Electrical and Computer Engineering 3810
Engineering Professionalism
Required

Course Description:
Introduces students to life as an engineer, including: the design process, working in teams, understanding professional and ethical responsibility, the impact of engineering on society, and the need for continued professional development. Also includes discussion on how engineering meets the contemporary needs of society.

Prerequisites:
ENGL 3080 (may be taken concurrently)

Textbook:

Course Outcomes:
1. Be able to design/plan a project that would result in a functioning engineering system.
2. Be able to manage a planned project to completion.
3. Understand the need for staying current and fundamentally sound in your field.
4. Understand the need for expanding into other fields.
5. Understand the ethical concerns as they affect engineers.
6. Be aware of issues (social, political and scientific) that affect you and your career.

Topics Covered:
- Systems Engineering
  - Systems and the Engineering Profession
  - Entrepreneurship and Ideas
  - Design/Planning of Projects
  - Project Management
- Lifelong Learning
  - Staying Current and Fundamentally Sound in Your Field
  - Expanding into Other Fields
  - Preparing for Graduate School
- Ethical and Contemporary Issues in Engineering and Science
  - Ethics in Engineering
  - Social Issues
  - Political Issues
  - Scientific Issues

Outcome Assessments (Grades):
1. Responses to questions posed during lecture. The required answers are short (paragraph) responses. You will be graded on technical structure (grammar, punctuation, spelling, etc.). You will also be graded on your ability to string together a coherent argument. 30%
2. A team project consisting of a project idea, a system design, and a preliminary design review.
   70%

Class Schedule:
   Class           Once a week for one hour and fifteen minutes.

Contribution of course to meeting the requirements of Criterion 5:
   1 credit hours of Engineering Topics and contains significant engineering design content

Relationship of course to student outcomes:
   b. An ability to design and conduct experiments, as well as to analyze and interpret data.
   c. An ability to design a system, component, or process to meet desired needs.
   d. An ability to function on multidisciplinary teams.
   f. An understanding of professional and ethical responsibility.
   g. An ability to communicate effectively.

Instructor:
   Don Cripps, Principal Lecturer
   August 2013