Instructor:
Hector Erives; Phone: 505-835-5932; Email: erives@ee.nmt.edu.

Text:

Design Resources:
IEEE Code of Ethics.
Internet.

Class and Lab Schedule
TR 2:00 – 2:50 pm in MSEC 101 (class lectures)
TR 3:00 – 5:00 pm in Workman117 (lab work).

Prerequisites
EE308 & EE308L (Microcontrollers), EE321& EE321L (Analog Electronics), EE333 (Electricity and Magnetism), EE341 (Signals and Linear Systems), and have declared electrical engineering as a major.

Course Overview:
This is a course in design methodology as applied to a particular problem in electrical engineering. Students will integrate their formal course work with the use of computer-aided tools to design, construct, evaluate, and document a prototype system.

Course Objectives:
1. Design and conduct experiments, and analyze and interpret data to characterize components.
2. Communicate outcomes through oral and written reports.
3. Develop skills to work effectively as a design team.
4. Become aware of professional obligations and codes of ethics.

Grading:
Statement of Work (paper copy and electronic version) 10% 2/11/10
Ethics Study 10% 2/18/10
Conceptual Design Presentation 10% 2/25/10
Preliminary Design Evaluation 10% 3/30/10
Preliminary Design Presentation 10% 4/6/10
Final Project Evaluation 10% 4/29/10
Final Project Presentation 10% 5/5/10
Group Members’ Evaluation 10% 5/6/10
Final Report (paper copy and electronic version) 20% 5/11/10

Other Electrical and Computer Engineering Resources:
• Dr. Dobbs, www.ddj.com. Companion website for the magazine is a resource for software developers.