# Course Syllabus PHIL 334: Engineering Ethics Fall 2009

Course: PHIL 334, Section 455 Credits: 3.0

Course Title: Engineering Ethics Instructor: Michael Brownstein

**Delivery**: Internet Course

**Start Date:** 31 August 2009 **Final exam**: No Final Exam

\*All exams will be administered online. There are no classroom meetings required for this course.\*

# **Catalog Description**

A philosophical examination of the nature of engineering practice and applied technology. Considers such questions as: How do the societal functions of engineers and the practical application of technologies relate to basic moral and intellectual values? What moral obligations are implied by the uses of technology? What are the ethical duties of engineers in the practice of their careers? How are technological practice and engineering related to questions about knowledge and reality?

## **Required Texts**

Mike. W. Martin and Roland Schinzinger, *Ethics in Engineering*, fourth edition (McGraw-Hill, 2005).

Additional Assigned Readings: Found on the course homepage

## **Instructor Feedback & Response Time**

Your instructor will reply to your questions, concerns, and comments in a timely manner. When corresponding with your instructor (or other classmates), please use appropriate language and etiquette. Email correspondence should be free of grammatical and mechanical errors. Email slang and lingo is not appropriate in any type of instructional setting.

#### **Course Organization**

- 6 Large-Group Discussions (70 points each 420 points total)
- 3 Quizzes (100 points each 300 points total)
- 1 Research Project (280 points)

Thus the course is worth 1000 points total

#### Grading

The scale this course uses is as follows:

A= 100%-90% D=69%-60% B= 89%-80% F=59% - 0%

C=79% -70%

Note: pluses and minuses will be given (e.g. 92% = A-). The grade ranges above only denote the boundaries between A-range grades, B-range grades, etc.

\*All quizzes & exams will be administered online.
There are no classroom meetings required for this course.\*

## On Line Learning/Attendance

This course has been developed to promote asynchronous learning. Students will have a designated time period (as identified on the course schedule) to complete all readings and assignments for each lesson. Students may work at their own pace throughout each lesson but they must adhere to the deadlines as outlined on the course schedule.

# Synchronous instruction vs. Asynchronous instruction

This course is an asynchronous course. This means that you do not have to meet on a designated day and time for instruction. The pace of this course is entirely up to you. However, it is the responsibility of the student to adhere to all deadlines and due dates. Once the class has completed a lesson, we will move onto the next lesson. (See above attendance policy). This keeps the class on task and enables students to learn the material over an appropriate period of time.

#### **Deadlines**

This course is broken down by week. All assignments are due by 11:59 PM EST on Sunday of the week of the assignment. Students will be unable to go back and complete course work; it is your responsibility to keep up with your assignments.

Students with an excused absence (hospitalization, jury duty, or family emergencies) may be asked to produce proper documentation in order to make up graded work. All make up work is at the discretion of the instructor.

#### **Academic Integrity**

Academic integrity is the pursuit of scholarly and creative activity in an open, honest and responsible manner, free from fraud and deception, and is an educational objective throughout the university. Students are expected to maintain the highest standards of academic and personal integrity. Academic dishonesty and plagiarism, whether intentional or unintentional, will not be tolerated and students will receive a failing grade.

## Syllabus Subject to Change

I anticipate that we will follow the schedule I've outlined here, but I may make adjustments based on what actually happens in class. Be sure to check with a classmate after an absence to see if assignments have changed. Remaining in the course after reading this syllabus will signal that you accept the possibility of changes and responsibility for being aware of them.

#### **Course Schedule**

## Week 1 – Introduction – Deadline: 9.4

- -- Read: MS 2-11
- -- Listen: Instructor Podcast
- -- Do: Discussion Forum #1 Introductions and "What is Engineering?"

## Week 2 – Introduction, cont – Deadline: 9.11

- -- Read: Feenberg 144-166
- -- Listen: Instructor Podcast
- -- Do: Brainstorming Forum for Research Topics (extra credit)

## Week 3 – Morality – Deadline: 9.18

- -- Read: MS 54-84
- -- Listen: Instructor Podcast
- -- Do: Discussion Forum #2: Moral Theory Q&A

#### Week 4 – Morality, cont'd – Deadline: 9. 25

- -- Read: MS 172-184
- -- Listen: Instructor Podcast
- -- Do: Quiz #1

# Week 5 – Morality, cont – Deadline: 10.2

- -- Read: Lynch and Kline, "Engineering Practice and Engineering Ethics"
- -- Listen: Instructor Podcast
- -- Do: Discussion Forum #3: Engineering, Open Topics

#### Week 6 - Ethics - Deadline: 10.9

- -- Read: MS 35-51
- -- Listen: Instructor Podcast
- -- Do: Discussion Forum #4: Research Projects Q&A

#### Week 7 – Ethics, cont – Deadline: 10.16

- -- Read: Wirth and Bewig, "John Dewey on School Architecture"
- -- Listen: Instructor Podcast

-- Do: Quiz #2

## Week 8 – Ethics, cont – Deadline: 10.23

- -- Listen: Instructor Podcast
- -- Do: Discussion Forum #5: Engineering and the Good Life

#### Week 9 – Politics – Deadline: 10.30

- -- Read: Winner, 3-29
- -- Listen: Instructor Podcast
- -- Do: Research Proposals

## Week 10 – Politics, cont – Deadline: 11.6

- -- Read: MS 274-285
- -- Listen: Instructor Podcast
- -- Do: Quiz #3

## Week 11 – Politics, cont – Deadline: 11.13

- -- Read: Mukerji "Engineering and the Legitimacy of State Power"
- -- Listen: Instructor Podcast
- -- Do: Discussion Forum #6: Politics and Practices

# Week 12 – Research Projects – Deadline: 11.20

- -- Listen: Instructor Podcast
- -- Do: Work on Research Papers (no formal work due)

# Week 13 – Research Projects, cont'd – Deadline: 11.27

- -- Listen: Instructor Podcast
- -- Do: Research Presentations

# Week 14 – Research Projects, cont'd – Deadline: 12.4

- -- Listen: Instructor Podcast
- -- Do: Peer Research Evaluations