Management

Summer 2010 Registration P AD 7110

This course provides an overview of the principles and concepts that are unique to nonprofit management. Topics include executive management, funding diversity, human resource management, marketing, volunteer management and ethics. Students are also given an introduction to the history and the importance of the nonprofit sector. Cross-listed with PUAD 5110. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 7115 - Effective Grant Writing for Nonprofit and Public Sector Managers

Summer 2010 Registration P AD 7115

This course is designed to provide students with the knowledge and skills to perform one of the most critical functions for any public or nonprofit sector agency today: gaining funds through proposals. Students learn how to locate and analyze funding opportunities through public and private funders and how to research, plan and write effective and competitive proposals. The course provides theoretical and practical knowledge about persuasive writing, the proposal submission and review process, building effective relationships with funders and how to proceed after post-funding decisions (positive or negative). Cross-listed with PUAD 5115. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 7120 - Nonprofits and Public Policy

Summer 2010 Registration P AD 7120

Examines the intersection of public policy and the nonprofit world and the ways in which each affects the other. The course examines current policy issues that relate to the nonprofit sector such as conversion of nonprofit to for-profit status, regulation of the nonprofit sector, issues of financial management, the role of nonprofits in devolution and privatization of government services, tax exemptions, "charitable choice," donor control, governance and the future of the sector. The course also examines the ways nonprofits have affected the policy process and public policies by exploring the factors that shape social movements, nonprofit advocacy, strategies of influence, and the role of nonprofits in social movements such as Civil Rights and the environment. Cross-listed with PUAD 5120. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 7125 - Civil Society and Nongovernmental Organizations

Summer 2010 Registration P AD 7125

This course is designed for students interested in the international nonprofit sector. The course compares non-Western forms of civil society with the American tradition of civil society. Students will learn about the efforts of Nongovernmental Organizations (NGOs)

working in Third World countries to influence democracy, free association, and/or increased political and societal pluralism. Additionally, the course will focus on NGO management and governance issues in countries where there are strict controls and limits on the activities of NGOs. Cross-listed with PUAD 5125. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 7130 - Collaboration Across Sectors

Summer 2010 Registration P AD 7130

The blurring of the three economic sectors - government, business and nonprofits-- continues to increase as more partnerships are developed across sectors. This course focuses on collaboration and partnerships involving public, nonprofit and for-profit organizations. Additionally, students are expected to gain an understanding of the issues and policies associated with the bidding, contracting, program delivery and reporting processes when nonprofit organizations are contracted to achieve public sector goals and/or private sector objectives. Cross-listed with PUAD 5130. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 7140 - Nonprofit Financial Management

Summer 2010 Registration P AD 7140

Financial management is one of the core competencies of effective nonprofit managers. Every nonprofit organization needs money to sustain or advance its mission. This course provides a grounding in financial management for the "non-accountant" by focusing on an array of knowledge and management skill areas necessary for allocating and controlling resources and for analyzing, reporting and protecting the fiscal health of the organization. Topics include key accounting principles, understanding and using financial statements, the budget development process, cash flow analysis, banking relationships, using the audit report, maximizing investment policy and strategy, and understanding the boundaries of tax exemption. Cross-listed with PUAD 5140. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 7150 - Understanding and Achieving Funding Diversity

Summer 2010 Registration P AD 7150

Designed to provide a comprehensive overview of funding sources available to nonprofit organizations (e.g., foundation and governmental grants, individual and corporate donations, entrepreneurial sources of revenue and events.), as well as detailed information on how to secure support of the various sources presented. Additionally, students are expected to gain both theoretical and practical knowledge relevant to why it is important to diversify an organization's revenue streams. Cross-listed with PUAD 5150. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 7160 - Nonprofit Boards and Executive Leadership

Summer 2010 Registration P AD 7160

The important roles and responsibilities of a voluntary board of directors and the process of governing are often misunderstood. This course explores the special powers of a nonprofit board of directors as framed by and responsive to public policy. From the perspective of organizational behavior and theory, the course examines the leadership role and interplay between board members and the executive director. The examination includes a comparative analysis of different governing models, and explores fundamental questions of board composition, the role of advisory boards, achieving effective board meetings, the realm of liability, using committees, and the board's role in fundraising, among other special subject matter. Cross-listed with PUAD 5160.

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 7170 - Strategic Management for Nonprofit and Public Managers

Summer 2010 Registration P AD 7170

Designed to train public and nonprofit managers in the effective use of strategic management tools and techniques traditionally used by corporations. Strategic management tools and skills, although traditionally used by business, should not be seen as the exclusive domain of corporations. The course teaches students how to adapt traditional strategic management capabilities to the particular conditions of public and nonprofit organizations. Cross-listed with PUAD 5170.

Semester Hours: 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 7180 - Social Entrepreneurship

Summer 2010 Registration P AD 7180

Designed to introduce students to the concept of social entrepreneurship. Using nonprofit (and public) organizational examples, students gain an understanding of what it means to be an innovative manager. Students study techniques designed to advance an organization's mission and increase organizational effectiveness, accountability and efficiency through the use of for-profit techniques within a nonprofit context. Cross-listed with PUAD 5180.

Semester Hours: 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 7220 - Managing People in Public and Nonprofit Organizations

Summer 2010 Registration P AD 7220

The study and practice of human resource management to build effective organizations. This course reviews the process of staffing an organization, motivating and managing employees from the initial steps of describing a position and determining compensation to recruiting qualified and diverse applicants, screening and selecting good employees,

hiring, training, motivating, developing and providing feedback to employees; and layoffs and promotions. Contemporary issues concerning managerial flexibility and merit pay will be reviewed. Prereq: PUAD 7002 or PUAD 5002. Cross-listed with PUAD

5220.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 7250 - Intergovernmental Management

Summer 2010 Registration P AD 7250

Surveys the basic literature of intergovernmental management and examines the interactive role of managers at federal, state, regional, and local levels of government.

Emphasis is placed on current intergovernmental issues. Cross-listed with PUAD

5250.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 7260 - Managing in a Multicultural Society

Summer 2010 Registration P AD 7260

Using a systems approach, diversity within organizations is examined through the construction and review of theories in private, public, and nonprofit organizations.

Existing models of managing diversity are examined and analyzed. Cross-listed with

PUAD 5260.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 7271 - Managing Conflict and Change

Summer 2010 Registration P AD 7271

Explores the process of change in organizations, communities, and society, and conflicts that arise. Through the use of relevant case studies and role playing exercises, students are provided a practical framework for looking at change and managing conflict associated with change. Cross-listed with PUAD 5271.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 7310 - Policy Formulation & Implementation

Summer 2010 Registration P AD 7310

Building on PUAD 5005, students learn how policy is developed and implemented in several levels of government - local, state, federal - and within organizations themselves.

The course makes use of the case studies to explore the intricacies of developing and implementing policy and the political, economic, and institutional contexts that affect these two states of policy development. Students also consider the different criteria that can be used to judge the effectiveness of programs and policies. Prereq: PUAD 5005 or 7005. Cross-listed with PUAD 5310.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 7320 - Public Policy Analysis

Summer 2010 Registration P AD 7320

Provides training in the systematic analysis of policy and program initiatives using an economics orientation and employing a case method. The course covers benefit-cost analysis, cost-effectiveness analysis, present values, and the treatment of multiple criteria in public sector program analysis. Prereq: PUAD 7003/5003, 7004/5004 and 7005/5005. Cross-listed with PUAD 5320. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 7330 - Intermediate Statistics

Summer 2010 Registration P AD 7330

Follows PUAD 5003/7003 and is focused on more advanced statistical techniques to be used in research. These techniques include the use of regression in time series analysis; binary response; nonlinear, logistic, and profit models; and factor and path analysis. Evaluating potential problems with model specification and the remedies are included. Students are required to test hypotheses using these models with a data set. Prereq: PUAD 7003 or 5003. Cross-listed with PUAD 5330. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 7350 - Program Evaluation

Summer 2010 Registration P AD 7350

Describes the theory and methodology for the design of social research and demonstration projects and the application of analytic and statistical methods for evaluating public programs. Focus is on the application of evaluation methods and techniques of data interpretation. Report preparation is emphasized. Prereq: PUAD 7003 or PUAD 5003 and PUAD 7005 or PUAD 5005. Cross-listed with PUAD 5350. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 7361 - Advanced Seminar in Public Policy and Management

Summer 2010 Registration P AD 7361

In this seminar, students demonstrate their mastery of the knowledge and skills acquired in core courses, through the conduct of a client-based project. Students in a concentration must undertake a project related to that concentration. Students also make a juried oral presentation of the professional paper which reports project findings. This is the cumulative opportunity for students to apply concepts, theories, and research skills gained in the program to professional practice. (Successful completion of this course is an M.P.A. degree program requirement.) Cross-listed with PUAD

5361.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 7370 - Media and Public Policy

Summer 2010 Registration P AD 7370

Explores the conventions and practices of the print and electronic media in the United States. The course enables students to better understand the place of the media in society, the way the media look at themselves and how journalists confront conflicting values in the performance of their roles. Cross-listed with PUAD 5370.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 7380 - Citizen Participation: Theory and Practice

Summer 2010 Registration P AD 7380

Tackles the issues of citizen participation and community involvement in theory and practice. Students work in class on understanding the theoretical foundations that are relevant to citizen participation. Students engage in significant out-of-class projects to ground them in the practice of public involvement. Cross-listed with PUAD 5380.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 7410 - Administrative Law

Summer 2010 Registration P AD 7410

Examines legal aspects of policy implementation particularly the relationship between courts and administrative agencies. Covers standards of judicial review and agency action; administrative procedure and due process; selected special topics such as rights, liabilities, and immunities of public employees; and administrative discretion and scientific uncertainty. Cross-listed with PUAD 5410.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 7420 - Law and Public Policy

Summer 2010 Registration P AD 7420

Examines the relationship between courts and legislative assemblies. Explores how legislators use the policy process to shape and influence the exercise of judicial authority, and how the courts affect the policy process in reviewing the constitutionality of state and federal legislation. Cross-listed with PUAD 5420.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 7430 - Seminar in Legal Research Methods and Public Law Scholarship

Summer 2010 Registration **P AD 7430**

Provides law library-based training in locating and analyzing primary and secondary sources of law. Individualized guidance in understanding and using the content of legal materials in the conduct of public law scholarship and law-based writing. Satisfies the PhD qualitative research methods requirement. Cross-listed with PUAD 5430. **Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 7440 - Negotiation and Conflict Resolution

Summer 2010 Registration **P AD 7440**

Focuses on concepts and skills necessary to negotiate policy and management decisions and manage internal and external conflicts. Designed to help students understand the dynamics that affect negotiations and to apply the principles and strategies of negotiation in a variety of decision making and dispute resolution contexts. Cross-listed with PUAD 5440. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 7450 - Law of All-Hazards Management

Summer 2010 Registration **P AD 7450**

This course conveys knowledge of the statutes, regulations and court decisions governing the management of hazards by governmental agencies. It covers local, state and federal agencies as they mitigate, prepare for, respond to and recover from naturally, accidentally and intentionally caused disasters. Cross-listed with PUAD 5450. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 7460 - Political Advocacy

Summer 2010 Registration **P AD 7460**

Designed to address advocacy and lobbying issues for graduate students, in the general area of public policy issues and government problems. Special attention is given to how the advocacy process works in the public sector and policy making bodies and how lobbying techniques and processes can be understood. The general focus of the class is on practical applications at all levels of government with primary attention to state and local government. It is anticipated that guest speakers are invited to attend some of the classes. The guest speaker will have the opportunity to utilize their own academic and professional backgrounds, and experiences. Cross-listed with PUAD 5460. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 7501 - Contemporary Issues in Revenue and Tax Administration and Policy

Summer 2010 Registration **P AD 7460**

This course provides a contemporary evaluation of Colorado's tax structure, revenue system, and the state budget. The interaction of politics, the initiative process, the State Constitution, and stakeholders is studied. Cross-listed with PUAD 5501. **Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 7502 - Public Financial Management and Policy

Summer 2010 Registration **P AD 7502**

Includes topics on investment and spending policy, public borrowing and advancing credit to the public sector; specialties of budgeting and anticipated revenues and costs, accounting for the receipt and disbursement of funds once the budget is enacted, and purchased goods and services; investing idle funds; issuing short-term and long-term debt. Cross-listed with PUAD 7502. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 7503 - Governmental Budgeting

Summer 2010 Registration **P AD 7503**

Focuses on theory and practices of government budgeting, including cycles, formats, political considerations, costing and analytical tasks. Covers both operating and capital budgeting, plus fiscal management issues. Cross-listed with PUAD 5503. **Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 7540 - Organization Development

Summer 2010 Registration **P AD 7540**

Studies the dynamics involved in managing and facilitating change in organizations by application of behavioral science knowledge. Emphasis is placed on both cognitive and experiential learning. A background in organization theory and administrative behavior is required. Cross-listed with PUAD 5540. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 7600 - Special Topics: Public Administration

Summer 2010 Registration **P AD 7600**

Studies special topics relevant to public administration, such as public/private sector partnerships, community participation, conflict management, regionalism, managing economic options for Colorado, and nonprofit management and marketing. (Each semester various topics are studied.) Cross-listed with PUAD 6600. **Semester Hours:**

1to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 7615 - Health Policy

Summer 2010 Registration P AD 7615

Draws upon existing policy models and evaluates the status of health policy formulation and implementation. Health policy topics include Medicaid and Medicare, managed care, health care reform, proposals, telemedicine, and the non-profit and for-profit role in health. Cross-listed with PUAD 5615. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 7617 - Health Economics

Summer 2010 Registration P AD 7617

Extend students' understanding of basic economic principles to consumer, physician, insurer, and health provider behavior. Current policy topics are analyzed from an economic perspective using published research. Students are required to write a research paper focused on analyzing a health care topic with the application of economic concepts. Prereq: PUAD 7004/5004 or equivalent economics course. Cross-listed with PUAD 5617. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 7618 - Cost-Benefit Analysis

Summer 2010 Registration P AD 7618

An intermediate-level course on the theory, methods, and application of economic evaluation in the health context. "Economic evaluation" includes cost analysis, cost-benefit analysis (CBA), cost-effectiveness analysis (CEA), and cost-utility analysis. Students are required to conduct an economic evaluation by collecting data and information related to a health area of interest. Prereq: PUAD 7003/5003, 7330/5330 and 7617/5617. Cross-listed with PUAD 5618. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 7625 - Local Government Management

Summer 2010 Registration P AD 7625

Relates the systems, processes, and principles of public management to the local government environment. Public management concepts such as strategic planning, bureaucracy, formal and informal organizational structures, human resource planning, management control, systems theory, and administrative behavior are explored within the context of local government. Cross-listed with PUAD 5625. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 7626 - Local Government Politics and Policy

Summer 2010 Registration **P AD 7626**

Examines local government from the perspective of politics and public policy making. The course focuses on local government political structures, policy analysis and formulation, political forces in administrative decision making, and the relationships between professional administrators and elected officials. Cross-listed with PUAD 5626.

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 7628 - Urban Social Problems

Summer 2010 Registration **P AD 7628**

Examines local government from the perspective of sociology and group dynamics. Course could include some or all of the following subjects: neighborhoods and community groups, class and race relations, community crime, social service issues, immigration, the underclass in American society, and related urban social problems. Cross-listed with PUAD 5628.

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 7631 - Seminar in Environmental Politics and Policy

Summer 2010 Registration **P AD 7631**

Examines the fundamental principles of politics and policy that shape strategies of environmental protection. Focuses on the role of institutional processes, government organizations and nongovernmental organizations in environmental politics and policy. Cross-listed with PUAD 5631.

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 7632 - Seminar in Environmental Management

Summer 2010 Registration **P AD 7632**

Examines the practical challenges facing environmental managers today, using a series of case studies. Focuses on the role of institutional processes, government organizations and nongovernmental organizations in the practice of environmental management. Cross-listed with PUAD 5632.

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 7633 - Seminar in Natural Resource and Environmental Health Law

Summer 2010 Registration **P AD 7633**

Administrative law aspects of environmental policy implementation and enforcement, and the role of courts in both stimulating and limiting statutory reform and regulatory innovation. Focus on the legal aspects of both natural resource allocation and management, and environmental protection. Alternatives to traditional processes for

environmental dispute resolution. Cross-listed with PUAD 5633. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 7634 - Theories of Sustainable Infrastructure Management

Summer 2010 Registration P AD 7633

This seminar introduces theories of sustainable infrastructure management from a variety of disciplinary perspectives. Students then apply them to resolution of a variety of actual infrastructure management problems. Cross-listed with PUAD 5634. **Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 7650 - Disaster and Emergency Management Policies

Summer 2010 Registration P AD 7650

Examines policies for the management of hazards, emergencies and disasters. Focuses on a series of case studies concerning major disasters and on management principles drawn from those cases. Examines the role of institutional processes, government organizations and nongovernmental organizations in emergency management. Cross-listed with PUAD 5650. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 7710 - Public Sector Technology

Summer 2010 Registration P AD 7710

Technology is an integral piece of public administration today. Taking a historical/topical approach, this course examines the relationship between technology and culture; technology's role in economic growth; how technologically-driven prosperity impacts the balance between governments and markets; and the impact of information technologies on e-Government and e-Democracy. Cross-listed with PUAD 5710. **Semester Hours:**

3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 7910 - Women and Violence: A Sociological Perspective

Summer 2010 Registration P AD 7910

This course is a sociological, feminist analysis of violence against women and girls that addresses the intersection of sexism and other forms of oppression such as racism, classism and heterosexism, within historical, cultural, social and institutional contexts. Topics covered focus on overt and covert forms of sexual coercion, harassment and assault, battering and stalking. Cross-listed with PUAD 5910, CRJU 5910 and 7910. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 7920 - Psychology of Violence Against Women

Summer 2010 Registration P AD 7920

This class addresses the contributions and the limitations of current empirical and clinical psychological literatures about domestic violence. Topics covered include: distinguishing among mental health professionals regarding work with DV clients; the psychological impacts of domestic violence; services useful for responding to the needs of women and children; and an introduction to the psychology and treatment of batterers. Cross-listed with PUAD 5920, CRJU 5920 and 7920. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 7930 - Battered Women and the Legal System

Summer 2010 Registration P AD 7930

This course provides a practical understanding of how the following relate to battered women and their children: (a) major developments in federal, state, tribal, administrative, statutory and case law; (b) the role and responses of law enforcement, judges, attorneys, victim assistance providers and other legal system agents; and (c) the role and process of victim advocacy. Cross-listed with PUAD 5930, CRJU 5930 and 7930. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 7940 - Domestic Violence Social Change and Advocacy

Summer 2010 Registration P AD 7940

This course provides students information on the theories and strategies behind contemporary social change movements and the skills necessary to organize and implement actions to influence public awareness and policy. The values of American society are complex and require advocates/activists to develop a heightened sense of self, community and an ethical framework while confronting sexism, racism and other forms of oppression. Cross-listed with PUAD 5940, CRJU 5940 and 7940. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 8010 - Historical and Comparative Foundations of Public Administration

Summer 2010 Registration P AD 8010

A doctoral seminar on developments and changes in public administration as a field of study. It examines how public administration and bureaucracy has evolved and is defined, practiced, studied and taught. It must normally be taken during the first full semester of the doctoral program. Prereq: PUAD 7001 or PUAD 5001 (or equivalent). **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 8020 - Seminar in Public Management

Summer 2010 Registration P AD 8020

An in-depth examination of contemporary literature, concepts, and theories of public management. Current issues and research problems are emphasized to prepare students for their advanced research. Prereq: PUAD 7003/5003, 7004/5004 or equivalent. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 8030 - Seminar in Public Policy

Summer 2010 Registration P AD 8030

Offers an in-depth examination of contemporary literature, concepts, and theories of public policy, with an emphasis on policy process. Current issues and research problems are emphasized to prepare students for their advanced research. Prereq: PUAD 7004/5004, 7005/5005 or equivalent. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 8040 - Critical Issues in Public Affairs

Summer 2010 Registration P AD 8040

Identifies and examines emerging topics of public administration, policy, and management in which additional research and theory are required with a focus on economic and related approaches. The intent is to help students identify advanced conceptual and methodological issues for dissertation research. Prereq: PUAD 8010, 8020, 8030 and 8060. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 8060 - Seminar on Conduct of Empirical Inquiry

Summer 2010 Registration P AD 8060

Examines a range of empirical approaches used in the study of public policy and management. Introduces some of the major concepts and problems of scientific inquiry; explores relevant aspects of the philosophy of science; and further develops skills in the design, conduct, and use of research. Prereq: PUAD 5003 or PUAD 7003. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 8070 - Advanced Seminar in Research Methods

Summer 2010 Registration P AD 8070

Provides in-depth knowledge about designing and conducting dissertation research. The course follows a basic sequence of problem definition, theoretical and propositional formulation, sample selection, data collection and observational methods, data analysis

and presentation, and writing skills. This course represents the final class in the PhD sequence of seminars.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 8840 - Independent Study: PUAD

Summer 2010 Registration **P AD 8840**

(Doctoral level) Affords students the opportunity to do independent, creative work.

Prereq: Permission of advisor.**Semester Hours:** 1to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

PUAD 8990 - Doctoral Dissertation

Summer 2010 Registration **P AD 8990**

Once students are admitted to candidacy, they must be continuously registered for dissertation credit each fall and spring semester or be automatically dropped from the program. Students must register for 5 credit hours per semester. In cases where students will not be using any university resources during a particular semester, they may petition the Ph.D. director to register for fewer semester credit hours. Students must be registered for dissertation credit during the semester they have a colloquium or defense.**Semester Hours:** 1to 10

Registration is changing. Visit our website for details ucdenver.edu/registration.

RLST 1610 - Introduction to Religious Studies

Summer 2010 Registration **RLST 1610**

Religion is a complex phenomenon which involves social norms, beliefs and fears, and overarching world view. Religious experiences are among the most profound an individual can have. The course examines religious phenomena from various perspectives, including philosophical, historical, psychological, anthropological, political, sociological, the symbolic and ritual.**Semester Hours:** 3to 3**GT Pathways Category**

Key: GT-AH3

Registration is changing. Visit our website for details ucdenver.edu/registration.

RLST 2660 - World Religions

Summer 2010 Registration **RLST 2660**

Provides an introduction to the basic beliefs and concepts of the world's great religious traditions. Covers the history, development, belief patterns, and institutional forms of the world's religions, including Judaism, Zoroastrianism, Christianity, Islam, Hinduism, Buddhism, Confucianism, Taoism and Shintoism.**Semester Hours:** 3to 3**GT Pathways**

Category Key: GT-AH3

Registration is changing. Visit our website for details ucdenver.edu/registration.

RLST 2680 - The American Indian Experience

Summer 2010 Registration **RLST 2680**

Surveys the relationships between Indian and non-Indian peoples, particularly in the context of the unique interaction between tribes and the federal government. Cross-listed with ETST 2606. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

RLST 2700 - The Bible as Literature

Summer 2010 Registration **RLST 2700**

Introduces students to biblical literature. Selections from the various genres of writing in Hebrew (history, wisdom, prophecy, literature) are read and discussed, as well as representative sections from the New Testament, including the gospels and the writings of Paul. Cross-listed with ENGL 2520. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

RLST 3000 - Judaism, Christianity and Islam: Affinity and Difference

Summer 2010 Registration **RLST 3000**

Judaism, Christianity and Islam have much in common, beginning with their common patriarch Abraham. But there are also elements in each that are unrecognizable from the perspectives of the other two. This course will trace the relationships among the Children of Abraham across history and in today's turbulent world. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

RLST 3060 - History of Early Christianity

Summer 2010 Registration **RLST 3060**

History of the rise of Christianity and the decline of paganism in the Roman Empire from the birth of Jesus of Nazareth to ca. 500 A.D. Special emphasis on social, historical, legal, and cultural context of Christianity's rise and paganism's decline. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

RLST 3080 - Reformation Europe

Summer 2010 Registration **RLST 3080**

Between the early 16th and the middle 17th centuries, Europe was torn by explosive ideological conflicts, resulting in religious upheaval, political revolution, and civil and international wars, but also underwent important experiments in representative government and economic controls. Cross-listed with HIST 4022, 5022. **Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

RLST 3100 - Islamic Politics and Culture

Summer 2010 Registration **RLST 3100**

Comprehensive, in-depth study of Islam and Muslims. Islam is viewed as a "way of life" with social, economic, psychological, spiritual, and political implications. Among topics to be examined are: women in Islam, Jihad, fundamentalism, Islamic movements, Islam and the West. Cross-listed with PSCI 4165. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

RLST 3300 - Shamanic Traditions

Summer 2010 Registration **RLST 3300**

Explores shamanic religious traditions across the world. This form of religion, involving spiritism, animism, trance states, and "mind power," is the oldest and most widespread religion in world history. Covers the "Shramana" disciplines of India, probable source for the name "Shamanism;" Tibet, Central Asia Korea, China, Japan, Australia; Pacific Island, Native American, and traditional African cultures. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

RLST 3400 - Asian Philosophies and Religions

Summer 2010 Registration **RLST 3400**

We in the Western world encounter a vastly different world, a radically different "universe of meaning," when we examine the traditions of the East. Even what we tacitly assume to be "real" is claimed by the Hindus and Buddhists of India to be a grand illusion. The world of China is, again, very different from India. An examination of Tibetan and Japanese religious forms will conclude our study of Asian thought. Cross-listed with PHIL 3666. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

RLST 3500 - Religions of India

Summer 2010 Registration **RLST 3500**

Examines the transcendentalist philosophy of India, which rests at the foundation of the great Eastern religious traditions of Hinduism and Buddhism. The Indian ideas of God, the soul, time, the nature of the universe, and its ultimate goal are examined. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

RLST 3660 - Chinese Philosophy and Culture

Summer 2010 Registration **RLST 3660**

China is a fascinating world with its own characteristic orientation to philosophical questions. Chinese thinkers produced the "Flowering of a Hundred Schools of Thought" in the Axial Age, the same period of time in which philosophy was coming to birth in ancient Greece. Covers some of the Chinese schools, including Confucianism, Taoism, Mohism, Legalism, Chinese "Logic", and the later schools of Neo-Confucianism, Neo-Taoism and Chinese Buddhism. Cross-listed with PHIL 3981. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

RLST 3720 - Religious Narratives

Summer 2010 Registration **RLST 3720**

Investigates the language and structure of religious discourse in Western literature. Welcomes interdisciplinary and comparative perspectives with a focus on cultural constructions of the sacred. Cross-listed with ENGL 3520. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

RLST 3740 - Biblical Traditions: Old Testament

Summer 2010 Registration **RLST 3740**

Investigates the history and nature of the Biblical text. Follows the tradition of critical scholarship beginning in the Enlightenment era and continued down to the present day, sometimes entitled "Secular Humanism." Topics include theories of authorship of the Torah, its general nature and content; the historical books of the Bible, the Prophets, and the Wisdom Literature. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

RLST 3760 - Biblical Studies: New Testament

Summer 2010 Registration **RLST 3760**

Examines the books of the New Testament from a scholarly, historical-critical perspective, which views it as a historically and culturally conditioned text, reflecting the beliefs and attitudes of the authors who produced it. The course covers the canonical gospels, letters, and other writings of the New Testament. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

RLST 3770 - Archaeological Discoveries Relating to the Bible

Summer 2010 Registration **RLST 3770**

Examines the revolutionary impact of archaeology on Biblical Studies. Among these discoveries are Egyptian, Mesopotamian, and Canaanite texts, the Dead Sea Scrolls, and the Gnostic texts. Through these investigations, the Bible will be placed in its appropriate historical, literary and cultural context. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

RLST 4000 - Religion and Cultural Diversity

Summer 2010 Registration **RLST 4000**

Religion is one of the key elements which creates multiculturalism. This course explores issues in religion and religious identity in contemporary America, including Native American spiritual traditions, Jewish-American traditions, Muslim-American traditions, Asian-American traditions, the African-American Pentecostal movement, and the growth of the Black Muslim movement. Attention is also given to the question of gender issues, as the traditional model for gender roles was formulated, in part, from a religious basis. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

RLST 4010 - Comparative Religious Systems

Summer 2010 Registration **RLST 4010**

A cross-cultural analysis of religious belief and behavior. Emphasis is placed on religions found among non-Western cultural groups and includes consideration of how major religions of the world are manifested on local levels. Cross-listed with ANTH 4130, 5130, RLST 5010. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

RLST 4020 - Sociology of Religion

Summer 2010 Registration **RLST 4020**

An intensive review and analysis of the fundamental tenets of religion as a social institution, with emphasis on present-day religious cults, their beliefs and activities in society. Cross-listed with RLST 5020 and SOCY 4610, 5610. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

RLST 4040 - Psychology of Religion

Summer 2010 Registration **RLST 4040**

Examines the theories developed by some of the great names in the field of psychology and their approaches to religion. Questions addressed include why people become religious, how religion functions in their lives, religious experience and assessment of the validity of religious claims. Key theorists studied include: William James, Sigmund Freud, Carl G. Jung, Abraham Maslow and Erich Fromm. Cross-listed with RLST 5040. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

RLST 4060 - Philosophy of Religion

Summer 2010 Registration **RLST 4060**

Nature of religion and methods of studying it. Cross-listed with HUMN 5600, PHIL 4600,

5600, RLST 5060, and SSCI 5600. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

RLST 4070 - Western Religious Thought

Summer 2010 Registration **RLST 4070**

Focuses on philosophers and theologians who have contributed to the evolution of the three great religious traditions of the West: Judaism, Christianity and Islam. Targets thinkers from three periods: the ancient or formative era, the medieval era, and the contemporary era. Note: Specific philosophers chosen may vary in different semesters.

Cross-listed with PHIL 4710. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

RLST 4080 - Eastern Religious Thought

Summer 2010 Registration **RLST 4080**

Parallels the course in Western religious thought. The great religious traditions of the East, including Hinduism, Buddhism, Confucianism, and Taoism, are examined as they are presented in the writings of key philosophical representatives of each tradition.

Cross-listed with PHIL 4720. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

RLST 4100 - Special Topics in Religion

Summer 2010 Registration **RLST 4100**

This special topics course allows for a variety of subjects to be explored in different semesters, including such issues as the nature of religious experience, communication with the divine, specific historical themes and events in religion. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

RLST 4160 - Mysticism

Summer 2010 Registration **RLST 4160**

Explores the mystical strains within the world's great religious traditions. Jewish, Christian, and Islamic mystics did not always express the same beliefs and attitudes as mainstream adherents. When mystics are placed side-by-side, amazing similarities appear. One cannot always tell whether a given mystical statement is Hindu, Jewish, Sufi, or Christian. This class examines these mystical traditions, East and West. Cross-listed with RLST 5160. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

RLST 4260 - Kosmos: Theories of the Universe

Summer 2010 Registration **RLST 4260**

A course in philosophical cosmology using material from the sciences, history and philosophy. The goal is to illuminate our present theories concerning the nature of the universe and the place of life within it. Cross-listed with PHIL 3420. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

RLST 4280 - Current Perspectives on the Evolution of Consciousness and Culture

Summer 2010 Registration **RLST 4280**

Studies of evolution traditionally regard morphology (anatomy) / behavior and mind/consciousness as separate fields that belong either in biology/paleontology or in psychology/philosophy. The "middle ground" behavior, anthropology, social systems, is also treated separately in most cases. Recent approaches tend toward a more holistic view using unifying principles and "laws of nature" that show similar processes (dissipative effects, information theory, development theory) operating across all fields. Examines the relationships and common threads between the physical anatomical evolution of organisms and their behavior perception and consciousness. Prereq: Introductory course in evolution (biology/paleontology), psychology, philosophy, anthropology, or permission of instructor. Cross-listed with GEOL 3100 and PHIL 3100. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

RLST 4300 - Myth and Symbol

Summer 2010 Registration **RLST 4300**

Approaches the field of classical Greek mythology and religion from the perspective of Jungian archetypal theory. The deities of the ancient Greeks are presented as archetypal patterns with universal correlates elsewhere in world religions. A foundation in C. G. Jung's archetypal theory will be offered to ground the course material. Cross-listed with RLST 5300. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

RLST 4320 - Spirituality in the Modern World

Summer 2010 Registration **RLST 4320**

Examines the issue of spiritual currents in the modern world. Joseph Campbell claimed that Western culture long ago lost an active sense of the sacred and that the traditional religions have not been the spiritual center for the vast majority of moderns for centuries. This class looks at the modern spiritual awakening in Shamanism, Eastern thought, the New Age movement, the men's movement, paganism and goddess religion, and the revival of traditional religious forms in recent decades. Prereq: RLST 4300. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

RLST 4340 - The Hero's Journey

Summer 2010 Registration **RLST 4340**

The myth of the hero's journey serves as a metaphor for the vicissitudes life puts each of us through. The hero or heroine represents the ego-self who undertakes the journey--a grand adventure into the realm of the unknown--to seek the treasure. He or she is greatly transformed by the process, ultimately into the great self, who wins the boon to share with all humanity. Versions of the story are found all over the world, such as in the sagas of Gilgamesh, Odysseus, Psyche, King Arthur, Dorothy of Oz, and Luke Skywalker from a galaxy far, far, away. Cross listed with ENGL 3530. **Semester Hours:** 3 to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

RLST 4360 - Freudian and Jungian Perspectives in Dream Analysis

Summer 2010 Registration **RLST 4360**

Focuses on the phenomenon of dreams in a way that differs distinctly from the traditional approach to the subject in the field of psychology. Throughout history, dreams have been regarded as prophetic, as the voice of the gods. These "spiritual" approaches to dreams are examined, as well as some major theorists on dreams, especially the work of Sigmund Freud and C. G. Jung. **Semester Hours:** 3 to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

RLST 4400 - Differing Concepts of God

Summer 2010 Registration **RLST 4400**

God, gods, and goddesses have been imagined in many different modes, forms, aspects, and guises throughout human history. This course investigates Paleolithic models of God, the Great Goddess of the Neolithic era, the gods of mythological traditions, Biblical God, the abstract God of the philosophers, the God of the pantheists, the deists, and the God of the mystics. Cross-listed with RLST 5400, PHIL 4650 and 5655. **Semester Hours:** 3 to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

RLST 4420 - Goddess Traditions

Summer 2010 Registration **RLST 4420**

Explores the many forms which goddesses have assumed through history, including the Neolithic Great Mother and her heiresses in the ancient Mediterranean cultures, such as: Isis, Ishtar, Demeter, Hecate, Aphrodite, Artemis, Athena and others, and their parallels in India. Goddess traditions have encompassed a full spectrum from virgins to Great Mothers to dark underworld goddesses of death and destruction. Cross-listed with RLST

5420 and WGST 4420. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

RLST 4440 - Concepts of the Soul

Summer 2010 Registration **RLST 4440**

Asks the questions: What is the nature of the human being? What makes us "human?" Do humans have a "soul?" What is its nature? Is it different from the "spirit?" What is its ultimate fate? Examines the various theories put forward by philosophers of both Eastern and Western traditions. Cross-listed with RLST 5440 and PHIL 4470, 5470. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

RLST 4460 - Death and Concepts of Afterlife

Summer 2010 Registration **RLST 4460**

Examines how the major religious traditions approach the issue of death. Where the Egyptians were fascinated by death, their Mesopotamian and Hebrew neighbors saw no kind of experience continuing after death. Concepts of the Final Judgment Day and the end of the world follow Zoroastrianism, Christianity, and Islam, while Indian religions developed a sophisticated theory of reincarnation and the "art of dying." Finally, we will turn to Chinese belief in ancestral spirits. Cross-listed with RLST 5460. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

RLST 4480 - Perspectives on Good and Evil

Summer 2010 Registration **RLST 4480**

Examines the "problem of evil." As formulated in the philosophical tradition: if the deity is understood as perfect, then why is there evil? How can a perfect entity create imperfection? Why would an absolutely benevolent God cause or allow the innocent to suffer? Presents the classical formulation of the problem, the traditional solutions offered, and the classical critiques of each answer. Considers the perspectives of the various religious orientations, each of which deals differently with the question of suffering. Cross-listed with PHIL 4480. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

RLST 4500 - Religion and Politics

Summer 2010 Registration **RLST 4500**

Exploration of: (1) theoretical perspectives on the relationship between religion and politics; (2) causes of and justifications for the historical development of the Western separation of "church" and state; (3) contemporary responses to and analyses of this separation; and (4) several current debates about public policy in America that reveal

tensions between these two spheres. Cross-listed with PSCI 4057, 5057 and RLST 5500.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

RLST 4730 - Whores and Saints: Medieval Women

Summer 2010 Registration RLST 4730

Studies how women are presented in texts, as well as works by women. Investigates the roles open to women and societal attitudes toward women, who were considered seductresses, saints, scholars and warriors in the middle ages. Prereq: Nine hours of literature courses or instructor permission. Cross-listed with ENGL 4510, ENGL 5510, RLST 5730 and WGST 4510.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

RLST 4840 - Independent Study: RLST

Summer 2010 Registration RLST 4840

Various topics in religious studies pursued in independent research.**Semester Hours:** 1to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

RLST 5010 - Comparative Religious Systems

Summer 2010 Registration RLST 5010

A cross-cultural analysis of religious belief and behavior. Emphasis is placed on religions found among non-Western cultural groups and includes consideration of how major religions of the world are manifested on local levels. Cross-listed with ANTH 4130, 5130, RLST 4010.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

RLST 5020 - Sociology of Religion

Summer 2010 Registration RLST 5020

An intensive review and analysis of the fundamental tenets of religion as a social institution, with emphasis on present-day religious cults, their beliefs and activities in society. Cross-listed with RLST 4020 and SOCY 4610, 5610.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

RLST 5040 - Psychology of Religion

Summer 2010 Registration RLST 5040

Examines the theories developed by some of the great names in the field of psychology and their approaches to religion. Questions addressed include why people become religious, how religion functions in their lives, religious experience and assessment of the

validity of religious claims. Key theorists studied include: William James, Sigmund Freud, Carl G. Jung, Abraham Maslow and Erich Fromm. Cross-listed with RLST 4040. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

RLST 5060 - Philosophy of Religion

Summer 2010 Registration **RLST 5060**

Nature of religion and methods of studying it. Cross-listed with HUMN 5600, PHIL 4600, 5600, RLST 4060, and SSCI 5600. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

RLST 5160 - Mysticism

Summer 2010 Registration **RLST 5160**

Explores the mystical strains within the world's great religious traditions. Jewish, Christian, and Islamic mystics did not always express the same beliefs and attitudes as mainstream adherents. When mystics are placed side-by-side, amazing similarities appear. One cannot always tell whether a given mystical statement is Hindu, Jewish, Sufi, or Christian. This class examines these mystical traditions, East and West. Cross-listed with RLST 4160. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

RLST 5300 - Myth and Symbol

Summer 2010 Registration **RLST 5300**

Approaches the field of classical Greek mythology and religion from the perspective of Jungian archetypal theory. The deities of the ancient Greeks are presented as archetypal patterns with universal correlates elsewhere in world religions. A foundation in C. G. Jung's archetypal theory will be offered to ground the course material. Cross-listed with RLST 4300. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

RLST 5400 - Differing Concepts of God

Summer 2010 Registration **RLST 5400**

God, gods, and goddesses have been imagined in many different modes, forms, aspects, and guises throughout human history. This course investigates Paleolithic models of God, the Great Goddess of the Neolithic era, the gods of mythological traditions, Biblical God, the abstract God of the philosophers, the God of the pantheists, the deists, and the God of the mystics. Cross-listed with RLST 4400, PHIL 4650 and 5655. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

RLST 5420 - Goddess Traditions

Summer 2010 Registration **RLST 5420**

Explores the many forms which goddesses have assumed through history, including the Neolithic Great Mother and her heiresses in the ancient Mediterranean cultures, such as: Isis, Ishtar, Demeter, Hecate, Aphrodite, Artemis, Athena and others, and their parallels in India. Goddess traditions have encompassed a full spectrum from virgins to Great Mothers to dark underworld goddesses of death and destruction. Cross-listed with RLST 4420 and WGST 4420. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

RLST 5440 - Concepts of the Soul

Summer 2010 Registration **RLST 5440**

Asks the questions: What is the nature of the human being? What makes us "human?" Do humans have a "soul?" What is its nature? Is it different from the "spirit?" What is its ultimate fate? Examines the various theories put forward by philosophers of both Eastern and Western traditions. Cross-listed with RLST 4440 and PHIL 4470, 5470. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

RLST 5460 - Death and Concepts of Afterlife

Summer 2010 Registration **RLST 5460**

Examines how the major religious traditions approach the issue of death. Where the Egyptians were fascinated by death, their Mesopotamian and Hebrew neighbors saw no kind of experience continuing after death. Concepts of the Final Judgment Day and the end of the world follow Zoroastrianism, Christianity, and Islam, while Indian religions developed a sophisticated theory of reincarnation and the "art of dying." Finally, we will turn to Chinese belief in ancestral spirits. Cross-listed with RLST 4460. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

RLST 5500 - Religion and Politics

Summer 2010 Registration **RLST 5500**

Exploration of: (1) theoretical perspectives on the relationship between religion and politics; (2) causes of and justifications for the historical development of the Western separation of "church" and state; (3) contemporary responses to and analyses of this separation; and (4) several current debates about public policy in America that reveal tensions between these two spheres. Cross-listed with PSCI 4057, 5057 and RLST 4500. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

RLST 5730 - Whores and Saints: Medieval Women

Summer 2010 Registration **RLST 5730**

Studies how women are presented in texts, as well as works by women. Investigates the roles open to women and societal attitudes toward women, who were considered seductresses, saints, scholars and warriors in the middle ages. Prereq: Nine hours of literature courses or instructor permission. Cross-listed with ENGL 4510, ENGL 5510, RLST 4730 and WGST 4510. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

RSEM 5000 - Orientation to Research and Measurement in Education

Summer 2010 Registration **REM 5000**

Provides an overview of the research process, various types of research, and major concepts and techniques in educational measurement. The emphasis is on: (1) critiquing educational research studies; and (2) critiquing tests and other measures used in educational research as well as for other assessment purposes. A limited coverage of statistics and evaluation is included. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

RSEM 5050 - Assessment for Teachers

Summer 2010 Registration **REM 5050**

Provides teachers with a conceptual framework for developing new assessments of student learning and attitudes, and for evaluating and selecting assessment instruments developed by others. Techniques of performance assessment and the use of portfolios in assessment are emphasized. A variety of assessment purposes--and their particular uses in placement, grading, instructional planning, and accountability--considered. Students design and administer portfolios and performance assessments; in addition, they read articles from leaders in the field. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

RSEM 5080 - Research for Teachers

Summer 2010 Registration **REM 5080**

Provides teachers with the competencies necessary for examining their professional experiences using formal and informal methods of inquiry. Teachers become more reflective practitioners who investigate questions that arise from their work in schools. The course also prepares teachers to critique published research in a thoughtful manner. The intended audience for the course is beginning and experienced P-12 teachers. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

RSEM 5100 - Basic Statistics

Summer 2010 Registration **REM 5100**

A first-level course on the use and interpretation of descriptive and inferential statistics. Topics covered include: frequency distributions, measures of central tendency and measures of variability; shapes of distributions; standard scores; scattergrams, correlation and regression; t-tests and analysis of variance. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

RSEM 5200 - Introduction to Research Methods

Summer 2010 Registration **REM 5200**

Examines the purposes of research, the methods and designs of quantitative and qualitative research, and the processes involved in research studies. The methods of research examined include experimental designs, quasi-experimental designs, descriptive surveys, case studies, ethnographies and correlational designs. Designing a research study is a part of the course activities. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

RSEM 5300 - Introduction to Measurement

Summer 2010 Registration **REM 5300**

A first-level course that examines the nature and purpose of psychological measurement. Particular attention is paid to the concepts of reliability, validity, norms, interpretation of scores, response sets, fairness in testing, and norm-referenced vs. criterion-referenced interpretation of scores. A variety of instruments that are used to measure human attributes and behaviors are studied. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

RSEM 5350 - Workshop in Instrument Development

Summer 2010 Registration **REM 5350**

Provides an opportunity to learn the art and technology of developing different measures in education. Students develop an instrument of their own design. Topics vary. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

RSEM 5400 - Introduction to Evaluation of Programs and Persons

Summer 2010 Registration **REM 5400**

Models and methods of evaluating programs and persons in education and related fields, such as business and nursing, are examined. Emphasis is given to the topics of formative and summative evaluation, frameworks for program evaluation, teacher evaluation, merit pay, and the measurement and design problems associated with each

topic.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

RSEM 5800 - Workshop: Topics in Research and Evaluation Methodology

Summer 2010 Registration **REM 5800**

Topics and credit hours vary from term to term. Often workshops address a current topic in research, evaluation, or measurement by considering its scholarly foundations and its application to schools and other educational settings.**Semester Hours:** 1to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

RSEM 5840 - Independent Study: RSEM

Summer 2010 Registration **REM 5840**

Semester Hours: 1to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

RSEM 5910 - Practicum in Research and Evaluation Methodology

Summer 2010 Registration **REM 5910**

Supervised work in projects that provide experience in data analysis, research, measurement, or evaluation. Requires a minimum of 75, 150, 225, or 300 clock hours under supervision (for 1, 2, 3, or 4 credit hours, respectively).**Semester Hours:** 1to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

RSEM 5920 - Readings in Educational Statistics

Summer 2010 Registration **REM 5920**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

RSEM 5921 - Readings in Educational Research

Summer 2010 Registration **REM 5921**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

RSEM 5923 - Readings in Educational Measurement

Summer 2010 Registration **REM 5923**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

RSEM 5924 - Readings in Program Evaluation

Summer 2010 Registration **REM 5924**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

RSEM 6050 - Seminar in Assessment Policy Issues

Summer 2010 Registration **REM 6050**

Three public policy issues involving educational assessment are analyzed. The policy issues selected vary to reflect current policy debates. Sample issues are school accountability, grading and report cards, performance-based graduation standards, classification of students as having special needs, merit pay for teachers, and retaining students in grade. Each analysis examines (a) policy history; (b) value assumptions and constituency interests; (c) validity of assessment procedures; and (d) consequences of policy alternatives. Prereq: RSEM 5050 or RSEM 5300 (or another introductory course in educational measurement or assessment.) **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

RSEM 6100 - Methods of Qualitative Inquiry

Summer 2010 Registration **REM 6100**

Prepares graduate students to conduct field research employing qualitative methods and perspectives. Students become familiar with evolving theoretical and methodological perspectives in qualitative research drawn from anthropology, clinical psychology, sociology and education. Students apply techniques of qualitative data collections and analysis in a pilot investigation. Prereq: RSEM 5080 or RSEM 5200 or EDLI 7000 (or their equivalents as determined by the course instructor.) **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

RSEM 7050 - Methods of Survey Research

Summer 2010 Registration **REM 7050**

Covers the purposes and methods of survey research. Topics included are: goals and uses of survey research, data collection methods, questionnaire and interview protocol design, reliability and validity of data collection methods, sampling, ways to reduce error in data collection and sampling, data analysis techniques commonly used in survey research studies, interpreting and reporting results, and ethical issues. Students design and conduct a survey as part of the course requirements. Prereq: RSEM 5100, 5200 or EDLI 7000 (or their equivalents, as determined by the course instructor.) **Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

RSEM 7100 - Advanced Methods of Qualitative Inquiry

Summer 2010 Registration **REM 7100**

An advanced seminar directed at individuals who have completed an introductory course in methods of qualitative research. Topics included are qualitative data collection, data analysis, and writing about data. Students collect and analyze data. Prereq: RSEM 6100 or equivalent. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

RSEM 7110 - Intermediate Statistics

Summer 2010 Registration **REM 7110**

Continuation of RSEM 5100, covering more advanced methods of analyzing data, with an emphasis on the use and interpretation of descriptive and inferential techniques. Topics covered are one-way and two-way analysis of variance; power; multiple comparisons; factorial designs and factorial ANOVA; partial correlation, multiple correlation and regression; analysis of covariance; and selected use of packaged statistical programs (SPSS). Prereq: RSEM 5100 or equivalent. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

RSEM 7120 - Advanced Methods in Quantitative Inquiry and Measurement

Summer 2010 Registration **REM 7120**

Covers advanced topics in quantitative design and analysis, including advanced measurement topics. Topics include: specific types of design used in experimental, quasi-experimental, co-relational, and survey research; multivariate ANOVA, ANCOVA and MRC; factor and trend analyses; classical test theory; and IRT approaches. Students analyze their own data using techniques presented in the course. Prereq: RSEM 5080 or RSEM 5200 and RSEM 7110 or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

RSEM 7150 - Mixed Methods Research

Summer 2010 Registration **REM 7150**

This seminar is directed at individuals who have completed both qualitative and quantitative research courses and are interested in combining these in the mixed-method approach. Focus will be on developing the skills and knowledge needed to formulate mixed-methodological research questions in which quantitative and qualitative data collection, analysis and interpretational techniques are utilized simultaneously or sequentially. Prereq: EDLI 7000, RSEM 7110 and 6100 or equivalents or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

RSEM 7240 - Patterned Inquiry for Educational Administrators

Summer 2010 Registration **REM 7240**

This seminar provides students with a conceptual and practical basis for conducting and evaluating educational research. Its focus is on the application of research to problems of administrative practice. The seminar is also intended to prepare students for dissertation research. Prereq: RSEM 7110. **Semester Hours:** 1to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

RSEM 7500 - Special Topics: Research and Evaluation Methods

Summer 2010 Registration **REM 7500**

Specific topics vary from semester to semester. **Semester Hours:** 1to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

SCHL 5020 - Collection Development

Summer 2010 Registration **SL 5020**

Principles and practices for developing information collections to meet user needs. Includes selection, evaluation and policy and procedure development for all materials, including print, electronic technologies and multimedia. Prereq: SCHL 5530. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SCHL 5030 - Information Literacy and Reference

Summer 2010 Registration **SL 5030**

Teaching, assessment, and integration of information literacy skills and educational technology standards with subject content areas. Reference collection development, policies and procedures, and use of and reference tools, including electronic resources. Emphasis is placed on standards-based collaborative planning and instruction with classroom teachers. Prereq: SCHL 5530, 5110 and 5020. **Semester Hours:** 4to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

SCHL 5040 - Information Storage and Utilization

Summer 2010 Registration **SL 5040**

Provides basic principles and practices of utilizing standard methods for organizing, accessing and storing information. Includes cataloging and classification in text-based and electronic systems. **Semester Hours:** 2to 2

Registration is changing. Visit our website for details ucdenver.edu/registration.

SCHL 5110 - Integrating Instructional Technology Practices in School Libraries

Summer 2010 Registration **SL 5110**

Analyze instructional technology use in school library settings. Discuss current trends

and issues related to the use of technology within schools. Emphasis integrating instructional technology that focuses on student achievement and the students' ability to use technology resources that promote critical thinking skills, information evaluation and dissemination skills. **Semester Hours:** 2to 2

Registration is changing. Visit our website for details ucdenver.edu/registration.

SCHL 5160 - Managing School Library Programs

Summer 2010 Registration SL 5160

Case studies in the organization and administration of school library and instructional leadership of programs and projects. Topics include project management, personnel administration, budget development, management philosophies, copyright and intellectual freedom. Prereq: SCHL 5530, SCHL 5110, SCHL 5120, SCHL 5130 & SCHL 5140. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SCHL 5530 - Foundations of School Librarianship

Summer 2010 Registration SL 5530

This course is the first course in the School Library programs and provides an overview of school librarianship. The course is designed to develop an understanding of the history of school library programs, their current place in the public school system and society and their future. **Semester Hours:** 2to 2

Registration is changing. Visit our website for details ucdenver.edu/registration.

SCHL 5830 - School Library Workshop

Summer 2010 Registration SL 5830

Specific content and titles vary depending upon the particular school library skills addressed in the course. **Semester Hours:** 0.5to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

SCHL 5911 - School Library Field Experience-Elementary

Summer 2010 Registration SL 5911

Provides practical experience in the management of a school library program. Includes 90 hours in an elementary school library plus instruction within an online seminar for practicum coaching and field experience goals and instructional development. Prereq or Coreq: SCHL 5160. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SCHL 5912 - School Library Field Experience-Secondary

Summer 2010 Registration **SL 5912**

Provides practical experience in the management of a school library program. Includes 90 hours in a secondary (7-12) school library plus instruction within an online seminar for practicum coaching and field experience goals and instructional development. Prereq or Coreq: SCHL 5160. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SCHL 6720 - Practitioner-Based Research in School Libraries

Summer 2010 Registration **SL 6720**

Analyze, evaluate and interpret published research conducted in library science. Provide an introduction to qualitative and quantitative data collection and data analysis measures. A school library practitioner-based action research project will be produced.

Prereq: SCHL 5160. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SCHL 6999 - Leadership and Practice in School Libraries

Summer 2010 Registration **SL 6999**

Designed to be the final class in the Master's in School Libraries Program, it is a reflective examination of the nature of contemporary leadership and practice in the field and provides a structure and forum for the successful completion of the comprehensive portfolio. Prereq: SCHL 5020, SCHL 5110, SCHL 5160 and SCHL 5530. **Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SECE 5060 - Improvement of Instruction

Summer 2010 Registration **SECE 5060**

Designed to assist the educator in the systematic improvement of instruction. Emphasis is on emergent knowledge related to successful classroom practices, techniques of assessment, analysis and action related to the improvement of professional skills.

Cross-listed with ELED 5060. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SECE 5200 - Classroom Management

Summer 2010 Registration **SECE 5200**

Instructional management, physical management, and behavior management are studied as interactive components in the establishment and maintenance of an effective learning environment. Cross-listed with ELED 5200. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SECE 5300 - Introductory Curriculum and Methods in Secondary Mathematics

Summer 2010 Registration **SECE 5300**

Surveys secondary mathematics curriculum and methods for pre-service teachers. Topics include planning lessons, motivation, grading, constructing tests, problem solving, teaching aids, expository and discovery lessons, teaching concepts, procedures and problem solving. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

SECE 5340 - Multicultural Science Education

Summer 2010 Registration **SECE 5340**

This course examines literature in science education related to multicultural issues, topics will be framed by an understanding of equity in diverse, urban classrooms and how it informs curriculum and instruction. Cross-listed with ENVS 5340. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

SECE 5350 - Issues and Problems in Science Education

Summer 2010 Registration **SECE 5350**

Recent developments in theory, curriculum, methods, and materials in secondary science, examined for their contribution to the objectives of science education. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

SECE 5400 - Curriculum in Secondary Mathematics

Summer 2010 Registration **SECE 5400**

Investigates curriculum in middle and high school mathematics, development, history and trends, and pertinent research. Participants construct and share curriculum relevant to their interest. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

SECE 5401 - Assessment in Mathematics Education

Summer 2010 Registration **SECE 5401**

Curriculum-based assessment covering nature of assessment and its relation to evaluation and grading; teacher-made assessments; validity and authentic assessment; techniques for assessing learning of mathematical concepts, procedures, and problem solving. Emphasis on assessment practices of mathematics teachers. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

SECE 5410 - Advanced Methods and Strategies in Secondary Mathematics

Summer 2010 Registration **SECE 5410**

An in-depth investigation of specific methods and strategies suitable for teaching mathematics for middle and senior high schools. Participants model and share various strategies, including the expository, collaborative discovery, laboratory, and Socratic methods. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SECE 5411 - Mathematics Education and Gender

Summer 2010 Registration **SECE 5411**

Investigates gender-inclusive curriculum and teaching methods, equity and assessment, mathematical life histories, women in mathematics history, women's individual development and voice, single sex programs, and gender differences. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SECE 5417 - Structure of Rational Numbers

Summer 2010 Registration **SECE 5417**

Emphasizes the use of multiple solution strategies to examine the structure of rational numbers. The assigned problems allow elementary and secondary teachers to investigate the mathematical notions of equivalence, properties, unitization, partitioning, ratios and proportionality. Prereq: Teaching license or permission of instructor. Cross-listed with ELED 5417. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SECE 5418 - Mathematical Modeling

Summer 2010 Registration **SECE 5418**

Elementary and secondary teachers explore settings where mathematics is utilized in everyday activities. Teachers create mathematical models to describe events or situations in the world and use a variety of modeling strategies to solve problems. Prereq: Teacher licensure or permission of instructor. Cross-listed with ELED 5418. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SECE 5419 - Exploring the Structure of Geometry Using Technology

Summer 2010 Registration **SECE 5419**

Develops elementary and secondary teachers' conceptual understanding of geometric properties and theorems through investigations on dynamic computer software. The software enhances and extends teachers' ability to solve complex problems by

manipulating abstract ideas on the computer. Prereq: teaching license or permission of instructor. Cross-listed with ELED 5419.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

SECE 5420 - Teaching Mathematics to Low Achievers

Summer 2010 Registration **SECE 5420**

Problems and characteristics of low achievers, motivation, attitudes, scaffolding with available materials, programs for low achievers, self-esteem, mathematics laboratory and activity approach to teaching mathematics. Appropriate for all grades.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SECE 5430 - Teaching Aids in Mathematics Education

Summer 2010 Registration **SECE 5430**

Examination, production, and use of manipulative aids, audiovisual aids, and other materials for teaching mathematics. Open to elementary and secondary teachers.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SECE 5440 - Topics in Mathematics Education

Summer 2010 Registration **SECE 5440**

An in-depth study of topics such as computers, testing, learning theory and mathematics laboratories. (May be repeated as topics vary.)**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SECE 5460 - Secondary Social Studies Methods and Curriculum Design

Summer 2010 Registration **SECE 5460**

Recent developments in theory and materials in the social studies are examined, and present practices are analyzed for their contribution to general goals of social studies education. Appropriate for secondary teachers and elementary teachers with a specialization in social studies.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SECE 5464 - Teaching About Ethnicity, Race and Prejudice

Summer 2010 Registration **SECE 5464**

Designed to introduce the nature of racial and ethnic groups, prejudice, discrimination and ethno violence. It also includes the teaching about these and related topics and deals with resolving problems of intergroup relations in schools and institutional settings.

Cross-listed with ELED 5464. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SECE 5465 - Teaching Critical Issues in Social Studies: An Interdisciplinary Approach

Summer 2010 Registration **SECE 5465**

An in-depth study of critical social issues related to global or international; ethnicity, race, gender and minorities; cross-cultural studies; and current societal problems. Requires an interdisciplinary approach and covers the structure of the social science disciplines.

Prereq: A minimum of 24 semester hours in history and social sciences. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SECE 5480 - Museum Studies in Paleontology

Summer 2010 Registration **SECE 5480**

A practical laboratory-based course covering aspects of museum studies related to paleontological collections. Students learn how to stabilize and prepare bones removed from fossil quarries; learn molding and casting techniques for bones and fossils; assist with the cataloging and curation of the collection; and participate in designing museum displays. Prereq: At least one science class. Cross-listed with GEOL 3415, ELED 5480. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SECE 5490 - Middle School Curriculum

Summer 2010 Registration **SECE 5490**

Explores the unique curriculum requirements of transient youth. Topics to be addressed include team teaching, interdisciplinary curricula, flexible scheduling, basic skills development, guidance function, fine arts, practical arts, industrial arts, career education, teaching strategies and management techniques. Cross-listed with ELED

5490. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SECE 5500 - The Nature of Science

Summer 2010 Registration **SECE 5500**

This course is a critical exploration of science and scientific knowledge using an epistemological approach to ask (and possibly answer) questions about sociological issues in science and implications for science research, teaching and learning. Cross-listed with ENVS 5500. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SECE 5510 - Teacher Leadership: Theory to Reality

Summer 2010 Registration **SECE 5510**

Working with colleagues in schools to make a difference as a team member and a change agent requires knowledge and skills that are "more than teachers, yet different from administrators" (Danielson, 2006). This course will provide teachers with skill building related to what it takes for teachers to improve schools. Cross-listed with ELED 5510. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SECE 5520 - Teacher Leadership: Essential Knowledge

Summer 2010 Registration **SECE 5520**

Teacher leaders need expertise about what constitutes a quality curriculum and how best to guide others to develop lessons with assessments that reflect essential standards. They use culturally responsive and differentiated teaching strategies to assure that learning occurs. Cross-listed with ELED 5520. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SECE 5530 - Teacher Leadership: Vital Skills

Summer 2010 Registration **SECE 5530**

Teacher leaders need skills in collaboration, facilitation and coaching in order to work with colleagues in ways that will optimally impact student learning. This course will provide theory and practice in models of adult learning, professional development and communication. Cross-listed with ELED 5530. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SECE 5650 - Environmental Education

Summer 2010 Registration **SECE 5650**

Theory and practice of conservation education, which include use of resource personnel and the study of curricular and instructional development. Field experiences are incorporated. Primarily oriented to elementary and junior high school. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SECE 5660 - Energy Education

Summer 2010 Registration **SECE 5660**

Explores current energy problems. Students examine such topics as fuels from plants, fuels from wastes, fossil fuels, nuclear energy, wind energy, geothermal energy, solar energy and energy conservation. Included is a demonstration of available educational resources for grades K-12. The purpose of the course is to make technical aspects of

energy accessible to the lay person. Cross-listed with ELED 5660.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

SECE 5780 - Storytelling

Summer 2010 Registration **SECE 5780**

Explores the history, function, philosophy, and techniques of storytelling. This class also includes collecting, selecting, preparing, developing, and delivering stories. Research and resources are emphasized. Cross-listed with ELED 5780.**Semester Hours:** 1to 4
Registration is changing. Visit our website for details ucdenver.edu/registration.

SECE 5800 - Curriculum Workshop for Secondary Teachers

Summer 2010 Registration **SECE 5800**

Opportunity to construct curriculum relevant to teachers' interests. Topics and credit hours vary.**Semester Hours:** 0.5to 4
Registration is changing. Visit our website for details ucdenver.edu/registration.

SECE 5840 - Independent Study: SECE

Summer 2010 Registration **SECE 5840**

Semester Hours: 1to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

SECE 5910 - Advanced Practicum in Teaching

Summer 2010 Registration **SECE 5910**

This course is not to be used as independent study, but is to be used by students approved in advance by the director of teacher education. This course fulfills the student teaching requirement for students seeking a second endorsement. Prereq: Permission of instructor.**Semester Hours:** 1to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

SECE 5920 - Readings in Secondary Education

Summer 2010 Registration **SECE 5920**

Semester Hours: 1to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

SECE 5930 - Internship in Secondary Education

Summer 2010 Registration **SECE 5930**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SECE 5950 - Master's Thesis

Summer 2010 Registration **SECE 5950**

Semester Hours: 1to 8

Registration is changing. Visit our website for details ucdenver.edu/registration.

SECE 6100 - Seminar in Secondary Education

Summer 2010 Registration **SECE 6100**

Students work on individual topics and report orally and in writing. Prereq: Permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SECE 6110 - Curriculum in Urban Studies

Summer 2010 Registration **SECE 6110**

Places curriculum development in the historical, social, and political context of educational change. Considers underlying concepts and assumptions, examines the implications of implementation theory and practice for school restructuring, and professional development. Prereq: graduate student status. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SECE 6120 - International Perspectives on the Curriculum

Summer 2010 Registration **SECE 6120**

Considers schooling patterns in the U.S., the U.K., Japan, Australia, and several European countries, examining different approaches to curriculum issues in relation to social, historical, and economic factors. Prereq: FNDS 5500 or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SECE 6840 - Independent Study: SECE

Summer 2010 Registration **SECE 6840**

Semester Hours: 1to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

SECE 6910 - Geology Field Study in Hawaii for Teachers

Summer 2010 Registration **SECE 6910**

Integrated summer field study course in Hawaii with emphasis on science education. Topics include: structural geology/volcanism, marine biology or oceanography, botany, natural energy, astronomy and human interaction. Participants are involved in hands-on science activities utilizing the vast Hawaiian Island resources. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

SECE 6950 - Master's Thesis

Summer 2010 Registration **SECE 6950**

Semester Hours: 4to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

SJUS 2000 - Democratic Participation and Social Justice

Summer 2010 Registration **SJUS 2000**

Examines how well the United States, Colorado and Denver are doing in addressing issues of social justice, such as inequality and environmental degradation. Explores various modes of democratic participation--electoral politics, community activism, and lifestyle changes--in advancing social justice. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

SJUS 2010 - Social Justice: Theories, Narratives, and Technologies

Summer 2010 Registration **SJUS 2010**

How can citizens of a democracy address social justice issues? This course examines theoretical perspectives relevant to social justice, the narratives which express and question social order, and the technologies which alternately shape and reflect local, regional, and global cultures. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

SJUS 4840 - Independent Study

Summer 2010 Registration **SJUS 4840**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SOCY 1001 - Introduction to Sociology

Summer 2010 Registration **SOC 1001**

A survey course in which the main concepts that define the sociological perspective are presented, and a picture of society is provided by examining major social institutions and forms of social organization within society. **Semester Hours:** 3to 3 **GT Pathways**

Category Key: GT-SS3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SOCY 1050 - Analysis of Modern Society

Summer 2010 Registration **SOC 1050**

Examines various sociological views of modern society, including those of Lundberg, Mills, Riesman, Goffman, Sorokin, Cohen and others. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

SOCY 1111 - Freshman Seminar

Summer 2010 Registration **SOC 1111**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SOCY 2462 - Introduction to Social Psychology

Summer 2010 Registration **SOC 2462**

Studies the development and functioning of persons, especially within a group context, and the dynamics of small groups. Emphasis is on import of symbols for human behavior, development of self-concepts, and the processes of competition and cooperation in group dynamics. **Semester Hours:** 3to 3 **GT Pathways Category Key:** GT-SS3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SOCY 3001 - Urban Sociology

Summer 2010 Registration **SOC 3001**

The city and urban society are examined in terms of social structure, residential and institutional patterning, process of interaction, demographic processes, and patterns of growth and change. Cross-listed with ETST 3001. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

SOCY 3010 - Sociology of Human Sexuality

Summer 2010 Registration **SOC 3010**

Increases the understanding of differences in views of sexuality, specifically the link between sex and reproduction and its role as the motivation for gender roles and sex acts. Explores the history of sexuality, cross-cultural studies and primate modeling. Cross-listed with WGST 3010. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

SOCY 3020 - Race and Ethnicity in the U.S.

Summer 2010 Registration **SOC 3020**

A sociological examination of race and ethnicity in contemporary U.S. society. Includes a focus on the nature and causes of prejudice and discrimination. Dominant-minority relations are examined, with an emphasis on current status of minority groups and issues. Prereq: Six hours of social science. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

SOCY 3030 - Social Change

Summer 2010 Registration **SOC 3030**

Process of change in Western societies and its effects on the individual, communities, and economic and political institutions. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

SOCY 3040 - Drugs, Alcohol & Society

Summer 2010 Registration **SOC 3040**

Explores our culture's relationship with drugs and alcohol from a sociological perspective, investigating all spheres of substance use: recreational, medicinal, instrumental & religious. Examines our long turbulent history with these chemicals, and the ways in which they have shaped our society. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

SOCY 3050 - Sociology of Education

Summer 2010 Registration **SOC 3050**

Topics covered include school socialization, A.D.D. diagnoses and drugs, special education, effects of standardized testing, race, ethnicity, gender, poverty in schools, public policies and funding, teacher burnout, student aspirations, secondary education and local issues in education. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

SOCY 3080 - Sex and Gender

Summer 2010 Registration **SOC 3080**

Causes and consequences of sex role differentiation at the individual, group and societal levels. Current issues related to changing norms and values concerning gender in modern society are examined. Cross-listed with WGST 3080. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

SOCY 3111 - Research Methods

Summer 2010 Registration **SOC 3111**

Design of social research. Application of statistical techniques and procedures to social phenomena. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SOCY 3121 - Statistics

Summer 2010 Registration **SOC 3121**

Quantitative techniques used in analyzing social phenomena. Prereq: MATH 1070 or equivalent. **Semester Hours:** 4to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

SOCY 3297 - Social History of Asian Americans

Summer 2010 Registration **SOC 3297**

Introductory-level course surveys the social history of Asian American groups from the mid-19th century to the present. Examines immigration patterns, the development of communities, social and economic problems, and anti-Asian movements and activities. Cross-listed with ETST 3297. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SOCY 3300 - Advanced Social Problems

Summer 2010 Registration **SOC 3300**

Social problems are the subject of controversy, such as that surrounding controversy may swirl around definitions (e.g., the social net and the poverty line), around degree of seriousness, about "causes," and inevitably about solutions. Controversy also centers on the "proper" role of the social theorist and social scientist, observer only or activist as well? While other disciplines study social problems, they are the very heart of the sociology perspective, and the wellspring of sociological inquiry. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SOCY 3460 - The Social Psychology of Intergroup Relations

Summer 2010 Registration **SOC 3460**

Study of those aspects of human interaction which deal with individuals perceiving themselves, and/or being perceived by others, as members of a social category. Focuses on the dynamics of intergroup conflicts--how they arise, what course they may take, and how they might be resolved. Prereq: Six hours of sociology, psychology, or any combination of the two. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SOCY 3480 - Global Issues

Summer 2010 Registration **SOC 3480**

Social issues such as race relations, social inequality, urbanization, family dynamics and global competition are examined using different theoretical perspectives. Existing policies are used to study "private troubles" and "public issues" and the relationships among global, national and local levels. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SOCY 3490 - Criminology

Summer 2010 Registration **SOC 3490**

Theories, nature and causes of crime as a social phenomenon. Processes of making laws, breaking laws, and reaction toward the breaking of laws. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SOCY 3500 - Topics in Sociology

Summer 2010 Registration **SOC 3500**

Special topics in sociology to be selected by the instructor. Note: Can be taken more than once when topics vary. **Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SOCY 3510 - Topics in Sociology

Summer 2010 Registration **SOC 3510**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SOCY 3520 - Topics in Sociology

Summer 2010 Registration **SOC 3520**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SOCY 3530 - Topics in Sociology

Summer 2010 Registration **SOC 3530**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SOCY 3540 - Topics in Sociology

Summer 2010 Registration **SOC 3540**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SOCY 3550 - Topics in Sociology

Summer 2010 Registration **SOC 3550**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SOCY 3560 - Death and Dying

Summer 2010 Registration **SOC 3560**

Designed to examine the attitudes, customs, and institutions related to death and dying in contemporary American society. Several theoretical approaches from a sociological perspective are utilized, as well as historical and cross-cultural data. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SOCY 3600 - Social Relations

Summer 2010 Registration **SOC 3600**

The course has two aims: first, to improve the student's abilities to observe, analyze, and understand his own behavior and that of others in everyday interpersonal situations; and second, to improve his ability to see the small group as a social system. The student is expected to demonstrate his abilities by effective participation in his group as well as in periodic written analyses. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SOCY 3650 - Sociology of Music

Summer 2010 Registration **SOC 3650**

Focuses on the meaning/use of music in society. Explores censorship, organization of the recording industry, sociocultural contexts in which music is produced/distributed/listened to and the relationship between music and technology along with musical applications and associations. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SOCY 3700 - Sociology of the Family

Summer 2010 Registration **SOC 3700**

The family as a social institution. Historical development and contemporary cross-cultural analysis, with emphasis on the contemporary American family. Cross-listed with WGST 3700. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SOCY 3840 - Independent Study: SOCY

Summer 2010 Registration **SOC 3840**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SOCY 3939 - Internship/Cooperative Education

Summer 2010 Registration **SOC 3939**

Designed experiences involving application of specific, relevant concepts and skills in supervised employment situations. Prereq: Junior standing and 2.75 GPA. **Semester**

Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SOCY 4040 - Social Determinants of Health

Summer 2010 Registration **SOC 4040**

This course explores social inequalities in physical and mental health, the illness experience, the healing professions, health policy, relations between providers and patients, and the structure, access to, and financing of health care organizations, with some cross-national discussions. Prereq: Upper-division standing. Cross-listed with SOCY 5040, HBSC 4040/5040. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SOCY 4101 - Applied Statistics Using SAS and SPSS I

Summer 2010 Registration **SOC 4101**

Teaches the practical statistical tools social scientists use to analyze real-world problems. Split into four modules, each taught by a different instructor. The first module introduces SAS and SPSS; modules 2-4 are problem-based and cover topics such as Anova, multivariate regression, and cluster analysis. Prereq: Any statistics course. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SOCY 4102 - Applied Statistics Using SAS and SPSS II

Summer 2010 Registration **SOC 4102**

Students use the skills they learned in the previous semester to analyze a social issue of their choosing and present their findings. Note: A continuation of SOCY 4101. In addition to lectures, weekly one-on-one meetings between faculty and students are required.

Prereq: SOCY 4101. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SOCY 4110 - Sociology of Health Care

Summer 2010 Registration **SOC 4110**

Examines the health care institutions of the United States. Issues such as the rising cost, the effect of class, racial and gender inequality, the professionalization and monopolization of roles, the current restructuring, construction of illness and health, managed care, health care for profit and ethics of health care decisions. Cross-listed with SOCY 5110. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SOCY 4120 - Popular Culture and the American Family

Summer 2010 Registration **SOC 4120**

A course in family sociology in which the ways American family is portrayed in the mass media and popular culture are studied. Even though the historical evolution of this reciprocal relationship is not ignored, the focus is on today's relevant issues. Cross-listed with SOCY 5120. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SOCY 4150 - History of Sociological Theory

Summer 2010 Registration **SOC 4150**

An analysis of the major contributions and determinants of earlier social analysts to present-day social thought and analysis of pertinent sociological issues. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SOCY 4160 - Contemporary Sociological Theory

Summer 2010 Registration **SOC 4160**

The explication of various conceptual approaches to the problems of social order, societal functioning and integration, social conflict, and social structural change by the examination of the work of contemporary theorists. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SOCY 4220 - Population Change and Analysis

Summer 2010 Registration **SOC 4220**

The sociological importance of population study. Advanced demographic analysis and population theory. Natality, mortality, problems of population growth and international and internal migrations, population policy, and aspects of population planning and control. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SOCY 4280 - Urban Social Space

Summer 2010 Registration **SOC 4280**

The city simultaneously attracts and repulses us. It has openness and beauty; it is also cramped, crowded, and ugly. The city provides us with freedoms undreamed of in other times and places, yet it restricts our movements and activities. This course examines how different professionals have viewed the city, with particular attention to the spaces in the city. Both social and physical spaces are discussed. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

SOCY 4290 - Aging, Society and Social Policy

Summer 2010 Registration **SOC 4290**

The role of the aged in today's society. Emphasizes interrelationships of the aged with the family, community, work, retirement and leisure. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

SOCY 4340 - Juvenile Delinquency

Summer 2010 Registration **SOC 4340**

Factors involved in delinquent behavior. Problems of adjustment of delinquents, and factors in treatment and post-treatment adjustment. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

SOCY 4440 - Social Stratification

Summer 2010 Registration **SOC 4440**

The relations among the concentration of income and wealth, economic organization and power, power and class phenomena in the United States. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

SOCY 4460 - Hate Groups and Group Violence

Summer 2010 Registration **SOC 4460**

Social sciences help us understand the phenomena of hate groups and group violence and contribute toward their elimination. Examples are examined using theoretical perspectives on different levels of analysis and within different areas of research. Cross-listed with SOCY 5680. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

SOCY 4475 - Self and Identity

Summer 2010 Registration **SOC 4475**

A course in social psychology focusing on individuals in social interaction. Focuses on self-conception, identity presentation of self, and self and emotion management. Major theories and research in social psychology literature are examined. Cross-listed with

SOCY 5475. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SOCY 4510 - Advanced Study of Social Change

Summer 2010 Registration **SOC 4510**

Historical change of societies from one epoch to another (e.g., from feudalism to capitalism) and from one stage to another (e.g., competitive capitalism to monopoly capitalism), with focus on attendant social processes such as development of the working class, the rise of the corporation, the expanding role of the state, the irrationality of growth, and economic crises and imperialism. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SOCY 4520 - Collective Behavior

Summer 2010 Registration **SOC 4520**

Social, cultural, and psychological factors affecting behavior in unpredictable situations. An in-depth analysis of social change through such phenomena as riots, crowds, publics and social movements. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SOCY 4610 - Sociology of Religion

Summer 2010 Registration **SOC 4610**

An intensive review and analysis of the fundamental tenets of religion as a social institution, with emphasis on present-day religious cults, their beliefs and activities in society. Cross-listed with SOCY 5610, RLST 4020, 5020. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SOCY 4640 - Sociology of Childhood and Adolescence

Summer 2010 Registration **SOC 4640**

An in-depth overview of the theories and research regarding the life course understanding of infancy, childhood and adolescence. Children's lives and cultures in relation to adults and their transition from childhood to adolescence are studied. Cross-listed with SOCY 5640. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SOCY 4650 - Sociology of Adulthood and Aging

Summer 2010 Registration **SOC 4650**

An in-depth overview of the theories and research using the life course understanding of adulthood and aging. Adult's lives, transition from adulthood to elderly status, and social

policy issues are also studied. Cross-listed with SOCY 5650. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

SOCY 4700 - Sociology of Law

Summer 2010 Registration **SOC 4700**

Consideration of the formulation, interpretation, and legitimacy of legal rules within the context of social organization. The examination of a major social institution in modern society. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SOCY 4770 - Advanced Topics in Sociology

Summer 2010 Registration **SOC 4770**

Advanced study of special topics in sociology to be selected by the instructor. Note: May be repeated for credit when topics vary. Cross-listed with SOCY 5770. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SOCY 4771 - Advanced Topics in Sociology

Summer 2010 Registration **SOC 4771**

Advanced study of special topics in sociology to be selected by the instructor. Note: May be repeated for credit when topics vary. Cross-listed with SOCY 5771. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SOCY 4772 - Advanced Topics in Sociology

Summer 2010 Registration **SOC 4772**

Advanced study of special topics in sociology to be selected by the instructor. Note: May be repeated for credit when topics vary. Cross-listed with SOCY 5772. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SOCY 4773 - Advanced Topics in Sociology

Summer 2010 Registration **SOC 4773**

Advanced study of special topics in sociology to be selected by the instructor. Note: May be repeated for credit when topics vary. Cross-listed with SOCY 5773. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SOCY 4774 - Advanced Topics in Sociology

Summer 2010 Registration **SOC 4774**

Advanced study of special topics in sociology to be selected by the instructor. Note: May be repeated for credit when topics vary. Cross-listed with SOCY 5774. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SOCY 4780 - Violence in Relationships

Summer 2010 Registration **SOC 4780**

Course focuses on the study of violence among individuals involved in intimate relationships; factors in society such as norms, laws and institutions that are related to creating violence among intimates; and social policies, prevention, intervention and treatment programs. Prereq: SOCY 1001, or a social science course. Cross-listed with SOCY 5780. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SOCY 4831 - Senior Seminar

Summer 2010 Registration **SOC 4831**

Seminar for senior sociology majors considering important concepts, issues, and problems in sociology. Prereq: SOCY 3111 and 3121. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SOCY 4840 - Independent Study: SOCY

Summer 2010 Registration **SOC 4840**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SOCY 4910 - Research Practicum

Summer 2010 Registration **SOC 4910**

Practical experiences for undergraduates in application of principles of research design and data processing to a social research problem selected by the instructor. Prereq: Permission of instructor required. **Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SOCY 5000 - Professional Seminar: Sociological Inquiry

Summer 2010 Registration **SOC 5000**

Orients new graduate students to key elements of graduate and professional levels of sociological inquiry. Topics include analyses of basic theoretical and epistemological

issues, the history and contemporary development of the discipline, essential research programs and an introduction to faculty research. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

SOCY 5014 - Classical Sociological Theory

Summer 2010 Registration **SOC 5014**

Examines the emergence and development of sociological ideas, concepts, and principles. Introduces students to the historical and social contexts in which theories of society are instituted. Particular attention is paid to the importance of and implication to contemporary sociology made by classical sociologists such as Durkheim, Marx, and Weber. Prereq: SOCY 4150. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

SOCY 5015 - Contemporary Sociological Theory

Summer 2010 Registration **SOC 5015**

The explication of various conceptual approaches to the problem of social order, societal functioning and integration, social conflict, and social structural change by the examination of the work of contemporary theorists. Note: Required for M.A. students in sociology. Prereq: Must have successfully completed an undergraduate course in contemporary sociological theory and SOCY 5014. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

SOCY 5024 - Seminar: Research Methods I

Summer 2010 Registration **SOC 5024**

Problems and procedures in research design, data collection and processing. Note: Required for M.A. graduate students in sociology. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

SOCY 5040 - Social Determinants of Health

Summer 2010 Registration **SOC 5040**

This course explores social inequalities in physical and mental health, the illness experience, the healing professions, health policy, relations between providers and patients, and the structure, access to, and financing of health care organizations, with some cross-national discussions. Prereq: Graduate standing. Cross-listed with SOCY 4040, HBSC 4040/5040. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

SOCY 5110 - Sociology of Health Care

Summer 2010 Registration **SOC 5110**

Examines the health care institutions of the United States. Issues such as the rising cost, the effect of class, racial and gender inequality, the professionalization and monopolization of roles, the current restructuring, construction of illness and health, managed care, health care for profit and ethics of health care decisions. Cross-listed with SOCY 4110. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SOCY 5120 - Popular Culture and the American Family

Summer 2010 Registration **SOC 5120**

A course in family sociology in which the ways American family is portrayed in the mass media and popular culture are studied. Even though the historical evolution of this reciprocal relationship is not ignored, the focus is on today's relevant issues. Cross-listed with SOCY 4120. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SOCY 5183 - Seminar: Quantitative Data Analysis

Summer 2010 Registration **SOC 5183**

A research-oriented seminar stressing the utilization of social data already collected in the test or generation of sociological theory. Note: Required for M.A. graduate students in sociology. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SOCY 5220 - Population Change and Analysis

Summer 2010 Registration **SOC 5220**

The sociological importance of population study, advanced demographic analysis, and population theory. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SOCY 5430 - Societies in Transition

Summer 2010 Registration **SOC 5430**

A description and analysis of changing social structures and social relationships as a response to technological innovation and change. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SOCY 5440 - Seminar: Social Stratification

Summer 2010 Registration **SOC 5440**

Historical development of various systems of production of social surplus, its differential distribution among distinct social groups, and the effects on social structure. **Semester**

Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SOCY 5475 - Self and Identity

Summer 2010 Registration **SOC 5475**

A course in social psychology focusing on individuals in social interaction. Focuses on self-conception, identify presentation of self, and self and emotion management. Major theories and research in social psychology literature are examined. Cross-listed with SOCY 4475.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SOCY 5480 - Graduate Special Topics

Summer 2010 Registration **SOC 5480**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SOCY 5500 - Graduate Special Topics

Summer 2010 Registration **SOC 5500**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SOCY 5550 - Seminar: Sociology of the Family

Summer 2010 Registration **SOC 5550**

An intensive review and analysis of the family as a social institution.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SOCY 5610 - Sociology of Religion

Summer 2010 Registration **SOC 5610**

An intensive review and analysis of the fundamental tenets of religion as a social institution, with emphasis on present-day religious cults, their beliefs and activities in society. Cross-listed with SOCY 4610, RLST 4020, 5020.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SOCY 5640 - Sociology of Childhood and Adolescence

Summer 2010 Registration **SOC 5640**

An in-depth overview of the theories and research regarding the life course understanding of infancy, childhood and adolescence. Children's lives and cultures in

relation to adults and their transition from childhood to adolescence are studied. Cross-listed with SOCY 4640.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

SOCY 5650 - Sociology of Adulthood and Aging

Summer 2010 Registration **SOC 5650**

An in-depth overview of the theories and research using the life course understanding of adulthood and aging. Adult's lives, transition from adulthood to elderly status, and social policy issues are also studied. Cross-listed with SOCY 4650.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

SOCY 5660 - Seminar: Social Psychology

Summer 2010 Registration **SOC 5660**

Sociological approaches to the study of the self, role theory, persons in situations, identifications, socialization, and other characteristics of persons in society.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

SOCY 5680 - Hate Groups and Group Violence

Summer 2010 Registration **SOC 5680**

Social sciences help us understand the phenomena of hate groups and group violence and contribute toward their elimination. Examples are examined using theoretical perspectives on different levels of analysis and within different areas of research. Cross-listed with SOCY 4460.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

SOCY 5750 - Seminar: Criminology

Summer 2010 Registration **SOC 5750**

An intensive review and analysis of the literature and research dealing with sociology of crime in modern society.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

SOCY 5770 - Advanced Topics in Sociology

Summer 2010 Registration **SOC 5770**

Advanced study of special topics in sociology to be selected by the instructor. Note: May be repeated for credit when topics vary. Cross-listed with SOCY 4770.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

SOCY 5771 - Advanced Topics in Sociology

Summer 2010 Registration **SOC 5771**

Advanced study of special topics in sociology to be selected by the instructor. Note: May be repeated for credit when topics vary. Cross-listed with SOCY 4771. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SOCY 5772 - Advanced Topics in Sociology

Summer 2010 Registration **SOC 5772**

Advanced study of special topics in sociology to be selected by the instructor. Note: May be repeated for credit when topics vary. Cross-listed with SOCY 4772. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SOCY 5773 - Advanced Topics in Sociology

Summer 2010 Registration **SOC 5773**

Advanced study of special topics in sociology to be selected by the instructor. Note: May be repeated for credit when topics vary. Cross-listed with SOCY 4773. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SOCY 5774 - Advanced Topics in Sociology

Summer 2010 Registration **SOC 5774**

Advanced study of special topics in sociology to be selected by the instructor. Note: May be repeated for credit when topics vary. Cross-listed with SOCY 4774. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SOCY 5780 - Violence in Relationships

Summer 2010 Registration **SOC 5780**

Course focuses on the study of violence among individuals involved in intimate relationships; factors in society such as norms, laws and institutions that are related to creating violence among intimates; and social policies, prevention, intervention and treatment programs. Prereq: SOCY 1001, or a social science course. Cross-listed with SOCY 4780 . **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SOCY 5840 - Independent Study: SOCY

Summer 2010 Registration **SOC 5840**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SOCY 5910 - Research Practicum

Summer 2010 Registration **SOC 5910**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SOCY 5920 - Guided Readings in Sociology

Summer 2010 Registration **SOC 5920**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SOCY 5930 - Internship in Sociology

Summer 2010 Registration **SOC 5930**

Semester Hours: 1to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

SOCY 5939 - Cooperative Education

Summer 2010 Registration **SOC 5939**

Semester Hours: 1to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

SOCY 5955 - Master's Thesis

Summer 2010 Registration **SOC 5955**

Semester Hours: 1to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

SOCY 5964 - Master's Report

Summer 2010 Registration **SOC 5964**

Semester Hours: 1to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPAN 1000 - Introduction to Cultures of the Spanish Speaking World

Summer 2010 Registration **SPAN 1000**

Introduces students to the Spanish-speaking cultures of Spain, Latin America, and the United States through a historical overview and a focus on contemporary politics and

culture. Note: Taught in English. **Semester Hours:** 3to 3 **GT Pathways Category Key:** GT-AH4

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPAN 1010 - Beginning Spanish I

Summer 2010 Registration **SPAN 1010**

Introduces basic Spanish pronunciation and grammar, useful vocabulary and idioms. Readings and class discussions relating to the Hispanic world. Note: Students may not enroll in any lower division (1000/2000) language skills course in which their level of proficiency exceeds that of the course. Students placing into a course through any means other than following the regular sequence must consult with an appropriate faculty member of the Dept. of Modern Languages prior to enrollment. **Semester Hours:** 5to 5

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPAN 1011 - Intensive Spanish

Summer 2010 Registration **SPAN 1011**

SPAN 1011/1021 combines both semesters of the first year, and meets the needs of highly motivated students of the language and culture. Prereq: Students having studied Spanish previously should not enroll in SPAN1011/1021 without first consulting a department advisor. Cross-listed with SPAN 1021. **Semester Hours:** 5to 5 **When Offered:** SUMMER

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPAN 1020 - Beginning Spanish II

Summer 2010 Registration **SPAN 1020**

(Continuation of SPAN 1010.) Further development of listening, speaking, reading and writing skills. Note: Students may not enroll in any lower division (1000/2000) language skills course in which their level of proficiency exceeds that of the course. Students placing into a course through any means other than following the regular sequence must consult with an appropriate faculty member of the Dept. of Modern Languages prior to enrollment. Prereq: SPAN 1010 with grade of 'C' (2.0) or higher. **Semester Hours:** 5to 5

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPAN 1021 - Intensive Spanish

Summer 2010 Registration **SPAN 1021**

SPAN 1011/1021 combines both semesters of the first year, and meets the needs of highly motivated students of the language and culture. Prereq: Students having studied Spanish previously should not enroll in SPAN 1011/1021 without first consulting a department advisor. Cross-listed with SPAN 1011. **Semester Hours:** 5to 5 **When**

Offered: SUMMER

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPAN 1111 - Freshman Seminar

Summer 2010 Registration **SPAN 1111**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPAN 1995 - Travel Study Topics

Summer 2010 Registration **SPAN 1995**

For students doing travel study in a Spanish-speaking country; register through the Office of International Education. **Semester Hours:** 1to 15

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPAN 2110 - Second Year Spanish I

Summer 2010 Registration **SPAN 2110**

Continues the development of skills acquired in 1010 and 1020. Readings deal with Hispanic culture and current topics from Spain and Latin America. Development of informal oral and written expression. Note: Students may not enroll in any lower division (1000/2000) language skills course in which their level of proficiency exceeds that of the course. Students placing into a course through any means other than following the regular sequence must consult with an appropriate faculty member of the Dept. of Modern Languages prior to enrollment. Prereq: SPAN 1020 with a grade of 'C' (2.0) or higher. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPAN 2120 - Second Year Spanish II

Summer 2010 Registration **SPAN 2120**

Continues the development of skills acquired in SPAN 1010, 1020 and 2110, together with a review of grammar. Readings deal with Hispanic culture and literature. Development of informal oral and written expression. SPAN 2120 satisfies the fourth-semester language requirement at most graduate schools. Note: Students may not enroll in any lower division (1000/2000) language skills course in which their level of proficiency exceeds that of the course. Students placing into a course through any means other than following the regular sequence must consult with an appropriate faculty member of the Dept. of Modern Languages prior to enrollment. Prereq: SPAN 2110 with a grade of 'C' (2.0) or higher. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPAN 2130 - Current Topics in the Spanish-Speaking World

Summer 2010 Registration **SPAN 2130**

A fourth-semester course (parallel to 2120) designed for students majoring or minoring in international affairs, but open to anyone wishing to continue the study of Spanish beyond 2110. Along with development of language skills and grammar review, class work involves contemporary topics in cultural, political, economic and social affairs.

Prereq: SPAN 2110 with a grade of 'C' (2.0) or higher or placement exam. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPAN 2939 - Internship/Cooperative Education

Summer 2010 Registration **SPAN 2939**

Experiences involving application of specific, relevant concepts and skills in supervised employment situations. Prereq: 15 hours of 2.75 GPA. **Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPAN 2995 - Travel Study Topics

Summer 2010 Registration **SPAN 2995**

For students doing travel study in a Spanish-speaking country; register through the Office of International Education. **Semester Hours:** 1to 15

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPAN 3010 - Advanced Conversation and Composition I

Summer 2010 Registration **SPAN 3010**

Expansion and reinforcement of oral and written skills in Spanish at an advanced level, in a broad cultural context. Oral activities are individual and in groups. Topics are introduced through oral activities, and are then used for written assignments. Prereq:

SPAN 2120 or 2130. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPAN 3020 - Advanced Conversation and Composition II

Summer 2010 Registration **SPAN 3020**

(Continuation of SPAN 3010.) Development of oral and written skills in Spanish in preparation for taking other advanced courses. Topics of increasing complexity are selected from current publications in Spanish. Prereq: SPAN 3010. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPAN 3060 - Hispanic Phonetics: Theory and Practice

Summer 2010 Registration **SPAN 3060**

Explores the phonetics of spoken Spanish throughout the world. Theoretical content: classification of all Spanish sounds and how they are affected and change according to their phonetic environment and region. Practical features: pronunciation and strategies teaching English speakers to pronounce Spanish. Prereq: SPAN 3010 or upper division standing in Spanish. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPAN 3070 - Bilingual Communities: Spanish as a Language of Contact

Summer 2010 Registration **SPAN 3070**

Explores bilingualism by tracing the series of linguistic and ethnic contacts that converted Castilian from a Latin dialect to the language of the Spanish empire, the primary language of Latin America, and a fast-growing language in the United States. Prereq: SPAN 3010 for majors, or permission of instructor for non-majors. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPAN 3073 - Bilingual Communities: Spanish in a Global Setting

Summer 2010 Registration **SPAN 3073**

Taught in English; no major or minor credit. Studies Spanish as a language of contact. Emphasis is placed on Spanish in the United States, as well as bilingualism in Spain and Latin America. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPAN 3082 - Introduction to Translation I

Summer 2010 Registration **SPAN 3082**

The first course in a two-semester sequence that introduces the methodology and practice of written translation. Thorough analysis of source texts precedes translation into target language. Students must demonstrate third-year competence in Spanish and advanced writing skills in English. Prereq: Upper division standing in Spanish. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPAN 3092 - Introduction to Translation II

Summer 2010 Registration **SPAN 3092**

Second course in a two-semester sequence (see SPAN 3082). Prereq: SPAN 3082,

upper division standing in Spanish, or permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

SPAN 3100 - Culture and Civilization of Spain

Summer 2010 Registration **SPAN 3100**

Surveys the development of Spanish civilization -- the social, political, economic, religious, literary, and artistic life of Spain--within the framework of the Western tradition, and its later dissemination in the New World. Note: Taught in English; no major or minor credit. Prereq: Minimum of sophomore standing. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

SPAN 3212 - Spanish American Culture and Civilization

Summer 2010 Registration **SPAN 3212**

Surveys the social, political, economic, religious, literary, and artistic life of Spanish America from the conquest to the present. Note: Taught in Spanish for major and minor credit. Prereq: SPAN 2120 or 2130. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

SPAN 3213 - Contemporary Latin American Culture and Institutions

Summer 2010 Registration **SPAN 3213**

Introduction to contemporary Latin American culture and institutions, with emphasis on the social, economic and political institutions of Spanish- speaking countries. Prereq: SPAN 2120 or 2130. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

SPAN 3221 - Culture and Civilization of Spain I

Summer 2010 Registration **SPAN 3221**

From prehistoric times through Phoenician, Greek, Roman, and Visigothic eras to the Moorish invasion in 711; the Arab period; the Reconquest; the Catholic Kings; the Imperial Period; and the Inquisition. Prereq: Upper division standing in Spanish. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

SPAN 3222 - Culture and Civilization of Spain II

Summer 2010 Registration **SPAN 3222**

(Continuation of 3221.) Studies the social, intellectual, and artistic development of Spain from the time of the Bourbons (18th century) through the civil war of 1936, and the Franco regime to the restoration of democracy under Juan Carlos I and the present day.

Prereq: Upper division standing in Spanish. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

SPAN 3223 - Contemporary Spanish Culture and Institutions

Summer 2010 Registration **SPAN 3223**

A study of contemporary Iberian culture, including an emphasis on modern business institutions and practices. This course can be applied to any Spanish major track but is specifically required for the International Language and Culture for the Professions track.

Prereq: SPAN 2120 or 2130. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPAN 3230 - Ibero-American Cultures through Film

Summer 2010 Registration **SPAN 3230**

A study of the Ibero-American cultures through their most representative films. Films will be windows to access the complexities and the contradictions lived in Ibero-American countries regarding a set of contemporary issues, such as violence, linguistic diversity, religious beliefs, sexuality, politics, history, social class, and globalization. Prereq: SPAN 2120 or SPAN 2130, or consent of the instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPAN 3252 - Introduction to the Study of Literature

Summer 2010 Registration **SPAN 3252**

The basic terms and skills needed to analyze both the themes and form of literary works, together with an introduction to research skills. All literary examples come from Hispanic literature. Note: SPAN 3252 is a prerequisite (previous or concurrent) to all other literature courses taught in Spanish. Prereq: SPAN 2120 or 2130 (or equivalent). **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPAN 3300 - Twentieth Century Spanish Literature

Summer 2010 Registration **SPAN 3300**

The literature of Spain from the beginning of the 20th century to the present through short stories, novels, poems and plays. Prereq or coreq: SPAN 3252. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPAN 3310 - Spanish Writing and Grammar I

Summer 2010 Registration **SPAN 3310**

A close study of the structure of the language and practice in its written use. Note:

Recommended for those intending to teach Spanish at the secondary level. Prereq: Upper division standing in Spanish. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

SPAN 3400 - Survey of Spanish Literature I

Summer 2010 Registration **SPAN 3400**

The most important works in the literature of Spain from the early Hispano-Arabic lyric poems through the golden age of the 17th century. Prereq or coreq: SPAN 3252. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

SPAN 3410 - Survey of Spanish Literature II

Summer 2010 Registration **SPAN 3410**

The most important works in the literature of Spain from the 18th century to the present. Prereq or coreq: SPAN 3252. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

SPAN 3510 - Survey of Spanish American Literature II

Summer 2010 Registration **SPAN 3510**

The most important works in the literature of Spanish America from the late 19th century to the present. Prereq or coreq: SPAN 3252. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

SPAN 3550 - Spanish American Short Story

Summer 2010 Registration **SPAN 3550**

The Spanish American short story from its beginnings in the romantic period of the 19th century to the present. Prereq or coreq: SPAN 3252. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

SPAN 3700 - Spanish for International Business I

Summer 2010 Registration **SPAN 3700**

Development of proficiency in oral and written Spanish as used in business and industry throughout the Hispanic world, together with an increased awareness of social, economic, and political conditions affecting business transactions, particularly in long-term operations. Prereq: Upper division standing in Spanish. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

SPAN 3710 - Spanish for International Business II

Summer 2010 Registration **SPAN 3710**

(Continuation of SPAN 3700.) Further development of oral and written language proficiency, together with further examination of pertinent social, economic, and political conditions of the Hispanic world. Prereq: Upper division standing in Spanish; SPAN 3700 desirable. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPAN 3730 - Special Topics in Spanish for International Business

Summer 2010 Registration **SPAN 3730**

Variable topics not otherwise covered sufficiently in regular courses. Note: May be taken more than once, provided that the topic is different each time. Prereq: SPAN 3700. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPAN 3830 - Topics in Spanish Literature

Summer 2010 Registration **SPAN 3830**

Varying topics in Hispanic literature for students not able to read Spanish well. Note: Taught in English; no major or minor credit. May be taken more than once, provided that the topic is different each time. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPAN 3840 - Independent Study: SPAN

Summer 2010 Registration **SPAN 3840**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPAN 3841 - Independent Study: SPAN

Summer 2010 Registration **SPAN 3841**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPAN 3939 - Internship/Cooperative Education

Summer 2010 Registration **SPAN 3939**

Designed experiences involving application of specific, relevant concepts and skills in supervised employment situations. Prereq: Junior standing and 2.75 GPA. **Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPAN 3970 - Topics in Spanish Literature

Summer 2010 Registration **SPAN 3970**

Varying topics in Hispanic literature appropriate the 3000 level, not otherwise covered by regular courses. Note: Taught in Spanish for major and minor credit. May be taken more than once, provided that the topic is different each time. Prereq: SPAN 3252. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPAN 3995 - Travel Study Topics

Summer 2010 Registration **SPAN 3995**

For students doing travel study in a Spanish-speaking country; register through the Office of International Education. **Semester Hours:** 1to 15

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPAN 4010 - History of the Spanish Language

Summer 2010 Registration **SPAN 4010**

Studies the history of the Spanish language, both internal and external, from the language's Latin roots to the present. Historical phonetics are emphasized, though all features of the language are discussed. Prereq for SPAN 4010: Upper division standing. Cross-listed with SPAN 5010. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPAN 4020 - Spanish Sociolinguistics

Summer 2010 Registration **SPAN 4020**

Studies the Spanish language in its social context. In addition to specific regional linguistic features, social factors such as geography, social class, politics, race, gender, economics, education and history are discussed as determiners of the linguistic landscape. Prereq: SPAN 3060. Cross-listed with SPAN 5020. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPAN 4060 - Dialects of the Spanish-Speaking World

Summer 2010 Registration **SPAN 4060**

Studies the geography of the Spanish language in those countries where it is spoken as a primary language. Includes a comparison of dialect features and a study of factors that contribute to the diversity of the Spanish language. Prereq: SPAN 3060. Cross-listed with SPAN 5060. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPAN 4070 - Spanish Applied Linguistics & Second Language Acquisition

Summer 2010 Registration **SPAN 4070**

This course is a survey of various areas of the field of linguistics in general (e.g. morphology, syntax, semantics, pragmatics, etc.) as well as specific aspects of the structure (and acquisition) of the Spanish language. Prereq: SPAN 3060 or 3070. Cross-listed with SPAN 5070. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPAN 4080 - Spanish in the United States

Summer 2010 Registration **SPAN 4080**

A study of the Spanish language in its social context as a language of the United States. In addition to studying bilingualism and language traits, factors such as race, gender, class, education, nationality, age, generation and language attitudes are considered.

Prereq: SPAN 3060. Cross-listed with SPAN 5080. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPAN 4110 - Contemporary Spanish Literature

Summer 2010 Registration **SPAN 4110**

Major works published since the Spanish Civil War, which ended in 1939. Prereq: SPAN 3252 and preferably at least one additional literature course. Cross-listed with SPAN 5110. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPAN 4130 - Medieval Spanish Literature

Summer 2010 Registration **SPAN 4130**

Examines Spanish literature from the jarchas and the Cid through the Celestina in the context of the reconquest. Considers the construction of the Christian knight as a hero and the corresponding representations of women, Jews and Muslims. Prereq for SPAN 4130: SPAN 3252 and at least one additional literature course. Cross-listed with SPAN 5130. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPAN 4150 - Masterpieces of Spanish Literature

Summer 2010 Registration **SPAN 4150**

The most enduring works in the literature of Spain across the centuries. Prereq: SPAN 3252 and preferably at least one additional course in Hispanic literature. Cross-listed with SPAN 5150. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPAN 4160 - Masterpieces of Spanish-American Literature

Summer 2010 Registration **SPAN 4160**

Focuses on a limited number of outstanding works in Spanish-American literature across the centuries. Prereq: SPAN 3252 and at least one additional course in Hispanic literature. Cross-listed with SPAN 5160. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

SPAN 4220 - Mexican Literature

Summer 2010 Registration **SPAN 4220**

Mexican literature from pre-Columbian times to the present. Prereq: SPAN 3252 and at least one additional course in Hispanic literature. Cross-listed with SPAN 5220. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

SPAN 4230 - Modern Culture of Spain through Film and Narrative

Summer 2010 Registration **SPAN 4230**

Culture of modern Spain studied through Spanish film. The death of military dictator Francisco Franco opened the process for the recuperation of a usurped democratic, representational system that has become the basis of a cultural and economic resurgence. Taught in Spanish. Prereq: SPAN 3252 and one other Spanish/Spanish American literature course at the 3000-level. Cross-listed with SPAN 5230. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

SPAN 4300 - Generation of 1898

Summer 2010 Registration **SPAN 4300**

Spanish literature from around the turn of the century through the first third of the 20th century, reflecting the deep intellectual and cultural foment occasioned in part by Spain's loss of the Spanish-American War of 1898. Prereq: SPAN 3252 and preferably at least one additional literature course. Cross-listed with SPAN 5300. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

SPAN 4310 - Seminar in Spanish Creative Writing: Poetry and Short Fiction

Summer 2010 Registration **SPAN 4310**

A capstone writing course. Semester writing project will be collected poems and short stories. Prereq: SPAN 3252 and one other upper-division literature course, or permission of instructor. Cross-listed with SPAN 5310. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

SPAN 4400 - Romanticism in Spain

Summer 2010 Registration **SPAN 4400**

The romantic movement in 19th century Spain through plays, poems, essays. Prereq: SPAN 3252 and preferably at least one additional literature course. Cross-listed with SPAN 5400. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPAN 4410 - Modernism

Summer 2010 Registration **SPAN 4410**

Examines the first real flowering of Spanish American literature, from about 1880 to 1910. The dominant genres of the period were the short story, the essay and lyric poetry. Readings come from Dario, Jose Enrique Rodo, Manuel Gutierrez Najera, Manuel Diaz Rodriquez and others. Prereq: SPAN 3252 and at least one additional course in Hispanic literature. Cross-listed with SPAN 5410. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPAN 4500 - Nineteenth-Century Spanish Novel

Summer 2010 Registration **SPAN 4500**

The Spanish novel in one of its most productive periods, beginning with romanticism and carrying through the realist and naturalist movements. Prereq for SPAN 4500: SPAN 3252 and preferably at least one additional literature course. Cross-listed with SPAN 5500. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPAN 4510 - Contemporary Spanish-American Novel

Summer 2010 Registration **SPAN 4510**

The novel in Spanish America since the Second World War, the period in which the greatest number and quality of works has been produced. Prereq: SPAN 3252 and at least one additional course in Hispanic literature. Cross-listed with SPAN 5510. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPAN 4520 - Golden Age Drama

Summer 2010 Registration **SPAN 4520**

Spanish drama of the 16th and 17th centuries, the period of greatest dramatic productivity in the nation's history. Readings include selections from Lope de Vega, Tirso de Molina, Calderon de La Barca, and others. Prereq: SPAN 3252 and at least one additional course in Hispanic literature. Cross-listed with SPAN 5520. **Semester Hours:**

3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPAN 4540 - Race, Class, and Gender in Spanish Golden Age Literature

Summer 2010 Registration **SPAN 4540**

Explores works of various genres in relation to their social and political contexts in 16th and 17th century Spain, emphasizing the cultural attitudes toward race, class, and gender that inform them. Prereq: SPAN 3252 and at least one additional literature course. Cross-listed with SPAN 5540 and WGST 4540. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

SPAN 4620 - Don Quijote

Summer 2010 Registration **SPAN 4620**

The complete Don Quixote in Spanish, focusing on its historical, social, and philosophic context, and its role in the emergence of the modern novel. Prereq: SPAN 3252 and at least one additional literature course. Cross-listed with SPAN 5620. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

SPAN 4840 - Independent Study: SPAN

Summer 2010 Registration **SPAN 4840**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPAN 4970 - Special Topics in Literature

Summer 2010 Registration **SPAN 4970**

Varying topics in Hispanic literature not otherwise covered by regular courses. Note: May be taken more than once, provided that the topic is different each time. Prereq for SPAN 4970: SPAN 3252 and at least one additional course in Hispanic literature. Cross-listed with SPAN 5970. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

SPAN 4980 - Special Topics in Linguistics

Summer 2010 Registration **SPAN 4980**

Varying topics in Hispanic language and literature not otherwise covered by regular courses. Note: May be taken more than once provided that the topics are different each time. Prereq: SPAN 3060 and at least one other upper division Spanish course. Cross-listed with SPAN 5980. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

SPAN 5000 - Introduction to Graduate Studies in Spanish

Summer 2010 Registration **SPAN 5000**

Introduces critical methodologies and critical perspectives of practices of signification such as literature and film, among others, in the context of culture and history. Prereq: Graduate standing. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

SPAN 5010 - History of the Spanish Language

Summer 2010 Registration **SPAN 5010**

Studies the history of the Spanish language, both internal and external, from the language's Latin roots to the present. Historical phonetics are emphasized, though all features of the language are discussed. Prereq: Graduate standing in Spanish. Cross-listed with SPAN 4010. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

SPAN 5020 - Spanish Sociolinguistics

Summer 2010 Registration **SPAN 5020**

Studies the Spanish language in its social context. In addition to specific regional linguistic features, social factors such as geography, social class, politics, race, gender, economics, education and history are discussed as determiners of the linguistic landscape. Prereq: Graduate standing in Spanish. Cross-listed with SPAN 4020. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

SPAN 5060 - Dialects of the Spanish-Speaking World

Summer 2010 Registration **SPAN 5060**

Studies the geography of the Spanish language in those countries where it is spoken as a primary language. Includes a comparison of dialect features and a study of factors that contribute to the diversity of the Spanish language. Prereq: Graduate standing in Spanish. Cross-listed with SPAN 4060. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

SPAN 5070 - Spanish Applied Linguistics & Second Language Acquisition

Summer 2010 Registration **SPAN 5070**

This course is a survey of various areas of the field of linguistics in general (e.g. morphology, syntax, semantics, pragmatics, etc.) as well as specific aspects of the structure (and acquisition) of the Spanish language. Prereq: Graduate standing in

Spanish. Cross-listed with SPAN 4070.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

SPAN 5080 - Spanish in the United States

Summer 2010 Registration **SPAN 5080**

A study of the Spanish language in its social context as a language of the United States. In addition to studying bilingualism and language traits, factors such as race, gender, class, education, nationality, age, generation and language attitudes are considered.

Prereq: Graduate standing in Spanish. Cross-listed with SPAN 4080.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPAN 5110 - Contemporary Spanish Literature

Summer 2010 Registration **SPAN 5110**

Major works published since the Spanish Civil War, which ended in 1939. Prereq: Graduate standing in Spanish. Cross-listed with SPAN 4110.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

SPAN 5130 - Medieval Spanish Literature

Summer 2010 Registration **SPAN 5130**

Examines Spanish literature from the jarchas and the Cid through the Celestina in the context of the reconquest. Considers the construction of the Christian knight as a hero and the corresponding representations of women, Jews and Muslims. Prereq for SPAN 5130: Graduate standing in Spanish. Cross-listed with SPAN 4130.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPAN 5150 - Masterpieces of Spanish Literature

Summer 2010 Registration **SPAN 5150**

The most enduring works in the literature of Spain across the centuries. Prereq: Graduate standing in Spanish. Cross-listed with SPAN 4150.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

SPAN 5160 - Masterpieces of Spanish-American Literature

Summer 2010 Registration **SPAN 5160**

Focuses on a limited number of outstanding works in Spanish-American literature across the centuries. Prereq: Graduate standing in Spanish. Cross-listed with SPAN 4160.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPAN 5220 - Mexican Literature

Summer 2010 Registration **SPAN 5220**

Mexican literature from pre-Columbian times to the present. Prereq: Graduate standing in Spanish. Cross-listed with SPAN 4220.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPAN 5230 - Modern Culture of Spain through Film and Narrative

Summer 2010 Registration **SPAN 5230**

Culture of modern Spain studied through Spanish film. The death of military dictator Francisco Franco opened the process for the recuperation of a usurped democratic, representational system that has become the basis of a cultural and economic resurgence. Taught in Spanish. Prereq: Graduate standing. Cross-listed with SPAN 4230.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPAN 5300 - Generation of 1898

Summer 2010 Registration **SPAN 5300**

Spanish literature from around the turn of the century through the first third of the 20th century, reflecting the deep intellectual and cultural foment occasioned in part by Spain's loss of the Spanish-American War of 1898. Prereq: Graduate standing in Spanish. Cross-listed with SPAN 4300.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPAN 5310 - Seminar in Spanish Creative Writing: Poetry and Short Fiction

Summer 2010 Registration **SPAN 5310**

A capstone writing course. Semester writing project will be collected poems and short stories. Prereq: Graduate standing in Spanish. Cross-listed with SPAN 4310.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPAN 5400 - Romanticism in Spain

Summer 2010 Registration **SPAN 5400**

The romantic movement in 19th century Spain through plays, poems, essays. Prereq: Graduate standing in Spanish. Cross-listed with SPAN 4400.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPAN 5410 - Modernism

Summer 2010 Registration **SPAN 5410**

Examines the first real flowering of Spanish American literature, from about 1880 to 1910. The dominant genres of the period were the short story, the essay, and lyric poetry. Readings come from Dario, Jose Enrique Rodo, Manuel Gutierrez Najera, Manuel Diaz Rodriquez and others. Prereq: Graduate standing in Spanish. Cross-listed with SPAN 4410. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPAN 5500 - Nineteenth-Century Spanish Novel

Summer 2010 Registration **SPAN 5500**

The Spanish novel in one of its most productive periods, beginning with romanticism and carrying through the realist and naturalist movements. Prereq: Graduate standing in Spanish. Cross-listed with SPAN 4500. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPAN 5510 - Contemporary Spanish-American Novel

Summer 2010 Registration **SPAN 5510**

The novel in Spanish America since the Second World War, the period in which the greatest number and quality of works has been produced. Prereq: Graduate standing in Spanish. Cross-listed with SPAN 4510. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPAN 5520 - Golden Age Drama

Summer 2010 Registration **SPAN 5520**

Spanish drama of the 16th and 17th centuries, the period of greatest dramatic productivity in the nation's history. Readings include selections from Lope de Vega, Tirso de Molina, Calderon de La Barca, and others. Prereq: Graduate standing in Spanish. Cross-listed with SPAN 4520. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPAN 5540 - Race, Class, and Gender in Spanish Golden Age Literature

Summer 2010 Registration **SPAN 5540**

Explores works of various genres in relation to their social and political contexts in 16th and 17th century Spain, emphasizing the cultural attitudes toward race, class, and gender that inform them. Prereq: SPAN 3252 and at least one additional literature course. Cross-listed with SPAN 4540 and WGST 4540. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPAN 5620 - Don Quijote

Summer 2010 Registration **SPAN 5620**

The complete Don Quijote in Spanish, focusing on its historical, social, and philosophic context, and its role in the emergence of the modern novel. Prereq: Graduate standing in Spanish. Cross-listed with SPAN 4620. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPAN 5840 - Independent Study: SPAN

Summer 2010 Registration **SPAN 5840**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPAN 5939 - Internship/Cooperative Education

Summer 2010 Registration **SPAN 5939**

Semester Hours: 1to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPAN 5970 - Special Topics in Literature

Summer 2010 Registration **SPAN 5970**

Varying topics in Hispanic literature not otherwise covered by regular courses. Prereq: Graduate standing in Spanish. Cross-listed with SPAN 4970. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPAN 5980 - Special Topics in Linguistics

Summer 2010 Registration **SPAN 5980**

Varying topics in Hispanic language and literature not otherwise covered by regular courses. Note: May be taken more than once provided that the topics are different each time. Prereq: Graduate standing in Spanish. Cross-listed with SPAN 4980. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPED 4021 - Exploring Diversity in Content and Pedagogy II

Summer 2010 Registration **SPED 4021**

An essential feature of instructional and curriculum design, implementation, and evaluation is the ability of teachers to draw upon students' previous experience, help students make connections between new information and previous knowledge and skills, and support students to transfer new information to real-life contexts and environments. The purpose of this course is to explore multiple aspects of complex processes including: 1) standards-based instruction (e.g., the relationship between standards and curriculum); 2) instructional design including both direct and indirect instruction; and 3)

assessment, including both selected response measures as well performance and portfolio assessment; and 4) differentiation in curriculum and instruction so that meaningful instruction becomes accessible to all students. Prereq: IPTE 4006. Admission into the IPTE Program. Cross-listed with SPED 5021. **Semester Hours:** 1to 2
Registration is changing. Visit our website for details ucdenver.edu/registration.

SPED 4111 - Teaching For the Success of All Adolescents

Summer 2010 Registration **SPED 4111**

Understanding the impact of learner variance due to differences in abilities or disabilities, linguistic experiences, socio-economic backgrounds, and ethnicity on learning and development. These differences are examined through the cognitive, affective, communicative and physical or health domains as well as the socio-cultural context. Prereq: Concurrent enrollment in an internship or permission of instructor. Admission into the IPTE Program. Cross-listed with SPED 5111. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

SPED 4112 - Teaching for the Success of All Children

Summer 2010 Registration **SPED 4112**

Understanding the impact of learner variance due to differences in abilities or disabilities, linguistic experiences, socio-economic backgrounds, and ethnicity on learning and development. These differences are examined through the cognitive, affective, communicative and physical or health domains as well as the socio-cultural context. Prereq: Concurrent enrollment in an internship or permission of instructor required. Admission into the IPTE Program. Cross-listed with SPED 5112. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

SPED 4150 - Individualizing Instruction for Learners with Challenging Behaviors

Summer 2010 Registration **SPED 4150**

Serves as an introduction to the knowledge, skills and dispositions necessary for teachers to proactively and systematically address student needs that underlie the presence of problem behaviors in schools and class rooms. Course content consists of specific strategies to promote social and communication skill development and introduction to functional behavior assessment and intervention, including guidelines for the role of general educators as specified in federal and state regulations. Prereq: SPED 5111 or 5112, IPTE 5120 or 5121. Cross-listed with SPED 5150. **Semester Hours:** 1to 1
Registration is changing. Visit our website for details ucdenver.edu/registration.

SPED 4200 - Autism Spectrum Disorders

Summer 2010 Registration **SPED 4200**

The purpose of this academy is to provide the paraeducator with information and skills to

assist paraeducators in the instruction of students with autism. It gives factual information to dispel the many myths that abound in this field and emphasizes the relationship between communication and behavior. It prepares paraeducators to make and use visual supports, to structure tasks and the environment and to provide appropriate supports for social skills instruction.**Semester Hours:** 1to 1
Registration is changing. Visit our website for details ucdenver.edu/registration.

SPED 4710 - Significant Health Support Needs Academy

Summer 2010 Registration **SPED 4710**

Intends to prepare paraeducators with knowledge and skills needed for working with children with significant health support needs. Consisting of seven modules of varying length, this 15 clock hour academy focuses on training both the health aid and the significant health support needs professional.**Semester Hours:** 1to 1
Registration is changing. Visit our website for details ucdenver.edu/registration.

SPED 4720 - Significant Supports for Challenging Behavior Academy

Summer 2010 Registration **SPED 4720**

This academy provides the paraeducator with the knowledge and skills needed for working with children who have significant behavior needs. The academy focuses on working with students who have challenging behaviors. The aim is to provide paraeducators with the basic understanding of behavior support and to provide them with the necessary skills to implement written behavior support plans. It is recommended that paraeducators complete the Behavior Management Academy prior to taking this course.**Semester Hours:** 1to 1
Registration is changing. Visit our website for details ucdenver.edu/registration.

SPED 4730 - Significant Communication Support Needs Academy

Summer 2010 Registration **SPED 4730**

This academy provides the paraeducator with the knowledge and skills needed for working with children who have significant behavior needs. The academy focuses on working with students who have challenging behaviors. Its aim is to provide paraeducators with a basic understanding of behavior support and to provide them with the necessary skills to implement written behavior support plans. It is recommended that paraeducators complete the Behavior Management Academy prior to taking this course.**Semester Hours:** 1to 1
Registration is changing. Visit our website for details ucdenver.edu/registration.

SPED 4740 - Life Skills Academy

Summer 2010 Registration **SPED 4740**

This 18 clock hour academy is intended to provide the paraeducator with knowledge and

skill in instructional methods and life skill support for youth and young adults who have moderate to severe cognitive, communicative, physical or affective needs. **Semester Hours:** 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPED 4750 - Orientation to Special Education

Summer 2010 Registration **SPED 4750**

This 15 clock hour academy is designed to provide a basic introduction to special education and the needs of students who have disabilities. It includes introductory material regarding legal and historical foundations of special education, human growth and development, the nature of disabilities, and an introduction to the basic human needs that must be addressed. **Semester Hours:** 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPED 4910 - Special Education Generalist Internship and Site Seminar I

Summer 2010 Registration **SPED 4910**

Special education teacher candidates engage in systematic observation of, participation in, design of and reflection on inclusive curricular, instruction and management practices. Graduated learning activities for each internship and time requirements are specified in the School Internship handbook and the Special Education Guidelines. In partner school, the site coordinator and site professor are responsible for coaching, supervision and site seminars. In internship outside partner school settings, cooperating teachers, district coordinators and/or university professors work with teacher candidates in the classroom and in seminars. Prereq: Completion of special education core or permission of instructor and advisor. Admission into the IPTE Program. Cross-listed with SPED 5910. **Semester Hours:** 1to 8

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPED 4919 - CO-TOP Practicum

Summer 2010 Registration **SPED 4919**

The paraeducator engage in systematic observation of, and participation in instruction of management practices. The learning activities for each practicum are specified in the CO-TOP Practicum handbook and information sheet. Cooperating teachers, district coordinators and/or university-based supervision observe paraeducators in the classroom. Prereq: Completion of CO-TOP academies or permission of the CO-TOP Coordinator. **Semester Hours:** 2to 2

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPED 5010 - Instructional Strategies for Students with Special Needs

Summer 2010 Registration **SPED 5010**

The content of this course extends three essential special education program areas: curriculum, instruction and assessment, to service provision for students with severe support needs. **Semester Hours:** 3 to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPED 5021 - Exploring Diversity in Content and Pedagogy II

Summer 2010 Registration **SPED 5021**

An essential feature of instructional and curriculum design, implementation, and evaluation is the ability of teachers to draw upon students' previous experience, help students make connections between new information and previous knowledge and skills, and support students to transfer new information to real-life contexts and environments. The purpose of this course is to explore multiple aspects of complex processes including: 1) standards-based instruction (e.g., the relationship between standards and curriculum); 2) instructional design including both direct and indirect instruction; and 3) assessment, including both selected response measures as well performance and portfolio assessment; and 4) differentiation in curriculum and instruction so that meaningful instruction becomes accessible to all students. Prereq: IPTE 5006/4006.

Cross-listed with SPED 4021. **Semester Hours:** 1 to 2

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPED 5111 - Teaching For the Success of All Adolescents

Summer 2010 Registration **SPED 5111**

Understanding the impact of learner variance due to differences in abilities or disabilities, linguistic experiences, socio-economic backgrounds, and ethnicity on learning and development. These differences are examined through the cognitive, affective, communicative and physical or health domains as well as the socio-cultural context.

Prereq: Concurrent enrollment in an internship or permission of instructor. Cross-listed with SPED 4111. **Semester Hours:** 3 to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPED 5112 - Teaching for the Success of All Children

Summer 2010 Registration **SPED 5112**

Understanding the impact of learner variance due to differences in abilities/disabilities, linguistic experiences, socio-economic backgrounds, and ethnicity on learning and development. These differences will be examined through the cognitive, affective, communicative and physical/health domains as well as the socio-cultural context.

Prereq: Concurrent enrollment in an internship or permission of instructor required.

Cross-listed with SPED 4112. **Semester Hours:** 3 to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPED 5130 - Speech/Language Characteristics of Students with Severe Communication Needs

Summer 2010 Registration **SPED 5130**

Provides a basis for identification and description of speech and language dysfunctions of students with severe communication needs. Careful attention is given to the transdisciplinary nature of speech or language and its effects on cognitive, affective or motor functioning. Prereq: SPED 5600, 5010, and IPTE 5120 or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPED 5140 - Advanced Assessment in Special Education

Summer 2010 Registration **SPED 5140**

Provides the practitioner with an understanding of the special education assessment process as specified by federal and state guidelines. Students analyze formal and informal tests as well as observe and participate in performing assessments. Prereq: IPTE 5000, 5001, 5020, MATH 3040, SPED 5112, 5021, 5320 and 5600 or permission of instructor. **Semester Hours:** 4to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPED 5150 - Individualizing Instruction for Learners with Challenging Behaviors

Summer 2010 Registration **SPED 5150**

Serves as an introduction to the knowledge, skills and dispositions necessary for teachers to proactively and systematically address student needs that underlie the presence of problem behaviors in schools and class rooms. Course content consists of specific strategies to promote social and communication skill development and introduction to functional behavior assessment and intervention, including guidelines for the role of general educators as specified in federal and state regulations. Prereq: SPED 5111 or 5112, IPTE 5120 or 5121. Cross-listed with SPED 4150. **Semester Hours:** 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPED 5151 - Positive Behavior Support

Summer 2010 Registration **SPED 5151**

Provides in-depth knowledge, skills, and dispositions for special educators and other school professionals who lead systematic school renewal efforts to promote Positive Behavioral Support (PBS). The foci of this course are threefold: 1) to promote PBS at the level of the school and classroom; 2) to develop effective behavioral support teams; and 3) to lead the process of functional assessment and intervention for individual students whose problem behaviors are persistent and severe. Federal guidelines and Colorado regulations regarding functional assessment and intervention are addressed as well. Prereq: SPED 4150 or SPED 5150 or concurrent enrollment in an internship, or

permission of instructor required. **Semester Hours:** 2to 2
Registration is changing. Visit our website for details ucdenver.edu/registration.

SPED 5160 - Medical/Physical Challenges of Students with Special Needs

Summer 2010 Registration **SPED 5160**

Provides an overview of the medical, sensory, communicative, and physical issues for students with special needs. Specific competencies include: identifying, examining, evaluating, and organizing a set of community resources to meet a wide range of medical and/or physical challenges. **Semester Hours:** 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPED 5170 - Individualizing Instruction for Diverse Learners

Summer 2010 Registration **SPED 5170**

Provides frameworks for understanding and choosing from an array of instructional strategies that can be incorporated into the instructional design, assessment and implementation processes that meet the needs of diverse learners, particularly students with disabilities and students learning English. Prereq: SPED 4111/5111 or SPED 4112/5112. **Semester Hours:** 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPED 5180 - Curriculum Planning for Students with Special Needs

Summer 2010 Registration **SPED 5180**

Designed to give teachers a framework for providing functional learning experiences in the domains of education, community access, employment, independent living, and social/recreational skills of students in special education. Emphasis is placed on creating, implementing, and evaluating educational placements for subsequent environments. Prereq: SPED 5010, 5600, IPTE 5000, 5120 and EPSY 5240 or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPED 5250 - Effective Practices for Young Children with Autism Spectrum Disorders

Summer 2010 Registration **SPED 5250**

This course provides the learner with an understanding of ASD and provides information about evidenced based practices and practical teaching strategies. It provides a 20 hour hands on practicum component that allows students to implement strategies learned in class under the supervision of the instructor. Prereq: Taking online Autism 101 www.pdacenter.org. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPED 5260 - Effective Practices for Elementary Children with Autism Spectrum Disorders

Summer 2010 Registration **SPED 5260**

The purpose of this course is to emphasize evidence-based practices and practical teaching strategies for the elementary education student with ASD. Developmentally appropriate practices with an emphasis on educational strategies, inclusion and working collaboratively with other professionals and families will be embedded in this course.

Prereq: Taking online Autism 101 www.pdacenter.org. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPED 5270 - Effective Practices for Teenagers/Young Adults with Autism Spectrum Disorder

Summer 2010 Registration **SPED 5270**

The purpose of this course is to provide a thorough understanding of ASD and effective strategies/evidence-based practices for students, ages 13-21. Developmentally appropriate practices with an emphasis on educational strategies, inclusion, transition and working collaboratively with other professionals and families will be embedded in this course. Prereq: Taking online Autism 101 www.pdacenter.org. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPED 5300 - Collaborating In Schools and Communities

Summer 2010 Registration **SPED 5300**

Focuses on the development of competencies in consultation and collaboration. The overall purpose is to encourage the development of understanding and skills that enhance a teacher's ability to work and communicate effectively with school personnel, including paraprofessionals and parents. The goal of collaboration is to support and determine together the instructional scenarios that best meet the needs of students. Specific competencies include problem solving, conflict resolution, data collection or observation skills, conferencing, facilitating meetings, and interacting with others while respecting diverse discourses and multicultural backgrounds. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

SPED 5310 - Collaboration with Families

Summer 2010 Registration **SPED 5310**

Provides the school professional with the knowledge, skills, and values that foster effective working relationships with parents and families of the students they serve. **Semester Hours:** 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPED 5320 - The Use of Technology in Special Education

Summer 2010 Registration **SPED 5320**

Specifically designed for the special educator, this course addresses the use of computers with students in special education. Issues in augmentative communication, adaptation of software authoring systems, and adaptive hardware levels are addressed. **Semester Hours:** 2to 2

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPED 5400 - Seminar in Special Education

Summer 2010 Registration **SPED 5400**

Designed to allow an opportunity for special educators to compare and contrast the service delivery, funding mechanisms, professional ethics, and underlying assumptions of special and regular education. Trends in the field of special education are examined through review of current research. Prereq: EPSY 5240, IPTE 5000, IPTE 5020, IPTE 5120, SPED 5112, SPED 5021, SPED 5140, SPED 5320, SPED 5600, or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPED 5500 - Transition and Secondary Issues in Special Education

Summer 2010 Registration **SPED 5500**

Provides the practitioner with an understanding of the Special Education transition process as specified by federal and state guidelines. The content of this course focuses on the design and implementation of transition planning that meets students' physical, affective, cognitive, and communicative needs across the contexts of school, community, family life, career and vocation, and recreation/leisure. **Semester Hours:** 2to 2

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPED 5600 - Special Education for School Professionals

Summer 2010 Registration **SPED 5600**

Designed for school professionals to compare and contrast service delivery options and to understand special education laws and underlying assumptions of special education practices. Through extensive study of original sources and current texts, students gain a comprehensive knowledge base for use in school applications. Readings and lectures are supplemented with direct observation of special education processes and instruction. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPED 5780 - Literacy Intervention for Students with Disabilities

Summer 2010 Registration **SPED 5780**

Provides the practitioner with an understanding of research-validated approaches, strategies, assessment tools and issues related to effective literacy instruction for students performing significantly below grade level. Practitioners can expect to be able to conduct thorough literacy assessments as well as be able to develop, implement, and evaluate individual reading and writing programs for individual students with the most challenging literacy needs. Prereq: IPTE 4000 or IPTE 5000 and IPTE 4001 or IPTE 5001 or previous literacy course work with permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPED 5800 - Workshop: Topics in Special Education

Summer 2010 Registration **SPED 5800**

Semester Hours: 0.5to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPED 5840 - Independent Study: SPED

Summer 2010 Registration **SPED 5840**

Semester Hours: 1to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPED 5910 - Special Education Generalist Internship and Site Seminar I

Summer 2010 Registration **SPED 5910**

Special education teacher candidates engage in systematic observation of, participation in, design of and reflection on inclusive curricular, instruction and management practices. Graduated learning activities for each internship and time requirements are specified in the School Internship handbook and the Special Education Guidelines. In partner school, the site coordinator and site professor are responsible for coaching, supervision and site seminars. In internship outside partner school settings, cooperating teachers, district coordinators and/or university professors work with teacher candidates in the classroom and in seminars. Prereq: Completion of special education core or permission of instructor and advisor. Cross-listed with SPED 4910. **Semester Hours:** 2to 2

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPED 5911 - Special Education Generalist Internship and Site Seminar II

Summer 2010 Registration **SPED 5911**

Special education teacher candidates engage in systematic observation of, participation in, design of and reflection on inclusive curricular, instruction and management practices. Graduated learning activities for each internship and time requirements are

specified in the School Internship handbook and the Special Education Guidelines. In partner school, the site coordinator and site professor are responsible for coaching, supervision and site seminars. In internship outside partner school settings, cooperating teachers, district coordinators and/or university professors work with teacher candidates in the classroom and in seminars. Prereq: SPED 5910. **Semester Hours:** 2to 2
Registration is changing. Visit our website for details ucdenver.edu/registration.

SPED 5912 - Special Education Generalist Internship and Site Seminar III

Summer 2010 Registration **SPED 5912**

Special education teacher candidates engage in systematic observation of, participation in, design of and reflection on inclusive curricular, instruction and management practices. Graduated learning activities for each internship and time requirements are specified in the School Internship handbook and the Special Education Guidelines. In partner school, the site coordinator and site professor are responsible for coaching, supervision and site seminars. In internship outside partner school settings, cooperating teachers, district coordinators and/or university professors work with teacher candidates in the classroom and in seminars. Prereq: SPED 5910 and SPED 5911. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPED 5913 - Special Education Generalist Internship and Site Seminar IV

Summer 2010 Registration **SPED 5913**

Special education teacher candidates engage in systematic observation of, participation in, design of and reflection on inclusive curricular, instruction and management practices. Graduated learning activities for each internship and time requirements are specified in the School Internship handbook and the Special Education Guidelines. In partner school, the site coordinator and site professor are responsible for coaching, supervision and site seminars. In internship outside partner school settings, cooperating teachers, district coordinators and/or university professors work with teachers, and candidates in the classroom and in seminars. Prereq: SPED 5910, SPED 5911, SPED 5912 or permission of instructor and/or advisor. **Semester Hours:** 1to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPED 6100 - Communication Development for Students with Severe to Profound Needs

Summer 2010 Registration **SPED 6100**

An in-depth analysis of the development of communicative competence in students with severe or profound needs. Prereq: Completion of special education core or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPED 6300 - Teaching Methods for Students with Severe Communication Needs

Summer 2010 Registration **SPED 6300**

Offers training in defining and elaborating the needs of students identified as having severe communication needs. Students learn to expand and apply various theories of instruction. They will administer and interpret procedures for assessing speech and language skills. They will be able to plan for maintenance and generalization within the student's environment. Prereq: Permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

SPED 6950 - Master's Thesis

Summer 2010 Registration **SPED 6950**

Semester Hours: 4to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPSY 5600 - Functional Behavior Assessment and Planning

Summer 2010 Registration **SPSY 5600**

Prepares educational professionals in functional behavior assessment as it applies to the development of behavioral support plans. Students gain knowledge and experience in working collaboratively with others to design strategies that help students with challenging behaviors to be more successful in school. These strategies include the implementation of environmental supports and skills training, as well as behavioral interventions. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPSY 5800 - Workshop: Topics in School Psychology

Summer 2010 Registration **SPSY 5800**

Semester Hours: 1to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPSY 5840 - Independent Study: SPSY

Summer 2010 Registration **SPSY 5840**

Semester Hours: 1to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPSY 5900 - School-Based Multicultural Interventions

Summer 2010 Registration **SPSY 5900**

The course will foster student's understanding and appreciation of diversity and its applications for school psychology practice, educational contexts, and mental health

policy. Students will learn to evaluate and implement school-based mental health and educational interventions with a multicultural lens. Prereq: SPSY 6410.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPSY 6000 - BrainSTARS: TBI-Strategies for Teams and Re-Educ

Summer 2010 Registration **SPSY 6000**

This interdisciplinary course provides a knowledge base in Traumatic Brain Injury (TBI) in children utilizing foundational learning experiences in sources of brain injury, various sequelae, interventions, educational modifications, IEP development, and resources for educators and families of children with TBI. Prereq: Admission to TBI Certification Program.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPSY 6020 - Consultation and Leadership in TBI

Summer 2010 Registration **SPSY 6020**

This interdisciplinary course focuses on consultation, teamwork and leadership strategies needed for providing family-centered, culturally competent, community-based services for children with traumatic brain injury and other disabilities and their families.

Prereq: Admission to TBI Certification Program.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPSY 6040 - Applied Research in TBI for School Psychologists

Summer 2010 Registration **SPSY 6040**

This seminar focuses on the development of skills in conducting applied research with children and youth who have suffered a traumatic brain injury and addresses the need for school psychologists to develop and interpret research designs used for applied research. Prereq: Admission to TBI Certification Program.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPSY 6100 - School Psychology: Professional & Legal Foundations

Summer 2010 Registration **SPSY 6100**

This course covers topics related to the practice of school psychology, both past and present, including legal/ethical obligations/issues, accreditation, certification/licensure, culturally competent practice, roles/responsibilities, and evaluation and accountability. Observation in schools and related settings is required. Prereq: Admission to School Psychology Program.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPSY 6150 - Psychoeducational Assessment I

Summer 2010 Registration **SPSY 6150**

Focuses on assessment of cognitive ability, cognitive processes, and achievement in children and adolescents. Topics include selection, administration, and interpretation of ability and achievement tests; psychological report writing, and psychometric, historical, theoretical, and cultural issues in assessment. Test administration required. Prereq: RSEM 5300.

Semester Hours: 3 to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPSY 6160 - Psychoeducational Assessment II

Summer 2010 Registration **SPSY 6160**

Focuses on the assessment of adaptive behavior, personality, and social-emotional functioning in children and adolescents. Topics include selection, administration, and interpretation of these types of measures; cultural considerations in psychological assessment, psychological report writing, and developing interventions. Test administration required. Prereq: SPSY 6150.

Semester Hours: 3 to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPSY 6170 - Assessment and Intervention: Birth to 3

Summer 2010 Registration **SPSY 6170**

Course familiarizes students with the provision of psychological services to children birth to 3 years. The course includes coverage of relevant federal/state mandates, typical and atypical development, multicultural issues, and family-centered and consultative psychological intervention services. Test administration required. Prereq: SPSY 6150.

Semester Hours: 3 to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPSY 6200 - Risk, Resilience, and Prevention in School Mental Health

Summer 2010 Registration **SPSY 6200**

Examines sources of biological and social risk that prevent children from infancy through adolescence from reaching their full adult potential, the prevalence of these risk factors in North American communities, and the wellness models of intervention that ameliorate the effects of risk factors before problems manifest themselves and become disabling.

Semester Hours: 3 to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPSY 6300 - Legal and Ethical Issues in School Psychology

Summer 2010 Registration **SPSY 6300**

Examines the legal and ethical issues in the practice of school psychology include

current professional issues; national, state and local statutes; regulations and case law that govern the practice of school psychology; ethical standards; and ethical decision making of the profession. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPSY 6350 - School-Based Interventions: Children, Youth and Families

Summer 2010 Registration **SPSY 6350**

Provides theoretical and practice-oriented introduction to child therapy in schools. Weaves together skills and techniques essential to theory and implementation of psychotherapeutic techniques. Course activities compliment the systemic and group-based interventions examined in SPSY 6400. Prereq: EPSY 5100 or EPSY

5140. **Semester Hours:** 4to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPSY 6400 - School-Based Interventions: Groups, Classrooms and Systems

Summer 2010 Registration **SPSY 6400**

Provides students with advanced study of research on and techniques of classroom and small group interventions. Includes instruction on the evaluation of intervention effectiveness. Systemic, school-wide interventions are addressed. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPSY 6410 - Psychoeducational Services for Linguistically Diverse Students

Summer 2010 Registration **SPSY 6410**

Prepares students to provide current 'best practices' in cognitive assessment and psychotherapeutic services for students who are linguistically diverse. Attention will be paid to differentiating between students with language disorders and students in the process of acquiring English as a second language. Service recommendations will be grounded in an understanding of the unique psychological and educational needs of linguistically diverse students and the legal and ethical standards governing their education. Prereq: 30 graduate semester hours in the School Psychology program. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPSY 6420 - Crisis Prevention, Planning and Intervention

Summer 2010 Registration **SPSY 6420**

Introduces students to crisis theory, prevention research, and intervention strategies. The course is designed for school mental health professionals interested in developing advanced crisis counseling and intervention skills sufficient for use in school settings. The course emphasizes the importance of practical hands-on opportunities for skills

development. Prereq: SPSY 6350 and CPCE 5100 (or equivalent) and experience required.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPSY 6450 - School-Based Consultation for Mental Health Professionals

Summer 2010 Registration **SPSY 6450**

A wide range of traditional or emerging consultation models emphasizing practical application of empirically-based approaches to advance the social or academic competence of students, classrooms, schools and districts. Hands-on experience supplement course content as students develop, refine, and practice their own eclectic consultation approach. Prereq: RSEM 5100, RSEM 5300 and SPSY 6350.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPSY 6500 - Identifying and Planning for the Mental Health Needs of Children and Adolescents

Summer 2010 Registration **SPSY 6500**

Provides students with advanced concentrated study of the etiology, diagnostic criteria, recommend intervention strategies, and diagnostic procedures appropriate for the identification of children's mental health needs.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPSY 6550 - Academic Interventions in School Psychology

Summer 2010 Registration **SPSY 6550**

Provides training in knowledge and skills for the use of educational intervention practices in school psychology, including the development, implementation, and evaluation of academic interventions in the areas of reading, math, and written language; curriculum based measurement and progress monitoring. Prereq: SPSY 6150.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPSY 6911 - School Psychology Practicum

Summer 2010 Registration **SPSY 6911**

This 500 hour practicum allows students to integrate theory with school psychology practice under supervision of a licensed school psychologist. Consultation, psycho-educational assessment, and other school psychological services are stressed. Prereq: SPSY 5600, SPSY 6100, SPSY 6150, and SPSY 6160.**Semester Hours:** 1to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPSY 6915 - Practicum with Culturally and Linguistically Diverse Students

Summer 2010 Registration **SPSY 6915**

This school psychology practicum experience is focused on developing multicultural competencies with culturally and linguistically diverse students through either a cultural immersion experience in Mexico or a local practicum placement in a culturally and linguistically diverse setting. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPSY 6930 - School Psychology Internship

Summer 2010 Registration **SPSY 6930**

The internship stresses the professional practice of school psychology in a psychoeducational facility. Field experiences will encompass an array of psychological services. Prereq: CPCE 5100, SPSY 6911 and permission of instructor. **Semester Hours:** 1to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

SPSY 6935 - Practicum in Evidence-Based Interventions: TBI

Summer 2010 Registration **SPSY 6935**

Practice implementing interventions with children and youth with a variety of behavioral, learning, and emotional problems related to traumatic brain injury. Includes special emphasis on identifying and implementing evidence-based interventions including the BrainSTARS curriculum and consultation methodology, under supervision. Prereq: Admission to BRI Certification Program. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SSCI 5000 - 19th Century Philosophy

Summer 2010 Registration **S SC 5000**

Covers the systematic work of such German idealists as Hegel, Fichte, and Shelling, as well as responses to those systems by such authors as Marx, Kierkegaard, and Nietzsche. Prereq: PHIL 3002 or 3022. Cross-listed with PHIL 4000/5000 and HUMN 5000. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SSCI 5013 - Philosophical Problems in the Social Sciences and Humanities

Summer 2010 Registration **S SC 5013**

Presents an overview of key theoretical issues currently emerging across academic disciplines. Examines questions about reality, knowledge, ethics that affect social research and writing in the humanities. Readings explore how contemporary philosophical and cultural discourses have altered theory and method. Assignments

include influential theoretical pieces by key historical and contemporary thinkers, examples of application in social research, and interpretations of thought and affect in cultural contexts. Cross-listed with HUMN/PHIL 5013. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

SSCI 5020 - Elements of Social Thought

Summer 2010 Registration **S SC 5020**

Introduces students to the disciplines that comprise the social sciences (classical anthropology, sociology, sociology of religion, philosophy of history, political theory, classical psychology, etc.). Provides necessary tools for interdisciplinary students to understand the social infrastructure of contemporary society. Cross-listed with HUMN 5020 and PHIL 5020. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

SSCI 5023 - Research Perspectives in Social Science

Summer 2010 Registration **S SC 5023**

Introduces interdisciplinary social research through a critical examination of various methodological approaches. Each student formulates a research proposal which includes a research question, a review of the literature, and methods of study. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

SSCI 5050 - Topics in Social Science

Summer 2010 Registration **S SC 5050**

These topic seminars are concerned with specialized aspects of the social sciences from various theoretical and research perspectives. These courses are interdisciplinary and serve as a forum for discussion of individual projects and theses. **Semester Hours:** 1to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

SSCI 5101 - Pragmatism: Classical American Philosophy

Summer 2010 Registration **S SC 5101**

The most significant philosophical tradition born in the United States is pragmatism. Examines several of the most important classical works of this tradition, the influence of thinkers who have helped pragmatism, and the contemporary relevance of this tradition. Figures who may be included in this course are: Emerson, Pierce, Royce, James, Dewey, Mead, Rorty. Prereq: An introductory course in philosophy. Cross-listed with PHIL 4101, 5101, HUMN 5101. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

SSCI 5242 - Bioethics

Summer 2010 Registration **S SC 5242**

Examines some of the major moral issues confronting the nation's health care system. The class will search for solutions to such problems as financing health care for those unable to do so on their own, determining the extent of a patient's right to both refuse and demand certain types of medical treatment, and allocating scarce medical resources such as life-saving vital organs. The springboard for examining these issues will be the doctor or patient relationship framed by the moral principles of respect for persons and beneficence. Cross-listed with PHIL 4242, PHIL 5242, HUMN 5242. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SSCI 5250 - Environmental Ethics

Summer 2010 Registration **S SC 5250**

While human industry/technology creates enormous material prosperity, it can result in devastating environmental damage. This course analyzes the moral values, consequences and duties implied in relationships between human beings, animals and ecological systems, while seeking out new and ethical approaches. Cross-listed with PHIL 4250/5250 and HUMN 5250. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SSCI 5400 - Women and Violence

Summer 2010 Registration **S SC 5400**

Analyzes the social, political, legal, and psychological aspects of violence against women and addresses: definitions of the problem, demographics, survivors, perpetrators, children who witness, bystanders, strategies and tactics of abuse and survival, along with strategies for prevention, intervention, treatment and social change. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SSCI 5520 - The City Beautiful: Art, Architecture and Theory in Urban History

Summer 2010 Registration **S SC 5520**

How did cities develop and what were the buildings that filled these spaces? Posing this question initially, this course takes a case-study approach to surveying the concerns confronting different cultures as they developed their urban environments sociologically, anthropologically, architecturally and spatially. Cross listed with HUMN 5520. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SSCI 5530 - Social Construction of the Self

Summer 2010 Registration S SC 5530

Investigates theories that address the construction of self and how that construction is constrained by culture, politics, society and historical moment. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

SSCI 5550 - Paris 1910: Art, Philosophy and Psychology

Summer 2010 Registration S SC 5550

Traces the influences of philosophy, psychology, and art in the English, French, and German-speaking worlds in the early twentieth century. This intellectual history is extended to broader cultural and political contexts. Key period is between 1910 and 1968, when modernity's key aspirations and tensions became explicit. Cross-listed with HUMN 5550 and PHIL 5550. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

SSCI 5600 - Philosophy of Religion

Summer 2010 Registration S SC 5600

Nature of religion and methods of studying it. Cross-listed with HUMN 5600, PHIL 4600, 5600, RLST 4060, and 5060. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

SSCI 5650 - Reflections on Modernity

Summer 2010 Registration S SC 5650

Explores modernity as a historical epoch and a theoretical space, looking at the commentaries and reflections of influential 20th century thinkers including Adorno, Arendt, Levinas, Merleau-Ponty, Habermas and Foucault. Examines how the theoretical inclinations of modernity were influenced by politics, art, literature and culture. Cross-listed with HUMN 5650 and PHIL 5650. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

SSCI 5720 - Sexuality, Gender and Their Visual Representation

Summer 2010 Registration S SC 5720

Studies sexuality, gender and identity representation from classical antiquity through the present in the visual arts. Uses the literature of visibility, feminism, race and queer theory. Explores representations of femininity, masculinity and androgyny and their reinforcement and challenge to gender-identity norms. Cross listed with HUMN 5720. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

SSCI 5750 - Philosophical Psychology

Summer 2010 Registration **S SC 5750**

Explores debates about psyche and body, mind and world, self and others, and consciousness and nature. Examines the philosophical questions related to those debates that arise within theories of perception, affect and cognition offered by influential psychological models. Cross-listed with HUMN 5750, PHIL 5755. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

SSCI 5830 - Grant Writing for Nonprofits

Summer 2010 Registration **S SC 5830**

Designed to help current and future professionals in the nonprofit sector understand the social, political, and economic context and mechanics of pursuing grants, government contracts, and other funding for nonprofit organizations. Cross-listed with PSCI 5830. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

SSCI 5833 - Existentialism

Summer 2010 Registration **S SC 5833**

Examines one of the most influential movements in recent European thought, beginning with existentialism's 19th century roots, and continuing on to the existentialist philosophers of the 20th century. Figures covered may include Dostoyevsky, Kierkegaard, Nietzsche, Heidegger, Sartre and de Beauvoir. Cross-listed with PHIL 4833/5833 and HUMN 5833. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

SSCI 5840 - Independent Study: SSCI

Summer 2010 Registration **S SC 5840**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SSCI 5920 - Philosophy of Media and Technology

Summer 2010 Registration **S SC 5920**

A philosophical examination of interrelationships between contemporary media, technology, and their impacts upon character of contemporary life and values. Topics may include ethics, epistemology, democracy, advertising, media literacy and criticism. Cross-listed with PHIL 4920, 5920, HUMN 5920. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

SSCI 5933 - Philosophy of Eros

Summer 2010 Registration **S SC 5933**

Why is philosophy an erotic, activity and what are the implications of this insight? We will explore these issues, first, by reading Plato's erotic dialogues: Lysis, Symposium and Phaedrus. Then we will focus on Freud's influential (and controversial) appropriation of Plato's thought in the writings that span his career, from *The Interpretation of Dreams* (1900) to *Civilization and its Discontents* (1930) and beyond. Finally, we will survey post-Freudian theories of eros, such as Michel Foucault's *History of Sexuality*, as well as the more recent contributions of thinkers such as Jonathan Lear, Thomas Nagel, Martha Nussbaum and Slavoj Zizek. Cross-listed with PHIL 4933, PHIL 5933, WGST 4933, and HUMN 5933. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SSCI 5939 - Internship/Cooperative Education

Summer 2010 Registration **S SC 5939**

Semester Hours: 1to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

SSCI 6010 - Methods and Theories of Feminism and Gender Studies

Summer 2010 Registration **S SC 6010**

Provides graduate-level interdisciplinary study in historiography, methodologies and theories of women's, gender and sexuality studies and considers how culture is constructed around these categories. Cross-listed with WGST 6010. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SSCI 6950 - Master's Thesis

Summer 2010 Registration **S SC 6950**

Semester Hours: 1to 8

Registration is changing. Visit our website for details ucdenver.edu/registration.

SSCI 6960 - Master's Project or Report

Summer 2010 Registration **S SC 6960**

Research which may be based on field work. **Semester Hours:** 1to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

SUST 3010 - The Non-Sustainable Past

Summer 2010 Registration **SUST 3010**

This is the first of a two-course sequence that assesses the interrelations among the historical, political, cultural, ecological, and economic aspects of contemporary environmental issues. SUST I focuses on the non-sustainable use of water, land, energy, manufactured goods, and food. Prereq: 1 Natural Science Core and 1 Social Science Core. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SUST 3011 - Toward a Sustainable Future

Summer 2010 Registration **SUST 3011**

This is the second of a two-course sequence that examines the interrelations among the historical, political, cultural, ecological, and economic aspects of contemporary environmental issues. Provides students with theoretical perspectives on sustainability through a series of current, problem-oriented case studies. Prereq: One natural science core and one social science core. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

SUST 4960 - Capstone in Sustainability

Summer 2010 Registration **SUST 4960**

As the culmination of the Sustainability Minor, this course examines current research practices in sustainability and sustainability-related fields. Students work in teams to complete a sustainability/sustainability-related research paper and poster and present it to the campus community. Note: Topics variable depending on region under study, student interest, and faculty specialty. Prereq: SUST 3011. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

TCED 1111 - Freshman Seminar

Summer 2010 Registration **T ED 1111**

This is a special topics course and the specific content varies each time the course is offered. **Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

TCED 2400 - Issues in Chicano/a Education

Summer 2010 Registration **T ED 2400**

A historical overview of segregation, landmark court cases, and immigration policy in the education of Chicanos/as in Colorado and nationally from 1900 to the present is offered. The intersection of these issues in the education of undocumented students is also examined. Cross-listed with ETST 2400. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

TCED 4800 - Workshop: Teacher Education

Summer 2010 Registration **T ED 4800**

This is a workshop course and the description varies each time the course is offered. **Semester Hours:** 0.5to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

TCED 5000 - Special Topics: Teacher Education

Summer 2010 Registration **T ED 5000**

This is a workshop course and the description will vary each time the course is offered. **Semester Hours:** 0.5to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

TFVP 1050 - Video Production/Post-Production I

Summer 2010 Registration **TFVP 1050**

Students gain a knowledge of single camera video techniques and are introduced to non-linear digital editing. Course work is hands-on and collaborative, with several projects shot and edited. Learning centers on storytelling, including pacing and aesthetics. Prereq: TFVP majors and minors only, or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

TFVP 1100 - Introduction to Theatre, Film, and Television

Summer 2010 Registration **TFVP 1100**

An introduction to dramatic and cinematic texts, styles and productions; students will research and analyze a play and develop it into a film script. They will present their understanding by storyboards and multi-media presentations, exams and written work. Prereq: TFVP majors and minors only, or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

TFVP 1110 - Production Design: Theatre, Film and Video

Summer 2010 Registration **TFVP 1110**

This design/research class explores the creative skills, technical knowledge and scholarly engagement employed by production designers. The students will understand how design elements enhance a production and create a production design for a video, film or play. Prereq: TFVP majors and minors only, or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

TFVP 1550 - Scriptwriting I

Summer 2010 Registration **TFVP 1550**

Each student conceptualizes, designs and creates short scripts for stage and screen. Instruction includes story development through first draft and rewrites, incorporation of critical feedback and the merger of image and idea to convey dramatic concepts. Prereq: TFVP majors and minors only, or permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

TFVP 1611 - Acting Lab I

Summer 2010 Registration **TFVP 1611**

Students will perform scenes, have required readings and write research papers introducing them to the basic performance skills required for Stage and Screen Acting. This work will provide a foundation and vocabulary for future projects, where students interact with performers. Prereq: TFVP majors and minors only, or permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

TFVP 2090 - Production Management Techniques

Summer 2010 Registration **TFVP 2090**

Demonstrates introductory management principles and aspects of budgeting, scheduling and managing theatre and film productions. Class time includes lectures, planning exercises, demonstrations, critiques, and media presentations along with peer review. Outside of class, students will write and plan a production. Prereq: TFVP majors and minors only, or permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

TFVP 2100 - Visual Culture

Summer 2010 Registration **TFVP 2100**

Study academic theories surrounding visual cultures related to Film, Theatre & Video relating to topics such as representation, spectatorship, and mass media by viewing, research, and analyzing. Creative projects, readings, and written responses will increase sensitivity to visuals usage. Note: TFVP majors and minors only, or permission of instructor. Prereq: TFVP 1100. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

TFVP 2800 - Elements of Directing

Summer 2010 Registration **TFVP 2800**

Uses text analysis and visualization techniques as the foundation of the director's work and investigates its dimensions of practice in theatre and film. Students develop fluency

in interpretive analysis and in creating meaning through image and action. Note: TFVP majors and minors only, or permission of instructor. Prereq: TFVP 1100, TFVP 1611.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

TFVP 3222 - Theatre, Film & Video Business

Summer 2010 Registration **TFVP 3222**

Students explore and evaluate business issues in film and theatre production such as finance, distribution, organization and legal issues through readings and projects. Students develop a solid business basis for work in these fields. Note: TFVP majors and minors only, or permission of instructor. Prereq: TFVP 1100.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

TFVP 3550 - Directing Process

Summer 2010 Registration **TFVP 3550**

Students learn professional options and opportunities through a sequence of seminars and project-based workshops presented by directors in film and theatre. These interactions with faculty will influence their work in stage productions or documentary, episodic, and narrative film/television. Note: TFVP majors and minors only, or permission of instructor. Prereq: TFVP 1100, TFVP 1611, TFVP 2800.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

TFVP 3620 - Acting Styles

Summer 2010 Registration **TFVP 3620**

This course explores various topics in performance for stage and screen. Students will fully prepare scene studies using various methods and techniques in acting. Each semester will focus on one approach giving students an in-depth basis for their work. Note: TFVP majors and minors only, or permission of instructor. Repeatable up to 3 times. Prereq: TFVP 1100 and TFVP 1611.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

TFVP 3810 - Introduction to Production Process

Summer 2010 Registration **TFVP 3810**

Part one of two-course sequence. Students introduced to theoretical and practical applications of production tools, vocabulary, and experiences in a variety of production settings. Students participate as crew members for both theatrical and film events thereby acquiring production skills. Note: Must be taken before TFVP Production Process. TFVP majors and minors only, or permission of instructor.**Semester Hours:**

3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

TFVP 3820 - Production Process

Summer 2010 Registration **TFVP 3820**

Part two of two-course sequence. Students will increase their experience by applying production skills and theories learned in Intro to Production Process in a practicum setting to support theatre and film activities. Note: TFVP majors and minors only, or permission of instructor. Prereq: TFVP 3810 (Intro to Production Process)**Semester Hours: 3to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

TFVP 3840 - Applications Seminar

Summer 2010 Registration **TFVP 3840**

Reflection on the intellectual competencies, artistic capabilities, and skill sets gained throughout student's academic career. Coursework includes investigation and writing on specified topics of industry opportunities to assist career advancement. Designed to be an alternative if Internship is not appropriate. Note: TFVP majors and minors only, or permission of instructor. Prereq: Senior status**Semester Hours: 1to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

TFVP 3910 - BA Junior Project

Summer 2010 Registration **TFVP 3910**

This course consists of structured work and independent work sessions assisting students with portfolio and career path. Students will be required to work on planning an event, either in theatre or film and produce professional portfolio for faculty review. Prereq: TFVP majors and minors only with junior status, or permission of instructor**Semester Hours: 1to 1**

Registration is changing. Visit our website for details ucdenver.edu/registration.

TFVP 3939 - Internship

Summer 2010 Registration **TFVP 3939**

Designed experiences involving application of specific, relevant concepts and skills in supervised employment situations. Note: TFVP majors and minors only, or permission of instructor. Prereq: Sophomore standing**Semester Hours: 1to 3**

Registration is changing. Visit our website for details ucdenver.edu/registration.

TFVP 4090 - Senior Seminar & Project

Summer 2010 Registration **TFVP 4090**

The course integrates the development of four capstone projects (research, creative work, collaborative process and service/outreach) with a continuing forum focused on current issues in professional practice. Note: TFVP majors and minors only, or permission of instructor. Prereq: Senior status in BFA. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

TFVP 4095 - Senior Thesis Project

Summer 2010 Registration **TFVP 4095**

The BFA thesis course involves the preparation, exhibition and critical faculty response to creative work and self-promotional materials as developed by graduating seniors on the BFA degree track. Note: TFVP majors and minors only, or permission of instructor. Prereq: Senior status in department. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

TFVP 4560 - Directors at Work

Summer 2010 Registration **TFVP 4560**

Through creation and participation on a premiere production of a devised and/or mixed media, performance work in collaboration with faculty and guest professional artists, directing students will sharpen the application of skills and learn aesthetics and structure. Note: TFVP majors and minors only, or permission of instructor. Prereq: TFVP 1100, TFVP 1611, TFVP 2800, TFVP 3550. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

TFVP 4570 - Directing Practicum

Summer 2010 Registration **TFVP 4570**

Directing Practicum is professional practice training through a mentored project-based assistantship with a director. During class students will be connected to and assist directors on film and theatre projects, working one on one, to develop their skills. By application only. Note: TFVP majors and minors only, or permission of instructor. Prereq: TFVP 1100, TFVP 1611. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

TFVP 4910 - BA Senior Project

Summer 2010 Registration **TFVP 4910**

This course consists of structured work and independent work sessions assisting students with portfolio and career path. Students will be required to work on planning an event, either in theatre or film and produce professional portfolio for faculty review. Prereq: TFVP majors and minors only with senior status, or permission of

instructor. **Semester Hours:** 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 1001 - Introduction to Theatre

Summer 2010 Registration **THTR 1001**

Discussion, workshops, and lectures designed to discover, analyze, and evaluate all aspects of the theatre experience: scripts, acting, directing, staging, history, criticism and theory. Play-going and field trips to several Denver-area theaters, demonstrations and participation in live productions. This course will not satisfy any degree requirements for Theatre or Film majors. **Semester Hours:** 3to 3 **GT Pathways Category Key:** GT-AH1

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 1050 - Video Production/Post-Production I

Summer 2010 Registration **THTR 1050**

Students gain knowledge of single camera video techniques and are introduced to non-linear digital editing. Course work is hands-on and collaborative, with several projects shot and edited. Learning centers on storytelling, including pacing and aesthetics.

Prereq: BA TFVP majors, minors. Cross-listed with FILM 1050. **Semester Hours:** 4to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 1100 - Introduction to Theatre, Film and Television

Summer 2010 Registration **THTR 1100**

An introduction to dramatic and cinematic texts, styles and productions; students will research and analyze a play and develop it into a film script. They will present their understanding by storyboards and multi-media presentations, exams and written work.

Prereq: Majors, minors or permission of instructor. Cross-listed with FILM

1100. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 1110 - Production Design: Theatre, Film and Video

Summer 2010 Registration **THTR 1110**

This design/research class explores the creative skills, technical knowledge and scholarly engagement employed by production designers. The students will understand how design elements enhance a production and create a production design for a video, film or play. Note: Introduction to Art or Art Survey I is strongly recommended, but not required. Prereq: Majors, minors or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 1550 - Scriptwriting I

Summer 2010 Registration **THTR 1550**

Each student conceptualizes, designs and creates short dramatic scripts. These scripts are for stage and screen, with production lengths from one to ten minutes. Instruction includes story development through first draft and rewrites, incorporation of critical feedback and the merger of image and idea to convey dramatic concepts. Students compare theatrical and video performance realization. Prereq: Majors, minors or permission of instructor. Cross-listed with FILM 1550. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 1611 - Acting Lab I

Summer 2010 Registration **THTR 1611**

Students will perform scenes, have required readings and write research papers introducing them to the basic performance skills required for Stage and Screen Acting. This work will provide a foundation and vocabulary for future projects, where students interact with performers. Prereq: BA TFVP majors, minors. Cross-listed with FILM 1611. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 2450 - Introduction to Performing Arts and Events Management

Summer 2010 Registration **THTR 2450**

Offers students the ability to learn about stage managing events in the performing arts, in a non-pressure environment where leadership and organizational skills may develop and the student can gain a general understanding of the profession. Cross-listed with MUSC 2450. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 2510 - Introduction to Oral Interpretation

Summer 2010 Registration **THTR 2510**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 2530 - Acting: Character and Staging

Summer 2010 Registration **THTR 2530**

Fully prepared scene studies leading to advance work in characterization and staging. Methods of discovering and utilizing the range of creative potential play scripts from the current production season are emphasized. Prereq: Voice and Movement I (or equivalent), and Performance and Visualization I and II (or equivalent). **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 2531 - Acting for Non-Theatre Majors

Summer 2010 Registration **THTR 2531**

Introductory acting course which focuses on the skills comprising the actor's art and their direct application to all disciplines of study outside of the theatre major. Students investigate interpersonal skills such as collaboration, communicating, risk-taking, listening, and creative problem solving. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 2560 - Topics in Theatre

Summer 2010 Registration **THTR 2560**

Semester Hours: 1to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 2600 - Studio I: Dynamics of Content Creation

Summer 2010 Registration **THTR 2600**

Investigates the process of creating performance texts for live, recorded and mixed presentation as well as the methods of selecting, transforming and pacing material for performance. Prereq: Performance Visualization I & II or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 2700 - Art for the Theatre

Summer 2010 Registration **THTR 2700**

Students will study principles of theatre and screen productions design. They will do exercises in drawing, sketching, drafting, rendering and model building with practical application towards theatre, film, and video design techniques. Upon completion, student will have a basic production design skills. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 2710 - Theatrical Design, Aesthetics, Production I

Summer 2010 Registration **THTR 2710**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 2820 - Departmental Production

Summer 2010 Registration **THTR 2820**

Participation in departmental production. **Semester Hours:** 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 2821 - Multi-Arts Performance

Summer 2010 Registration **THTR 2821**

Participation in an integrated arts performance piece. Credit hours are determined by a faculty advisor and are dependent on the level of responsibility in the production. **Semester Hours:** 2to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 2822 - Affiliated Theatre Production

Summer 2010 Registration **THTR 2822**

Participation in a production at an affiliated theatre in the Denver metro area. Credit hours are determined by a faculty advisor and are dependent on the level of responsibility in the production. **Semester Hours:** 1to 2

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 2823 - Theatre Buffs Production

Summer 2010 Registration **THTR 2823**

Participation in a Theatre Buffs production. Credit hours are determined by a faculty advisor and are dependent on the level of responsibility in the production. **Semester Hours:** 1to 2

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 2824 - Theatre Practice: Management

Summer 2010 Registration **THTR 2824**

Practicum component of the theatre emphasis requirement through participation in stage management, box office management, or public relations for an approved production.

Credit hours are determined by a faculty advisor and are dependent on level of responsibility in the production. **Semester Hours:** 2to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 2840 - Independent Study: THTR

Summer 2010 Registration **THTR 2840**

Prereq: Written permission of the supervising instructor. **Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 3010 - Stage and Production Management

Summer 2010 Registration **THTR 3010**

This is a course that addresses aspects of planning and managing various theatrical events and live performances. Emphasizes maximum results, given the complexity of live performance and the resource pool. Prereq: THTR/FILM 1600 or THTR/FILM 1610 or instructor permission. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 3530 - Acting: Character and Text

Summer 2010 Registration **THTR 3530**

Fully prepared scene studies leading to advance work in characterization and text. Methods of discovering and utilizing the range of creative potential play scripts from the current production program are emphasized. Prereq: THTR/FILM 1611. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 3531 - Theatre of Social Responsibility

Summer 2010 Registration **THTR 3531**

The research and development of a one-act interactive theatre piece based on a selected social, political, or community concern, (peer pressure, gender identification and substance abuse) which are toured to appropriate locales for performances and follow-up workshops and discussions. Prereq: At least one Arts and Media class or permission of instructor following an interview. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 3540 - Directing: Text and Analysis

Summer 2010 Registration **THTR 3540**

Explores the director's analytical processes and interpretative choices in preparing a script for production with primary focus on representational theater. Note: TFVP majors and minors only, or permission of instructor. Prereq: TFVP 1100, TFVP 1550. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 3560 - Topics in Theatre

Summer 2010 Registration **THTR 3560**

Various topics in the study of the theatre of special interest to majors with an emphasis in theatre. **Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 3561 - Topics in Theatre: Honors in Humanities Cluster

Summer 2010 Registration **THTR 3561**

Specific topics courses designed as cluster courses for the Honors in Humanities program. Titles rotate on a regular basis. **Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 3580 - Theatre for Children

Summer 2010 Registration **THTR 3580**

Offered irregularly. Study of processes involved in creating substantial theatre for children, including an examination of various sources for dramatizing children's stories, fairy tales, poems, and existing scripts. Includes a full production of a children's play to be performed by members of the class before audiences of children. Prereq: THTR 1001 or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 3610 - Performance: Theory/History/Criticism I

Summer 2010 Registration **THTR 3610**

Part one of two semester course sequence exploring questions of dramatic theory and dramaturgy in context of the development of Western Theater before 1850 and an analysis of historical modes of production, dramatic text and artistic creation in relation to contemporary theatrical practice. Prereq: THTR 1100 or FILM 1100 or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 3611 - Drama of Diversity

Summer 2010 Registration **THTR 3611**

Investigates the creation and reinforcement of gender, ethnic, and racial stereotypes in theatre, film, and television in the United States. The course explores how popular images are created by writers, directors, and performers, and become "reality" for the audiences for which they are intended. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 3720 - Lighting Design

Summer 2010 Registration **THTR 3720**

A practical introduction to the history, theory, practice and equipment for lighting performing arts productions. Course emphasizes textual analysis for lighting design, basic electricity, lighting equipment and control, safety practices and lighting graphics. Requirements include related experiences with departmental productions. Prereq:

THTR/FILM 1100 and THTR 2700 or permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 3730 - Scene Design

Summer 2010 Registration **THTR 3730**

Introduces the principles and practices of scenic design for the theatre. Emphasizes textual analysis, the aesthetic and practical elements of design, design development and theatrical graphics. Requirements include related experiences working departmental production. Prereq: THTR/FILM 1100 and THTR 2700 or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 3740 - Costume Design

Summer 2010 Registration **THTR 3740**

Introduces the principles and practices of costume and make-up design for the theatre. Costume design focuses on basic figure drawing, practical elements of design, design development and different costume rendering techniques. Make-up design encompasses basic and specialty make-up application along with creating life masks. Prereq: THTR 1100 or FILM 1100 and THTR 2700 or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 3760 - Sound Design for the Theater

Summer 2010 Registration **THTR 3760**

Studies sound design with practical application towards usage in the theatrical discipline. Includes studio techniques, live playback, script analysis, graphic techniques for sound plots and selection and recording techniques to amplify or otherwise manipulate the performer's voice, recreate sounds as they naturally occur and influence the emotional content of the drama. Prereq: THTR/FILM 1100 or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 3820 - Production Process

Summer 2010 Registration **THTR 3820**

Part of four course sequence; students gain theoretical and practical applications of the tools, vocabulary and experience in a variety of presentations. Students participate as crewmembers for both theatrical and film events. They maintain a record/portfolio of their participation. Note: Must be taken 2 times for BA degree. Prereq: Majors, minors or permission of instructor. **Semester Hours:** 2to 2

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 3838 - Applications Seminar

Summer 2010 Registration **THTR 3838**

Reflection on the intellectual competencies, artistic capabilities and skill sets gained throughout student's academic career. Coursework in this seminar includes investigation of career opportunities and trends in theatre. This course is designed to be an alternative if THTR 3939-Internship, is not appropriate or available. Prereq: Senior standing. **Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 3840 - Independent Study: THTR

Summer 2010 Registration **THTR 3840**

Prereq: Written permission of supervising instructor. **Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 3910 - BA Junior Project

Summer 2010 Registration **THTR 3910**

This course consists of structured work and independent work sessions assisting student with portfolio and career path. Students will be required to work on planning an event, either in theatre or film and produce professional portfolio for faculty review. Note: Not for BFA majors. Prereq: BA majors, minors, junior status or permission of instructor. Cross-listed with FILM 3910. **Semester Hours:** 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 3939 - Internship/Cooperative Education

Summer 2010 Registration **THTR 3939**

Designed experiences involving application of specific, relevant concepts and skills in supervised employment situations. Prereq: Junior standing and 2.75 GPA. **Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 3995 - Travel Study Topics

Summer 2010 Registration **THTR 3995**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 4520 - Lessac Summr Wrkshp I: Voice

Summer 2010 Registration **THTR 4520**

Semester Hours: 1to 5

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 4521 - Lessac Summr Wkshp I: Bdy Wisdm

Summer 2010 Registration **THTR 4521**

Semester Hours: 1to 2

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 4522 - Lessac Summr Wrkshp II: Voice

Summer 2010 Registration **THTR 4522**

Semester Hours: 1to 5

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 4523 - Lessac Sumr Wkshp II: Bdy Wisdm

Summer 2010 Registration **THTR 4523**

Semester Hours: 1to 2

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 4524 - Adv Studies with Lessac Master Teacher

Summer 2010 Registration **THTR 4524**

Semester Hours: 1to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 4530 - Acting: Character and Media

Summer 2010 Registration **THTR 4530**

Provides the study, skill development and workshop experience for the actor in media work-film, television, video and voice over. Prereq: THTR 1611 or FILM 1611. Cross-listed with THTR 5530.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 4540 - Directing: Staging and Process

Summer 2010 Registration **THTR 4540**

Explores the Director's contemporary staging options, rehearsal processes and production development of text and non-text-based work in the context of traditional as well as experimental approaches to theatricality. Prereq: THTR 1100 or FILM 1100. Cross-listed with THTR 5540.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 4550 - Playwriting: The Short Form

Summer 2010 Registration **THTR 4550**

Writing workshop in one-act plays, with special emphasis on the demands of production: space, acting, staging conventions and techniques. Prereq: A creative writing course or permission of instructor. Cross-listed with THTR 5550. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 4560 - Topics in Theatre

Summer 2010 Registration **THTR 4560**

Various topics in the study of the theatre of special interest to acting majors, with an emphasis in theatre. **Semester Hours:** 1to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 4570 - Creative Drama

Summer 2010 Registration **THTR 4570**

Offered irregularly. Study of creativity, its role and application in dramatics, and the manner in which creative dramatics assists in the growth and development of children and youth. Prereq: THTR 2530 or equivalent. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 4571 - Topics: Applied Theatre Perspectives

Summer 2010 Registration **THTR 4571**

Offered irregularly. A special topics investigation of creativity, communication, counseling, and theatre for families and young adults, as well as an exploration into the potential of oral history, folklore, and non-performance-oriented theatre techniques. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 4580 - Theatre for Children

Summer 2010 Registration **THTR 4580**

Offered irregularly. Study of the processes involved in creating designed and substantial theatre for children, including an examination of various sources for dramatizing children's stories, fairy tales, poems and existing scripts. Includes a full production of a children's play to be performed by members of the class before audiences of children. Prereq: THTR 1001 or permission of instructor. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 4610 - Performance: Theory/History/Criticism II

Summer 2010 Registration **THTR 4610**

Part two of course sequence exploring questions of dramatic theory and dramaturgy in context of development of Western Theater after 1850 and an analysis of historical modes of production, dramatic text and artistic creation in relation to contemporary theatrical practice. Note: TFVP majors and minors only, or permission of instructor.

Prereq: TFVP 1100. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 4611 - American Theatre History

Summer 2010 Registration **THTR 4611**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 4710 - Production Process

Summer 2010 Registration **THTR 4710**

An overview exploration of the design areas of the performing arts, designed for majors in all areas of focus and non-majors with some background in theatre. The contribution of major design components (scenic, lighting, costume, and sound) will be examined in theory and practice. Lab requirements will involve participation in departmental activities. Attendance and review of productions will be scheduled. Prereq: THTR 1001 or equivalent and 12 upper division hours in theatre. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 4730 - Advanced Scenic Design

Summer 2010 Registration **THTR 4730**

Students will continue studies in graphic techniques, design styles and the integration of production design areas. Students will complete projects in scenic design for various production forms. Outcomes will include fully realized design projects with renderings, models and drafting. Prereq: THTR 1100 and 1110. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 4760 - Topics in Design

Summer 2010 Registration **THTR 4760**

A special topics investigation of trends in production design and experimental practices in traditional and non-traditional endeavors. Prereq: THTR 3730 and 4730 or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 4820 - Theatre Practice

Summer 2010 Registration **THTR 4820**

Advanced practicum in production work for an approved production. Credit hours are determined by faculty advisor and are dependent on the level of responsibility in the production. **Semester Hours:** 1to 4

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 4840 - Independent Study: THTR

Summer 2010 Registration **THTR 4840**

Prereq: Written permission of supervising instructor. **Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 4910 - BA Senior Project

Summer 2010 Registration **THTR 4910**

This course consists of structured and independent sessions of advanced work assisting senior students with portfolios and careers. Students will work on planning an event, either in theatre or film and will produce a portfolio to professional standards for faculty review. Prereq: Majors, minors, THTR 3910 and permission of instructor. Cross-listed with FILM 4910. **Semester Hours:** 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 4999 - Senior Seminar and Project

Summer 2010 Registration **THTR 4999**

A two semester seminar integrating the development of four capstone projects (research, creative work, collaborative process and service/outreach) with a continuing forum focused on current issues in professional practice. Prereq: Senior status in Theater. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 5520 - Lessac Summer Workshop I: Voice

Summer 2010 Registration **THTR 5520**

Semester Hours: 1to 5

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 5521 - Lessac Summer Intensive Workshop I: Body Wisdom

Summer 2010 Registration **THTR 5521**

Semester Hours: 1to 2

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 5522 - Lessac Summer Intensive Workshop II: Voice

Summer 2010 Registration **THTR 5522**

Semester Hours: 1to 5

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 5523 - Lessac Summer Intensive Workshop II: Body Wisdom

Summer 2010 Registration **THTR 5523**

Semester Hours: 1to 2

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 5524 - Adv Studies with Lessac Master Teacher

Summer 2010 Registration **THTR 5524**

Semester Hours: 1to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 5530 - Acting: Character and Media

Summer 2010 Registration **THTR 5530**

Provides the study, skill development and workshop experience for the actor in media "work - film," television, video and voice over. Prereq: THTR/FILM 1611 or permission of instructor. Cross-listed with THTR 4530. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 5540 - Directing: Staging and Process

Summer 2010 Registration **THTR 5540**

Explores the Director's contemporary staging options, rehearsal processes and production development of text and non-text-based work in the context of traditional as well as experimental approaches to theatricality. Prereq: THTR/FILM 1100. Cross-listed with THTR 4540. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 5550 - Playwriting: The Short Form

Summer 2010 Registration **THTR 5550**

Writing workshop in one-act plays, with special emphasis on the demands of production: space, acting, staging conventions and techniques. Prereq: A creative writing course or permission of instructor. Cross-listed with THTR 4550. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 5560 - Topics in Theatre

Summer 2010 Registration **THTR 5560**

Covers different areas of theatre. Can be taken more than once for credit when topics vary. Prereq: Permission of instructor. **Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 5570 - Creative Drama

Summer 2010 Registration **THTR 5570**

Offered irregularly. Study of creativity, its role and application in dramatics, and the manner in which creative dramatics assist in the growth and development of children and youth. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 5580 - Theatre for Children

Summer 2010 Registration **THTR 5580**

Offered irregularly. Study of the processes involved in creating substantial theatre for children, including an examination of various sources for dramatizing children's stories, fairy tales, poems, and existing scripts. Includes a full production of a children's play to be performed by members of the class before audiences of children. Prereq: THTR 1001 or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 5611 - American Theatre History

Summer 2010 Registration **THTR 5611**

Offered irregularly. Investigates American theatres, methods of presentation, audiences, actors, acting, and economics from 1700 to the present, emphasizing contemporary practices and values as away of understanding and appreciating the place of theatre in this country as it has evolved and developed. Prereq: THTR 3610 and 4610 or permission of instructor. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 5710 - Production Process

Summer 2010 Registration **THTR 5710**

An overview exploration of the design areas of the performing arts, designed for majors in all areas of focus and non-majors with some background in theatre. The contribution of major design components (scenic, lighting, costume, and sound) will be examined in theory and practice. Lab requirements will involve participation in departmental activities. Attendance and review of productions will be scheduled. Offered irregularly. Prereq:

THTR 1001 or equivalent and 12 upper division hours in theatre. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 5840 - Independent Study: THTR

Summer 2010 Registration THTR 5840

Prereq: Written permission of supervising instructor. **Semester Hours:** 1to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 5939 - Cooperative Education

Summer 2010 Registration THTR 5939

Semester Hours: 1to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 5995 - Travel Study Topics

Summer 2010 Registration THTR 5995

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 6840 - Independent Study: THTR

Summer 2010 Registration THTR 6840

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

THTR 6950 - Master's Thesis

Summer 2010 Registration THTR 6950

Semester Hours: 1to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

UNHL 1100 - Introduction to University Honors and Leadership

Summer 2010 Registration UHL 1100

The UNHL program was developed with the goal of creating academics with leadership skills to communicate their ideas and strong leaders with the ability to think critically, analyze issues from alternate perspectives and develop and communicate plausible solutions that take into consideration all points of view; the ideal end result of the program would be intelligent, ethical leaders and scholars in multiple fields of endeavor. The three areas around which the course will revolve are: a) Oil, b) Robots, c) Penicillin. Each of these topics allows multiple facets of a university education in the old sense to be explored from philosophy, history and art to chemistry, physics and engineering.

There will be multiple means of exploration for each of these topics, from lectures and in-class discussions to field trips and engagement activities; there will be writing assignments in every phase that will focus on writing skills and writing for different audiences.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

UNHL 2755 - UNHL Seminar

Summer 2010 Registration **UHL 2755**

Semester Hours: 1to 1

Registration is changing. Visit our website for details ucdenver.edu/registration.

UNHL 2840 - Independent Study

Summer 2010 Registration **UHL 2840**

Semester Hours: 1to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

UNHL 2939 - Internship

Summer 2010 Registration **UHL 2939**

Experiences involving application of specific, relevant concepts and skills in supervised employment situations. Prereq: Cumulative GPA of 3.0 or above and permission of UNHL Director/Associate Director.**Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

UNHL 3100 - Ethics & Leadership: An Introduction

Summer 2010 Registration **UHL 3100**

This one-semester ethics and leadership course will introduce students to the wide variety of some of the best leadership theories and their application to current ethical issues. Prereq: UNHL 1100.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

UNHL 3110 - Leadership, Communication, and Conflict

Summer 2010 Registration **UHL 3110**

Leaders spend a significant amount of time managing conflict. This course is designed to explore the practical and theoretical basis of conflict and communication, and seeks to examine critical leadership processes that lead to the increased likelihood of organizational survival through successful conflict management. Prereq: UNHL 1100.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

UNHL 3501 - Love and Death in the Greek Classics

Summer 2010 Registration **UHL 3501**

This course introduces students to classical Greek literature, focusing on love and death in Homeric epic, lyric poetry, tragic drama, the history and social science of Thucydides, the comedies of Aristophanes, and Plato's philosophical dialogues. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

UNHL 3502 - The History and Literature of Science in the 19th Century

Summer 2010 Registration **UHL 3502**

This course will examine the literature of the 19th Century, the history of science in that period, and how those works and that history impact how we think about science today. Prereq: UNHL 1100. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

UNHL 3503 - Ethics, Academic Integrity, and Social Responsibility

Summer 2010 Registration **UHL 3503**

This course combines research and class discussions in such a way that theories, viewpoints, and practical proposals regarding ethics and its application to intellectual responsibility are understood in their own right as well as in relation to other human activities. One daunting task will be facing up to the challenge of how to use the increasingly powerful information tools provided by universities. In the last third of the semester, students will be asked to work in teams on projects dealing with current ethics controversies. Prereq: UNHL 1100; not open to students who have taken UNHL 3100. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

UNHL 3810 - Understanding and Dealing with Uncertainty

Summer 2010 Registration **UHL 3810**

This course discusses the concept of uncertainty from multiple perspectives. What is uncertainty? How does it relate to other notions such as ignorance or variation of risk? How do we deal with uncertainty? We will consider ideas from mathematics, science, philosophy, religion, law, and psychology, among other fields. Students will be required to develop their own ideas on uncertainty in written form and/or participate in group presentations. Prereq: UNHL 1100. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

UNHL 3939 - Internship

Summer 2010 Registration **UHL 3939**

Experiences involving application of specific, relevant concepts and skills in supervised employment situations. Prereq: Cumulative GPA of 3.0 or above and permission of UNHL Director/Associate Director. **Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

UNHL 4840 - Independent Study

Summer 2010 Registration **UHL 4840**

Semester Hours: 1to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

URBN 6610 - Infrastructure Studio

Summer 2010 Registration **U D 6610**

Introduces urban structure and morphology, presenting city as complex, ecological organism comprised of interrelated systems. Working on urban/metropolitan scale, students deconstruct city into series of infrastructural layers, then recompose and restructure it in a more integrated fashion. **Semester Hours:** 6to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

URBN 6611 - Regulatory Studio

Summer 2010 Registration **U D 6611**

Advances understanding of tools, methods and practice of urban design. Operating on neighborhood scale, studio emphasizes proactive role designers play in shaping regulations. Students consider real estate development economics, aesthetic criteria, historic preservation, and methods of effective community participation. **Semester Hours:** 6to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

URBN 6612 - Urban Synthesis Studio

Summer 2010 Registration **U D 6612**

Synthesizes learning from previous studios, emphasizing exploration and experimentation on variety of scales. Civic engagement is paramount component, with the studio taking place in a variety of challenging contexts, including metropolitan regions in China, India and the Middle East. **Semester Hours:** 6to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

URBN 6640 - History of the City

Summer 2010 Registration **U D 6640**

Introduces students to the history of global cities through selected typologies. Explores

similarities and differences among cities considered against the larger cultural, political and socio-economic envelope of which they are part. Provides awareness of origins, growth and evolution of urban form. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

URBN 6641 - Design Process/Practice

Summer 2010 Registration U D 6641

Advances current practice by exploring innovative methods of design analysis, production, representation, and communication. Community participation and civic engagement are integral components of seminar, and students are introduced to business of urban design through contact with prominent urban design professionals. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

URBN 6642 - Design Policy/Regulation

Summer 2010 Registration U D 6642

Argues that a role of urban designers is to shape built environment through combination of physical intervention and policy development. Students review urban economic and real estate trends and assess zoning/land use regulations to understand impacts on built environment quality. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

URBN 6643 - Graphics for Planners

Summer 2010 Registration U D 6643

Professional planners must be able to communicate their design concepts through graphical means. Students will learn to communicate with use of hand and technical drawings, color renderings, computer modeling and graphic layout design. Cross-listed with URPL 5500. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

URBN 6686 - Special Topics: Urban Design

Summer 2010 Registration U D 6686

Various topical concerns are offered in urban design history, theory, elements, concepts, methods, implementation strategies, and other related areas. **Semester Hours:** 1to 6
Registration is changing. Visit our website for details ucdenver.edu/registration.

URBN 6840 - Independent Study: URBN

Summer 2010 Registration U D 6840

Studies initiated by students or faculty and sponsored by a faculty member to investigate

a special topic or problem related to urban design. **Semester Hours:** 1to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

URBN 6930 - Urban Design Internship

Summer 2010 Registration **U D 6930**

Designed to provide professional practice experience in urban design. Emphasis on actual work experience in settings with client groups as students assist them in determining solutions. Program directors approval required. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

URPL 5460 - Intro Sustainable Urban Infrastructure

Summer 2010 Registration **URP 5460**

Focuses on developing uniform vocabulary on sustainable infrastructure across science & technology, architecture & planning, public policy, and health & behavioral sciences. Students learn concepts, principles/pathways and evaluation techniques for promoting the diffusion of sustainable urban infrastructures. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

URPL 5500 - Graphics for Planners

Summer 2010 Registration **URP 5500**

Professional planners must be able to communicate their design concepts through graphical means. Students will learn to communicate with use of hand and technical drawings, color renderings, computer modeling and graphic layout design. Cross-listed with URBN 6643. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

URPL 5501 - Planning Issues and Processes

Summer 2010 Registration **URP 5501**

Provides an overview of planning history and theory. The philosophical, political, and economic roots of the various theories are discussed. Ideas are placed in the context of the planning profession's history and its present aims, interests, and ethics. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

URPL 5510 - Planning Methods I

Summer 2010 Registration **URP 5510**

Focuses on application of methodological techniques commonly used in planning practice. Course covers data collection, management, analysis, communication and presentation. Major topics include primary/secondary data analysis, database

construction, descriptive and inferential statistics, sampling, probability distributions, hypothesis testing, and correlation. Cross-listed with GEOG 4000.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

URPL 5511 - Planning Methods II

Summer 2010 Registration **URP 5511**

Addresses advanced models associated with the estimation, prediction, and prescription of conditions and trends in population, employment, land use and transportation.

Examines orchestrating analytic studies that inform all phases of a project, including effective methods for engaging the public, presentation techniques, etc.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

URPL 5520 - Urban Spatial Analysis

Summer 2010 Registration **URP 5520**

Examines urban spatial patterns and processes. Considers city as system. Major topics: defining urban/spatial/analysis; economic theory of city origin; urban land value; social space; industrial and retail structure; economic base/urban growth, sustainable development; city of mind.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

URPL 5530 - Planning Law

Summer 2010 Registration **URP 5530**

Focuses on the legal setting for urban and regional planning in the United States and major constitutional issues in the effectuation of planning policy. Contemporary controversies are put into the larger context of attempts by the judicial system to redefine the balance between individual rights and governmental power in an increasingly weakened society.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

URPL 6612 - Geographic Information Systems for Planners

Summer 2010 Registration **URP 6612**

Introduces the use of geographic information systems for environmental, economic, and physical planning. Focuses on what a GIS is and how it works, data issues, and using a GIS to improve planning and decision making.**Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

URPL 6630 - Planning Studio I

Summer 2010 Registration **URP 6630**

Focuses on plan design in urban and regional planning and explores basic concepts, techniques, and issues related to urban planning, urban design, site planning, and environmental awareness. **Semester Hours:** 6to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

URPL 6631 - Planning Studio II

Summer 2010 Registration **URP 6631**

Focuses on plan-making related to urban and regional planning. An understanding of the plan-making process is emphasized. Students have direct experience with the various steps in planning, including data-gathering, goal-setting, identification of alternatives, analysis, synthesis, and presentation of the plan. The plan may be for a city sector, a neighborhood, an entire community, a region, or it may be a policy plan. Where possible, students work with an actual client. Prereq: URPL 6630. **Semester Hours:** 6to 6

Registration is changing. Visit our website for details ucdenver.edu/registration.

URPL 6632 - City Design Policy

Summer 2010 Registration **URP 6632**

Focuses on historical and contemporary relationship between regulatory policy and urban form. Course views zoning and land use regulations as ways of intervening in built environment's production, providing analytical methods for evaluating morphological outcomes suggested by given zoning codes. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

URPL 6633 - Urban Form Theory

Summer 2010 Registration **URP 6633**

An analysis of social, economic, political and cultural forces shaping historical and contemporary production of urban form. Course examines crucial links between design and society, and theories are evaluated according to practicality of their strategies for implementing their ideal. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

URPL 6634 - Preservation Theory and Practice

Summer 2010 Registration **URP 6634**

Philosophical questions in preservation practice; balancing significance in the environment with natural decay and demands for change. Policy issues as well as preservation and adaptation design. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

URPL 6635 - City Building

Summer 2010 Registration **URP 6635**

Examines changing norms in city planning and design from 1800 to the present and the production of the built environment by a variety of actors. Discussions of zoning, land use regulation, management, and the creation of ordinary/everyday urban space. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

URPL 6636 - Design Policy/Regulation

Summer 2010 Registration **URP 6636**

Argues that a role of urban designers is to shape built environment through combination of physical intervention and policy development. Students review urban economic and real estate trends and assess zoning/land use regulations to understand impactson built environment quality. Cross-listed with U D 6642. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

URPL 6637 - Comprehensive Planning

Summer 2010 Registration **URP 6637**

This course will review and analyze the theory, practice and role of comprehensive planning. The focus will be on moving from theory to practice while integrating real world examples, planning skills and methods, forecasts, data collection, surveys, public process, visioning and strategic planning. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

URPL 6640 - Community Development Process

Summer 2010 Registration **URP 6640**

Introduces community development, a field closely allied with planning, in its devotion to working with people to strengthen their communitiesin accordance with locally-determined goals. Emphasisis placed on understanding groups, organizations, and communities, and on developing skills in such areas as community analysis, goal setting, group facilitation, and problem solving. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

URPL 6641 - Social Planning

Summer 2010 Registration **URP 6641**

An increasingly important specialty in contemporary planning practice is social planning. This course covers the process of formulating public policies and designing, implementing, and evaluating programs in such areas as social services, housing, health care, employment and education. Attention is given to the historical perspective and the

present-day social and political context within which social policy formation and social planning occurs.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

URPL 6649 - Environmental Planning I: Ecology

Summer 2010 Registration **URP 6649**

Studies the physiography, cultural factors, and aesthetic criteria in relation to landscape and spatial organization and structure. Covers data sources and interpretation, and looks at environmental factors in development and site analysis. Prereq: Urp 5510 or permission of instructor.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

URPL 6650 - Environmental Planning II

Summer 2010 Registration **URP 6650**

Provides a comprehensive perspective on environmental planning policy. Focuses on major environmental issues and problems, methods of evaluation, and legislative responses.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

URPL 6651 - Environmental Impact Assessment

Summer 2010 Registration **URP 6651**

The objective of this course is to provide the foundation for understanding the environmental impact assessment process, its legal context, and the criteria and methods for procedural and substantive compliance. Prereq: Urp 5530 or permission of instructor. Cross-listed with Geog 4220, 5220.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

URPL 6652 - Growth Management

Summer 2010 Registration **URP 6652**

Examines environmental and land regulations such as zoning, subdivision controls, and growth management systems in the context of public policy. Emphasis is placed on case studies, the analysis of past and present practices, improvement of existing systems, and the design of new regulatory systems. Prereq: Urp 5530 or permission of instructor.**Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

URPL 6653 - Natural Resource Planning and Management

Summer 2010 Registration **URP 6653**

Considers methods for managing renewable and non-renewable resources using both

legislative and economic controls. The role of technology, ideologies, and equity are discussed. Decision making techniques are applied to problems of resource and environmental management. The ability to allocate and control resource usage to ensure sustainability is discussed. Cross-listed with Geog 4260. **Semester Hours:** 3 to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

URPL 6654 - Stable Land Use Planning

Summer 2010 Registration **URP 6654**

Provides a thorough grounding in methods of land use planning with reference to problems of environmental and community sustainability. Students will formulate a plan in a professional manner, appropriate to the community context, and create a plan for a small hypothetical city. **Semester Hours:** 3 to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

URPL 6656 - Regional Land Use Analysis and Planning

Summer 2010 Registration **URP 6656**

Considers the means for documenting land use, appraising environmental constraints, establishing developmental options, directing growth, and preserving natural, agricultural, and other open space in both metropolitan and rural regional settings. Stresses spatial analysis, policy prescription, regulatory constraint, and institutional development for subnational regional strategic growth management. **Semester Hours:** 3 to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

URPL 6660 - Real Estate Development Process

Summer 2010 Registration **URP 6660**

a detailed analysis of components of real estate process and its relationship to the design profession and other key participants. Students learn what variables are within the real estate development business, how they interrelate, and why projects succeed or fail. **Semester Hours:** 3 to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

URPL 6661 - Real Estate Development Finance

Summer 2010 Registration **URP 6661**

Focuses on financial analysis of real estate investments. Covers topics including measures of value, capitalization rate, capital budgeting, debt and equity markets and taxation. Cash flow and appraisal techniques, complex deal structuring, innovations in debt financing, syndications, tax shelters, tax-exempt financing, and micro-computer applications also are covered. **Semester Hours:** 3 to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

URPL 6665 - Urban Market Analysis

Summer 2010 Registration **URP 6665**

Considers how markets for land and real estate, labor, capital, and private and public goods and services deploy resources and shape both social and spatial outcomes in urban settings. Posits models of policy intervention whose effects are transmitted by private actions orchestrated within the interlocking markets that form the economy of cities. Provides selected examples of the analysis of markets in such policy venues as land development, public transit, urban housing, and regional labor markets. Prereq: Urp 5510 and 5520. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

URPL 6670 - Urban Economic Development

Summer 2010 Registration **URP 6670**

Examines the process of local economic development and seeks from the theory of economic change essential modes of policy intervention. Local economies are seen to serve these central functions: employment, fiscal betterment, and growth enabling certain efficiencies of public and private goods and services, and a greater diversity of opportunities. Weighs the merits of indigenous development versus external recruitment, and both in relation to regional carrying capacities that ultimately define growth's limits. Addresses tools needed to analyze, induce, and regulate change. Posits economic development in relation to physical planning via strategic policy. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

URPL 6671 - Regional Economic Development

Summer 2010 Registration **URP 6671**

Examines the economies of metropolitan, rural, state, and national regions, placing each within the fabric of global relations that direct capital, manage productive activities, and govern prosperity's geography. Organized both sectorally and spatially, the course addresses key sectors of the emerging global economy, as well as the rationale of the "Entrepreneurial" state at the public-private interface. Posits institutional approaches and professional roles in the management of regional economies. Seeks in theory a template of regional change, and both the means and purpose of policy intervention. Finds in strategic planning an integration of developmental and environmental perspectives. Prereq: Urp 5520 or permission of instructor. Cross-listed with Geog 4400. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

URPL 6673 - Transportation Planning I: Land Use and Transport

Summer 2010 Registration **URP 6673**

Examines several important aspects of the transport network: accessibility and

connectivity of nodes and linkages and the volume and direction of the flow of a transport network. Descriptive, predictive, and planning methods and models discussed include graph theoretical measures, connectivity matrices, gravity model, abstract mode model, entropy-maximization, trip generation model and flow allocation models. Prereq: Urp 5510 or permission of instructor. Cross-listed with Geog 4630. **Semester Hours:** 3 to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

URPL 6674 - Transportation Planning II

Summer 2010 Registration **URP 6674**

Examines issues of transportation in urban development, the urban transportation system, the relationship between land use planning and transportation planning, urban transportation planning processes and selected issues. Covers theoretical, policy, and practical perspectives to understand the merits of employing specific planning policies or other infrastructure investments. Prereq: Urp 6673. Cross-listed with Geog 4670. **Semester Hours:** 3 to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

URPL 6676 - Urban Housing

Summer 2010 Registration **URP 6676**

Examines planning and other aspects of urban housing, focusing primarily on U. S. urban housing conditions with some references to international conditions and comparisons. Major topics of the course include aggregate trends and patterns, housing in spatial context, the allocation process of housing markets and submarkets (supply/finance, demand/mobility/demographic change), housing problems and failures), (substandardness, inequitable distribution, special group needs, segregation and discrimination, market problems), the role of government, and alternative approaches. **Semester Hours:** 3 to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

URPL 6680 - Urbanization in Developing Countries

Summer 2010 Registration **URP 6680**

a description, analysis, and evaluation of urbanization and planning in less developed countries. The special problems of planning, housing, transportation, environmental quality, and economic development in cities of these countries are addressed. Comparisons are made among cities of third-world countries and between third-world countries and first-world countries. **Semester Hours:** 3 to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

URPL 6686 - Special Topics: Urban and Regional Planning

Summer 2010 Registration **URP 6686**

Various topical concerns are offered in urban and regional planning, theory, concepts, methods, case studies and practice. **Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

URPL 6840 - Independent Study

Summer 2010 Registration **URP 6840**

Studies initiated by students or faculty and sponsored by a faculty member to investigate a special topic or problem related to urban and regional planning. **Semester Hours:** 1to 3

3

Registration is changing. Visit our website for details ucdenver.edu/registration.

URPL 6910 - Planning in Other Cultures II: Field Experience

Summer 2010 Registration **URP 6910**

Students travel to their respective cities and undertake agreed-upon study proposals. Intends not only to help students consider their own design and planning attitudes, but also to help them see the world from a more balanced perspective. **Semester Hours:** 6to 6

6

Registration is changing. Visit our website for details ucdenver.edu/registration.

URPL 6930 - Planning Internship

Summer 2010 Registration **URP 6930**

Designed to provide professional practice experience in urban and regional planning. The emphasis is on actual work experience in settings with client groups as the students assist them in determining solutions to their problems. **Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

URPL 6950 - Thesis Research and Programming

Summer 2010 Registration **URP 6950**

Prereq: minimum of 24 credit hours earned toward completion of Master of Urban and Regional Planning degree. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

URPL 6951 - Urban and Regional Planning Thesis

Summer 2010 Registration **URP 6951**

Semester Hours: 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

WGST 1050 - Introduction to Women's and Gender Studies

Summer 2010 Registration **WGST 1050**

This course provides an introduction to key concepts, themes and approaches to the interdisciplinary field of women's and gender studies. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

WGST 2900 - Smart Girl Leadership Training and Practicum

Summer 2010 Registration **WGST 2900**

Provides leadership and mentoring training, and a practicum in which UCD students mentor teenagers in their community or school settings. Following completion of the training, students work as near-peer mentors and coaches with groups of teenage girls in the Denver community and apply the skills learned in their training. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

WGST 3010 - Sociology of Human Sexuality

Summer 2010 Registration **WGST 3010**

Increases the understanding of differences in views of sexuality, specifically the link between sex and reproduction and its role as the motivation for gender roles and sex acts. Explores the history of sexuality, cross-cultural studies and primate modeling. Cross-listed with SOCY 3010. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

WGST 3034 - Race, Gender, Law and Public Policy

Summer 2010 Registration **WGST 3034**

Historical overview of race and gender relations in the U.S. and an examination of the treatment of issues of race and gender in the judicial system and public policy. Cross-listed with PSCI 3034. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

WGST 3035 - Political Movements: Race and Gender

Summer 2010 Registration **WGST 3035**

Examines the emergence, growth, and decline of social movements for race and gender equality. Discussion of political issues of race and gender in the 1990s. Cross-listed with PSCI 3035. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

WGST 3080 - Sex and Gender

Summer 2010 Registration **WGST 3080**

Causes and consequences of sex role differentiation at the individual, group and societal levels. Current issues related to changing norms and values concerning gender in modern society are examined. Cross-listed with SOCY 3080. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

WGST 3343 - Women in U.S. History

Summer 2010 Registration **WGST 3343**

An analysis of women's place in society, in the work place, and in the political arena over the last 300 years. Cross-listed with HIST 3343. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

WGST 3450 - Twentieth Century Women Writers

Summer 2010 Registration **WGST 3450**

Examines how women write about a specific theme, such as home, work, family, the "other," as well as how women's writing may differ from men's. Theme and genre vary. Cross-listed with ENGL 3450. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

WGST 3500 - Ideology and Culture: Racism and Sexism

Summer 2010 Registration **WGST 3500**

Surveys the nature and role of racism and sexism. Topics may include ideology theory, naturalism, the equal protection clause, recent scientific discussion, sociolegal history, and social constructionism. Cross-listed with PHIL 3500. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

WGST 3700 - Sociology of the Family

Summer 2010 Registration **WGST 3700**

The family as a social institution. Historical development and contemporary cross-cultural analysis, with emphasis on the contemporary American family. Cross-listed with SOCY 3700. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

WGST 3840 - Independent Study: WGST

Summer 2010 Registration **WGST 3840**

Semester Hours: 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

WGST 3939 - Cooperative Education

Summer 2010 Registration **WGST 3939**

Designed experiences involving application of specific, relevant concepts and skills in supervised employment situations. Junior standing and 2.75 GPA. **Semester Hours:** 1to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

WGST 4215 - Women's Rights, Human Rights: Global Perspectives

Summer 2010 Registration **WGST 4215**

Explores the global feminist movement's campaign to "engender" human rights. Examination of women's human-rights issues and the critique of this campaign as representing cultural imperialism. Prereq: 6 hours of political science or permission of instructor. Cross-listed with PSCI 4215. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

WGST 4230 - Women in the West

Summer 2010 Registration **WGST 4230**

Focuses on ways in which women, from the mid-19th century through the mid-20th century, of different races, classes, and ethnic background, have interacted and been active participants in the development of the western states. Cross-listed with HIST 4230, HIST 5230. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

WGST 4248 - Gender, Globalization and Development

Summer 2010 Registration **WGST 4248**

Analyzes the effects of globalization on the gendered processes of international development and strategies to empower women to achieve gender justice across race, class and national divisions. Cross-listed with PSCI 4248, 5245. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

WGST 4303 - Sex and Gender in Modern Britain

Summer 2010 Registration **WGST 4303**

Examines modern British history by focusing on sex and gender as central aspects in people's lives. Considers the ways gender shapes the realms of politics, economics, society and culture in Britain from the 18th century to the present. Cross-listed with HIST 4303, HIST 5303. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

WGST 4306 - Survey of Feminist Thought

Summer 2010 Registration **WGST 4306**

Examines changes and continuities in feminist thought from the 18th century to the present, using historical and literary materials. Explores the ways that women's characteristics, experiences, and capabilities have been understood and challenged. Cross-listed with ENGL 4306, 5306, HIST 4306, 5306, WGST 5306. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

WGST 4307 - History of Sexuality

Summer 2010 Registration **WGST 4307**

Explores the relationships between gender and norms, sexual practice, and ideas about sexuality in Europe and the United States. Examines how sex and sexuality have changed over time and how those changes relate to social, cultural, political and economic history. Cross-listed with HIST 4307, 5307. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

WGST 4345 - Gender, Science, and Medicine: 1600 to the Present

Summer 2010 Registration **WGST 4345**

Examines the ways science and medicine have both shaped and been shaped by ideas about gender. Pays particular attention to the relationship between scientific/medical ideas about the sexes and the social organization of gender. Prereq: Upper division and/or graduate standing. Cross-listed with HIST 4345, HIST 5345. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

WGST 4420 - Goddess Traditions

Summer 2010 Registration **WGST 4420**

Explores the many forms which goddesses have assumed through history, including the Neolithic Great Mother and her heiresses in the ancient Mediterranean cultures, such as: Isis, Ishtar, Demeter, Hecate, Aphrodite, Artemis, Athena and others, and their parallels in India. Goddess traditions have encompassed a full spectrum from virgins to Great Mothers to dark underworld goddesses of death and destruction. Cross-listed with RLST 4420, RLST 5420. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

WGST 4510 - Whores and Saints: Medieval Women

Summer 2010 Registration **WGST 4510**

Studies how women are presented in texts, as well as works by women. Investigates the

roles open to women and societal attitudes toward women, who were considered seductresses, saints, scholars and warriors in the middle ages. Prereq: Nine hours of literature courses or instructor permission. Cross-listed with ENGL 4510, ENGL 5510, RLST 4730, RLST 5730. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

WGST 4511 - French Women Writers

Summer 2010 Registration **WGST 4511**

Designed to explore writings by French and Francophone women from the Middle Ages to the present. Addresses the question of what it means to be a woman and want to write. The selections include a wide variety of genres: autobiographical writings, stories, poems, manifestos, letters, political and historical documents. Prereq: FREN 3112 or FREN 3122 plus one other 3000-level French course or permission of instructor. Cross-listed with FREN 4510, FREN 5510. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

WGST 4540 - Race, Class, and Gender in Spanish Golden Age Literature

Summer 2010 Registration **WGST 4540**

Explores works of various genres in relation to their social and political contexts in 16th and 17th century Spain, emphasizing the cultural attitudes toward race, class, and gender that inform them. Prereq: SPAN 3252 and at least one additional literature course. Cross-listed with SPAN 4540, SPAN 5540. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

WGST 4555 - International Women's Resistance

Summer 2010 Registration **WGST 4555**

Examines local and international struggles of women to build peace and justice by resisting systems of inequality such as colonialism, racism, patriarchy, globalization, and religious intolerance. Cross-listed with PSCI 4555, PSCI 5555 and ETST 4555. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

WGST 4564 - Gender and Politics

Summer 2010 Registration **WGST 4564**

Analysis of the political experience of women and of strategies for change. Emphasis on the U.S. Cross-listed with PSCI 4564. **Semester Hours:** 3to 3
Registration is changing. Visit our website for details ucdenver.edu/registration.

WGST 4827 - Women and the Law

Summer 2010 Registration **WGST 4827**

Examines the role of the courts in the development of public policy toward women; how the legal system affects the economic power, family roles, safety and political participation of women. Cross-listed with PSCI 4827 and ETST 4827. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

WGST 4933 - Philosophy of Eros

Summer 2010 Registration **WGST 4933**

Why is philosophy an erotic activity and what are the implications of this insight? We will explore these issues, first, by reading Plato's erotic dialogues: Lysis, Symposium and Phaedrus. Then we will focus on Freud's influential (and controversial) appropriation of Plato's thought in the writings that span his career, from *The Interpretation of Dreams* (1900) to *Civilization and its Discontents* (1930) and beyond. Finally, we will survey post-Freudian theories of eros, such as Michel Foucault's *History of Sexuality*, as well as the more recent contributions of thinkers such as Jonathan Lear, Thomas Nagel, Martha Nussbaum and Slavoj Zizek. Cross-listed with PHIL 4933, 5933, SSCI 5933 and HUMN 5933. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

WGST 5306 - Survey of Feminist Thought

Summer 2010 Registration **WGST 5306**

Examines changes and continuities in feminist thought from the 18th century to the present, using historical and literary materials. Explores the ways that women's characteristics, experiences, and capabilities have been understood and challenged. Cross-listed with ENGL 4306, 5306, HIST 4306, 5306, WGST 4306. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

WGST 5900 - Smart Girl Coaching Training and Practicum

Summer 2010 Registration **WGST 5900**

Course provides training (lecture and role-playing) in coaching and mentoring which will be applied to support near-peer guides in delivering the Smart Girl curriculum in school settings. Following the completion of the training, students work as coaches for teams of near-peer mentors and groups of teenage girls in the Denver Community, and apply the skills learned in their training. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.

WGST 6010 - Methods and Theories of Feminism and Gender Studies

Summer 2010 Registration **WGST 6010**

Provides graduate-level interdisciplinary study in historiography, methodologies and theories of women's, gender and sexuality studies and considers how culture is constructed around these categories. Cross-listed with SSCI 6010. **Semester Hours:** 3to 3

Registration is changing. Visit our website for details ucdenver.edu/registration.