

## EE 3724 Power Laboratory 1

University of Colorado Denver  
College of Engineering and Applied Science

Term: Fall 2009

Course dates/days/times: Friday 7:00-9:50 PM

Course location: NC 2613

Office Hours: After Class

Instructor: Francisco Munoz

Office location: NC 2613

Phone: 303-862-4296

email address: frmunozmartin@gmail.com

### Course Design

Catalog Description: EE 3724-1. Power Laboratory I. Basic electro-mechanical energy conversion concepts as applied to the synchronous machine, induction machine, DC machine, and the transformer applications. Prereq or coreq. EE 3164. EE/CSC 2142

Course Description: This course provides hands-on work with most common electric machines applied in power systems and applies power engineering principals to design and analysis.

Course Objectives: Students will acquire a practical knowledge of the principals behind and methods of analysis for common electric machines.

### Requirements

Required Texts: Laboratory manual handed out in class.

Assignments and Examinations: Course consists of six labs. A presentation on each lab is given the week before the lab is performed describing the engineering principals involved in the lab. Students must complete all labs and turn in **individual** lab write-ups. Labs write-ups are **due one week** after the lab is performed.

### Assessment Design

Grades: There are 600 points possible in this class. Lab write-ups are 100 points each. A>540 points, 540≥B>480 points, 480≥C>420 points, 420≥D>330 points, 330≥F. Scale is absolute and no grades are dropped. Late work is accepted **only** if previous notice is given.

Graded work will be returned one or two weeks following its due date.

Course Policies: Students must perform all labs and turn in **individual** lab write-ups. Attendance is mandatory for the lab. Late work is accepted only with prior arrangement, or in case of illness or emergency. Illness or absences can be reported by e-mail. When pre-arranged, missing labs may be made up and turned in until the end of the semester at full credit. If not pre-arranged, **late labs** will be penalized **twenty points**. Make up labs can be arranged if necessary.

Not performing a lab will reduce the grade on the lab no matter the grade on the write-up. Cheating or plagiarism will be penalized. **Copying** from other students' lab report will be penalized with **twenty points** for all the students involved in the incident. **No lab write-ups** are accepted **via e-mail**. All work must be turned in personally during normal class hours. Dates of labs and lectures may be modified as necessary during the semester.

## Course Schedule

### Class Schedule (Dates subject to change)

Date	Topic	Required Reading	Assignments
8/17	Lab 1 Lecture	Lab 1 Manual	
8/24	Lab 1		
8/31	Lab 2 Lecture	Lab 2 Manual	Lab 1 due
9/7	Labor Day No Class		
9/14	Lab 2		
9/21	Lab 3 Lecture	Lab 3 Manual	Lab 2 due
9/28	Lab 3		
10/5	Lab 4 Lecture	Lab 4 Manual	Lab 3 due
10/12	Lab 4		
10/19	Lab 5 Lecture	Lab 5 Manual	Lab 4 due
10/26	Lab 5		
11/2	Lab 6 Lecture	Lab 6 Manual	Lab 5 due
11/9	Lab 6		
11/16	Make-up labs if needed		Lab 6 due(submit to Janiece at the EE office)

## Course Communication

- Office hours are after class.
- The use of e-mail for questions and other correspondence is encouraged.

## 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.