

**EE/ME 3030-001 Electric Circuits and Systems
Spring 2008**

University of Colorado at Denver and Health Sciences Center
College of Engineering and Applied Science

Course dates/times: MW 5:30-6:45 pm

Course location: CN 215

Instructor: Kelly Campbell

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Website: <http://blackboard.cuonline.edu/>

Phone: 303-981-2803

Office: NC 2404C

Office Hours: MW 1:30 – 2:30 pm, F 1:00 – 2:00 pm

Course Catalogue Description:

This basic electrical engineering course is for non-majors. Students study circuit analysis, transformers, electric motors, and simple electronic circuits (diodes and transistors).

Prereq. or Coreq. Math 2421 Calculus III and Phys 2331 General Physics II.

Required Text: Foundations of Electrical Engineering, J.R. Cogdell, 2nd Edition, Prentice Hall, 1996.
ISBN 0-13-092701-5

Assessment:

Midterm 1 (20% take home, 80% in class)	25%
Midterm 2 (20% take home, 80% in class)	25%
Final Exam (20% take home, 80% in class)	25%
Homework and quizzes	25%

- Take home exams are representative of the in-class exams. Take home exams are due on the day of the in-class exam. Late take-home exams will not be accepted.
- The final exam will be comprehensive and administered during finals week.
- Make-up of exams will only be permitted if prior arrangements are made, at the discretion of the instructor, or in the case of medical emergency, notification is made by email or phone no later than the day of the exam. In the case of medical emergency, a written doctor's excuse may be required.
- Homework will be assigned at the end of each class and will be due one week from the day assigned. Late homework will be accepted up to one week past the due date. Greater than one week past due will not be accepted.
- Quizzes will be announced one class period ahead of the day of the quiz.

Course Schedule

Week	Dates	Topic(s)	Homework
1	Jan. 23	Basic circuit theory, Kirchoff's current law	Chap 1
2	Jan 28, 30	Kirchoff's voltage law, circuit elements, voltage & current dividers	Chap 1
3	Feb 4, 6	DC circuit analysis, Thevenin & Norton equivalent circuits	Chap 2
4	Feb 11, 13	Nodal analysis, Mesh analysis	Chap 2
5	Feb 18	Inductance and capacitance, RL and RC analysis.	Chap 3
5	Feb 20	Review Chap 1-3, Take-home exam 1	
6	Feb 25	In-class exam 1	
6	Feb 27	AC circuits, Phasors, Power & Energy storage	Chap 4
7	Mar 3, 5	Transformer principles, Three phase power	Chap 5
8	Mar 10, 12	Power distribution and transmission	Chap 6
9	Mar 17, 19	Electric & magnetic forces and fields	Chap 13
10	Mar 24, 26	Spring Break	
11	Mar 31	Electric motors and generators	Chap 13
11	Apr 2	Review Chap 4-6, Take-home exam 2	
12	Apr 7	In-class exam 2	
12	Apr 7, 9	Semiconductor devices, diodes, transistors, amplifiers	Chap 7
13	Apr 14, 16	Digital electronics	Chap 8
14	Apr 21, 23	Frequency domain representation of signals, filters, op-amps	Chap 9
15	Apr 28, 30	Communication systems	Chap 11
16	May 5, 7	Review	
	May 12-17	Finals Week	

Students called for military duty

- “If you are a student in the military with the potential of being called to military service and /or training during the course of the semester, you are encouraged to contact Paul Rakowski in the Dean's office.

Important Dates

January 22	- First day of Spring semester classes. - Last day to petition residency.
January 27	- LAST DAY TO: - Add courses and waitlist using S.M.A.R.T - NOTE: If your name is not on the official class roster, you are not officially registered in the course.
January 28	- Last day to drop a course without a \$100 drop charge. - No Course adds until January 29.
January 29	- Between January 29 and February 6: - Open courses may be added using a Schedule Adjustment Form with instructor's approval. - First day instructor may approve request to add a student to a closed course using a Schedule Adjustment Form. - Late starting module or intensive courses may be added up until the first day of the class. After that, those courses may be added with instructor's permission. - Independent study, internship, thesis, and dissertation credit may be added with required signature approvals.

- February 6 - **LAST DAY TO:**
 By 5:00 PM - DROP full-term courses with tuition adjustment.
 (Census Date) - After this date, dropped courses **require instructor's approval** and will appear on your transcript.
 - **Add full term courses** (except thesis, independent study and internships). After this date, student will be charged the full tuition amount for additional course(s) added College Opportunity Fund hours will not be deducted from eligible student's lifetime hours.
 - **Withdraw from the term.**
 After this date, complete withdrawal (all courses dropped) requires the signature of your dean (no tuition adjustment).
 Signature of financial aid required if student has financial aid (loans, grants, or scholarships).
 - Request a No Credit or pass/fail grade for a course.
 - Register as candidate for degree.
 - **Last day to apply for spring graduation.**
 - Petition for reduction in dissertation hours.
- March 24-30 - Spring break (no classes; campus open).
- April 7 - Last day to drop or withdraw without a petition and special approval from student's dean.
- May 1 - Last day to authorize for College Opportunity Fund (COF) via S.M.A.R.T. Students may continue to authorize through finals at the Registrar's Office.
- May 12-17 - Finals Week.
- May 17 - End of semester.
- May 26 - Spring Final grades available on S.M.A.R.T.