# Course Syllabus

**Course Information** 

ECS 3361.003: Social Issues & Ethics in ECS

Spring 2015, Mondays, Wednesdays, Fridays 10:00–10:50, ECSS 2.412

Census date: Last day to drop a class without a W. Wednesday, January 28 Withdrawal date: Last day to drop a class with a W grade. Monday, March 30

### **Professor Contact Information**

**Senior Lecturer:** Rabah Mezenner, PhD **E-mail:** rabah.mezenner@utdallas.edu

**Phone number:** 972-883-6871

Office: ECSN 3.920

Office Hours: Mondays/Wednesdays 11:00-1:00pm,

Tuesdays/Thursdays 11:30-12:30pm

## Course Pre-requisites, Co-requisites, and/or Other Restrictions

Students must be capable to check their UTD eLearning account and submit assignments/assessments online IN and OUT of the classroom. All communications of assignments is through e-learning.

### **Course Description**

This course exposes students to major theoretical approaches and modes of reasoning about ethics while exploring a range of important professional and ethical issues in computing and engineering, and the interrelationship between the computing and engineering professions and important elements of social systems. Issues of professional ethics, computer crime and privacy, intellectual property, the balance between the acceptability of risk and constraints such as cost, scheduling, safety and quality, the role of globalization and various important constitutional issues are explored 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.

## **Required Textbooks and Materials**

"Ethics for the Information Age", by: Michael J. Quinn, 6th edition. Fifth edition is acceptable. Other materials as posted on e-learning.

### **Assignments & Academic Calendar**

Tentative Course Outline \*(Subject to change to allow for unforeseen issues). Every week, we will have review/lecture/homework and class discussion/presentation by students.

## Week 1 Starting January 12:

Introductions/Course syllabus/Teams formation Lecture 0 Interpersonal skills

## Week 2 starting January 19:

Lecture 1 Chapter 1- IT Milestones/HMW1

# Week 3 starting January 26:

Lecture 2\_Chapter 2- Introduction to Ethics/HMW2 Discussion 1 Census day Semester Project assigned

# Week 4 starting February 2:

Lecture 3a\_Chapter 9a- Professional Ethics(SECE code of ethics) Discussion 2, Project update 1

# Week 5 starting February 9:

Lecture 3b\_Chapter 9b/HMW3 Discussion 3, Project update 2

### Week 6 starting February 16:

Lecture 4 Codes of Ethics (IEEE, PMI)/HMW4 Discussion 4, Project update 3 Release Essay assignment

## Week 7 starting February 23:

Lecture 5\_Chapter 3- Networked Society/HMW5 Discussion5, Project update 4
Essay assignment due

### Week 8 starting March 2:

Exam 1 online test in testing center Project Presentation file due Midterm Grade due

### Week 9 starting March 9:

Lecture 6\_Chapter 4- Intellectual Property/HMW6 Project Presentations A,B

# Week 10 starting March 16: Spring Break

# Week 11 starting March 23:

Lecture 7\_Chapter 5- Information Privacy/HMW7 Project Presentations C,D,E Drop Deadline

# Week 12 starting March 30:

Lecture 8\_Chapter 6- Privacy and the Government/HMW8 Project Presentations F-H

## Week 13 starting April 6:

Lecture 9\_Chapter 7,8- Computer security, Reliability/HMW9 Project Presentations I-K

## Week 14 starting April 13:

Lecture 10 PE licensing/NSPE code/Harassment/HMW10 Project Presentations L-N

# Week 15 starting April 20:

Presentations O-R and Review/Bonus HMW Review

## Week 16 starting April 27:

Review

Exam 2 Online test in testing center

## Week 17 starting May 4:

No Final

Course Grade due May 12.

### List of project topics to choose from include:

- Hyatt Regency walkway collapse
- Cowboys practice facility collapse
- o WikiLeaks
- o Hubble Space Telescope Failure
- o Deep Water Horizon Accident (BP oil spill)
- o Fukushima Nuclear meltdown
- o Enron Bankruptcy
- o Madoff Investment scandal
- o NSA information gathering/Leaks
- o Samsung/Apple IP lawsuits
- o 2008 Financial Crisis
- Net Neutrality
- Keystone Pipeline
- o Citicorp Tower structural flaw

o Other of your choice (preferably within last 10 years and approved by instructor)

### **Grading Policy**

Homework	20%
Discussions	15%
Essay	20%
Exam 1 online	15%
Project	15%
Exam 2 online	15%

The letter grades will be assigned as follows:

95-100%	A+	84-86.99 B+	- 73-76.99 C+	60-64.99 D+	< 50 F
90-94.99	A	81-83.99 B	69-72.99 C	55-59.99 D	
87-89.99	A-	77-80.99 B-	65-68.99 C-	50-54.99 D-	

#### **Course & Instructor Policies**

#### Homeworks

Over the course of the semester, 11 homeworks (including one bonus homework) will be assigned. Homeworks will be a combination of short answer and multiple choice questions done out of class.

#### Discussions

Over the first half of the semester, discussion class sessions will be conducted and submitted for grading. Team members will take turn to share and/or submit for the team.

# Team Project

Every student will participate in an assigned team for a semester long project covering a specific topic which will be chosen by the teams from a list of options. No two teams may select the same topic.

In the first half of the semester, teams will be required to turn in weekly status updates as they work on their project. A final power point file for their presentation must be submitted by the due date. Oral in-class presentations will be scheduled in the second half of the semester. The oral presentations will be in the order that the final power point file is submitted.

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

### Exams

Over the course of the semester, there will be one essay and 2 online exams. Online exams will be taken in the testing center (basement of Library). Exam 1 is a combination of multiple choice and T/F questions. Exam 2 is a combination of multiple choice, T/F and short answer questions.

**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 Homework: Accepted with late penalties.

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 <a href="http://go.utdallas.edu/syllabus-policies">http://go.utdallas.edu/syllabus-policies</a> for these policies.

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