Engineering Visions
E^4
Engineering, **E**thics, **E**nergy, and the **E**nvironment

ENGR097S section 167

(MW 3:35-4:25 PM, 15 Beaver Hall)
schedule # 280114

A first year seminar

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Objectives of the Course

- Provide an introduction to the engineering profession, while assisting students in making the transition into college.
- Introduce notions of ethics, and the societal impact of engineering
- Illustrate technology issues by discussing energy and the environment.

Schedule of Classes:

9/3 Introduction/ Get to know you activity/ Survival Skills

9/8 The Engineering Discipline

9/10 Success Skills/ Scheduling

9/15 Prisoners Dilemma Game; a Model for social cooperation

9/17 Career Options – Panel Discussion

9/22 Tour of Nuclear Reactor

9/24 Career Options – Panel Discussion

9/29 The Scientific Career/ Scientific method/Eleusis Game (double class)

10/1 Career Options – Panel Discussion

10/6 Energy and the Environment

10/8 Career Options – Panel Discussion

10/13 Energy and the Environment

10/15 Upperclassmen Panel

10/27 Ethics and the Engineering Profession

10/29 Ethics and the Engineering Profession

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Grading

Grading will be done by class participation, and by written assignments. To participate effectively in class, it is necessary to be both present and prepared, so both factors will be considered in your grade. No exams will be given, and the course will end November 3. There will be several short assignments, which should be done by email. These assignments will not be graded, but judged if acceptable, and recorded. They will also be used in class discussion.

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Final Assignments

There will be two final assignments, one on "Energy and the Environment" and one on "Engineering Ethics", which will be graded on the scale:

- Very good
- Good
- Fair
- Unacceptable

The criteria for achieving the different levels of the scale will be explicitly written on the assignments. For these final graded assignments students will be given a chance to resubmit their assignments to address instructor comments, (except for those which are deemed unacceptable, which means that the work was effectively not turned in). These resubmitted papers will be re-graded.

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The assignments and class attendance and participation will be the basis of your letter grade for the course according to the following.

A student will receive an A if he/she:

- Has no unexcused absences;
- Participates in class;
- Turns in 90% of the regular assignments acceptably.
- Turns in both final assignments, and receives at least a "good" grade in each

A student will receive a B if he/she:

- Has no more than one unexcused absence;
- Participates in class only sporadically;
- Turns in 75% of assignments acceptably.
- Turns in energy and assignments and receives at grade of at least "good" in one of the two assignments.

A student will receive a C if he/she:

- Has no more than two unexcused absences;
- Turns in 50% of assignments acceptably.
- Turns in only one of the two final assignments.

A student will receive a D if he/she:

- Has no more than five unexcused absences;
- Turns in 25% of assignments acceptably.

F; fails to perform the criteria for D

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Excused Absence

Requests for excused absences must be done by email. You are normally expected to ask for the excused absence *before* the class, except in special circumstances. Prior to class, if an unexpected conflict appears, ask for instructor's permission to miss class. Extra work will be assigned as compensation. If circumstances prevent you from asking in advance, write a note as soon as possible after class. If the reason for the absence was medical, a note from the doctor will be required. Extra work will be assigned as compensation.

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Acceptable Assignments

An assignment is acceptable if it fulfills the following points:

1. Addresses the main point of the assignment.
2. Is of the required length and mostly free of grammatical and spelling errors.
3. Is presented in timely manner (sent by email).

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