Course Syllabus

Course Information
ECS 3361.501.13F: Social Issues & Ethics in ECS
Fall 2013, Th 7:00-9:45, ECSS 2.412
Census date: Last day to drop a class without a W: Wednesday, September 11
Withdrawal date: Last day to drop a class with a W grade: Thursday, October 31

Professor Contact Information
Lecturer: Christopher Wilt
E-mail: james.wilt@utdallas.edu
Phone number: xxx-xxx-xxxx
Office: 4.tbd
Office Hours: TBD

Course Pre-requisites, Co-requisites, and/or Other Restrictions
Students must be capable to check their UTD eLearning account.

Course Description
This course exposes students to major theoretical approaches, modes of reasoning about ethics, and gives illustrative examples of ethical issues. We will explore a range of important professional and ethical issues in computer science and engineering, and the relationships between the computing and engineering professions and important elements of social systems. Students explore issues of professional ethics, computer crime and privacy, intellectual property, the balance between the acceptability of risk and constraints such as cost, scheduling, safety, quality, the role of globalization, and various important constitutional issues by drawing upon engineering and computing case studies.

Student Learning Objectives/Outcomes: To make students aware of the importance of, and criteria for, professional and ethical conduct in Engineering and Computer Science

- An understanding of professional, ethical, legal, security, and social issues and the implications of these issues for the professional responsibilities of engineers and computer scientists
- An ability to analyze the local and global impacts of engineering and computing in individual, societal, economic, and environmental contexts
- An understanding of the legal, security and social responsibilities of computing and engineering professionals
- Knowledge of selected contemporary issues that affect professional practice in engineering and computing

---

Required Textbooks and Materials
"Ethics for the Information Age", by: Michael J. Quinn, 5th edition. Other materials as posted on e-learning.

Assignments & Academic Calendar
Because this Section is scheduled for only 1 day per week, the class will have 2 parts: First a lecture on any theory, background information, data, and related materials; Second, we will have an open discussion on a particular case study or case studies. The second part of classes will include presentations from individual teams in the class. Every student must be on a 4 person team and make one presentation on a specific case study.

Topics include:

1. Principles of ethical behavior
2. Principles and case studies of ethics in product design and development
3. Principles and case studies of ethics in manufacturing, construction, and product deployment
4. Principles and case studies of ethics in test engineering
5. Principles and case studies of ethics in maintenance and customer service
6. Open standards in engineering and computer science
7. Principles and case studies of ethics in research
8. Ethics in an entrepreneurial environment
9. Societal impacts of ethics in engineering and computer science

List of Case include, but are not limited to:

- Challenger explosion
- Gulfstream G650 Test Flight Crash
- Cowboys stadium roof collapse
- Citicorp Tower – structure failure
- Hyatt Regency Walkway Collapse
- Hubble Space Telescope Failure
- Deep Water Horizon Accident (BP oil spill)
- Therac-25
- Citicorp Tower – structural flaws
- Deep Water Horizon Accident (BP oil spill)
- Fukushima Nuclear meltdown
- Samsung/Apple IP lawsuits
- Other case studies

Grading Policy
Two exams: Mid-Term 25% (October 17), Final 25% (December 19)
Presentation: 30%
Homework & Pop Quizzes: 20%

Make-up Exams: No make-up exams allowed except in the case of a medical condition or family emergency. In the case of a medical condition, a doctor's note is necessary.

Team Presentation:
Every student will participate in a four person team presentation/discussion covering a specific topic. Each presentation should be 20-30 minutes long and cover a case study approved by the instructor.

Course & Instructor Policies

Exams

Over the course of the semester, 2 exams will be given. Exams constitute a total of 50% of the course grade. Exams will be a combination of written critical response and multiple choice questions done out of class.

Team Project

Every student will participate in an assigned team for discussions and a project covering a specific topic that each group will chose from a list of options.

Participants will be required to turn in status updates as they work on the project and a power point file for their presentation. Presentations are scheduled in the second half of the semester.

Failure to attend/participate in discussions and project activities will result in a zero or partial credit for the assignment.

Make-up Exams: No make-up exams will be allowed except in the case of a medical condition or family emergency. In the case of a medical condition, a doctor's note is necessary.

Extra Credit: There will be bonus opportunities assigned during the course of the semester. Only attending students will get credit.

Late Work: Accepted with penalty as instructed.

Class Attendance: Highly Recommended. May do random attendance check.

Classroom Citizenship: I expect students to be attentive during class and to actively participate in class discussions and reviews. You are expected to listen respectfully to me and to other students when they are speaking.

Academic Dishonesty: Any student who is found responsible for committing an act of academic dishonesty will receive a grade of zero on that assignment.

UT Dallas Syllabus Policies and Procedures

The information contained in the following link constitutes the University's policies and procedures segment of the course syllabus.

Please go to http://go.utdallas.edu/syllabus-policies for these policies.

The descriptions and timelines contained in this syllabus are subject to change at the discretion of the Professor.