

Engineering Ethics

Last Updated: Thu, 08/14/2025

Course prefix: PHIL

Course number: 3109

Section: R05

CRN (you may add up to five):

86819

Instructor First Name: Robert

Instructor Last Name: Rosenberger

Semester: Fall

Academic year: 2025

Course description:

This course serves as an introduction to philosophical accounts of ethics, with a focus on the ethical dilemmas faced by professional engineers and scientists. This includes consideration of abstract philosophical accounts of morality, of the nature of technology, and of the relationship between science and society. However, the bulk of the course will consist of reflection on the special ethical issues that are raised through the practice of engineering. Just a few examples of topics we will consider include whistleblowing, liability, environmental concerns, research ethics, serving as an expert witness, and risk assessment. The primary way we investigate these issues is through the detailed analysis of concrete case studies.

Course learning outcomes:

These course will help teach students to recognize when an ethical issue is present, and will help students to distinguish ethical choices from mere self-interest. These studies will also help students to become aware of the ways that culture shapes ethical views and to critically evaluate those views. Through the analysis of texts and other media, students will be able to describe relationships among languages, philosophies, cultures, literature, ethics, or the arts. And by analyzing real-life cases of ethical issues stemming from technology design, policy, and organizational structures, we will develop our critical thinking skills and grow sensitivity toward the kinds of moral problems that can arise in normal engineering work.

Required course materials:

Engineering Ethics: Concepts & Cases, 6th edition, by Harris, Prichard, and Rabins. Wadsworth Publishing.

Grading policy:

“Evaluated” assignments are together worth 30% of the final grade

“Credit” assignments are together worth 20%

Midterm exam 25%

Final exam 25%

The grading scale is standard:

100%-90% A

89%-80% B

79%-70% C

69%-60% D

59%-0% F

Grades are neither curved nor rounded up (For example, the grades of 80.1, 85.6, 88.9, and 89.9 are all examples of Bs).

Late papers will be penalized at a rate of one letter grade per day; for example, a paper that would have received a B if turned in on time will receive a B- if it is received the day after it is due, and a C+ if received two days later. Exceptions can be made in cases of documented emergencies.

Attendance policy:

Attendance is required for Friday recitation discussions. Regular short in-class assignments happen in the lecture sessions.

Academic honesty/integrity statement:

Students are expected to maintain the highest standards of academic integrity. All work submitted must be original and properly cited. Plagiarism, cheating, or any form of academic dishonesty will result in immediate consequences as outlined in the university's academic integrity policy.

Core IMPACTS statement(s) (if applicable):

This course will help students master course content, and support students' broad academic and career goals.

This course should direct students toward a broad Orienting Question:

- How do I interpret the human experience through creative, linguistic, and philosophical works?

Completion of this course should enable students to meet the following Learning Outcome:

- Students will effectively analyze and interpret the meaning, cultural significance, and ethical implications of literary/philosophical texts or of works in the visual/performing arts.

Course content, activities and exercises in this course should help students develop the following Career-Ready Competencies:

- Ethical Reasoning
- Information Literacy
- Intercultural Competence