

Date prepared: 8/14/14

Syllabus  
The University of New Orleans  
Dept. of Philosophy

## PHIL 2244: Engineering Ethics (1 credit)

SECTIONS 001, 002, 003: LA 370, M/W/F 2-2:50

### Contact Information

**Instructor:** Dr. Clarence Mark Phillips  
**Office:** UNO: LA 391  
**Office Hours:** MWF 12:50–2; 2:50-3:40 (and by appointment)  
**Office / Mobile:** (504) 280-6659  
**Email:** [cmphilli@uno.edu](mailto:cmphilli@uno.edu) (add 'PHIL 2244' to subject line)  
**Course Webpages:** [Moodle](#) login page

### Required Texts

- [1] Harris, Pritchard, & Rabins, *Engineering Ethics: Concepts and Cases* (5<sup>th</sup> edition), Wadsworth, 2009. ISBN: 9780-0-495-50279-1
- [2] Additional readings will vary according to each student's chosen paper topic (e.g., 3 to 4 essays or articles - or - a book and two reviews or commentaries).

### Course Description

**CATALOG DESCRIPTION:** This course will examine ethical issues arising in the professional and social-policy aspects of engineering. Coverage includes such topics as: codes of professional ethics, methods of moral problem solving, honesty, risk, responsibilities to employers and to the public, technology and the environment, and moral issues in management, research, and consulting.

**COURSE OVERVIEW:** Ethics is the study of human action, of what makes certain ways of acting good or bad. Engineering Ethics is a specific branch of what is most often referred to as Applied, or Social, Ethics, and is concerned with issues affecting the profession of engineering. Whereas Ethics is a theoretical discipline, as a type of applied ethics, Engineering Ethics is the practical application of ethical theory in the sort of day-to-day situations that engineers are likely to encounter.

As a result, the bulk of this one-unit course will be taken up with examining some of the cases with which engineers have struggled in the past. And while we will consider a number of ethical theories, our main focus will be on problem solving, further developing the sort of analytical skills at which engineers are typically so adept.

Student Learning Outcomes

Upon successfully completing this course, students will be able to do the following:

- to recognize the sort of ethical issues facing engineers today
- to understand the philosophical problems associated with the field of engineering
- to be able to define key concepts in engineering ethics
- to understand the responsibility professional engineers have with respect to the general public
- to present and to defend your own views regarding such issues
- to recognize when there is an ethical problem, and what sort of circumstances are likely to lead to one
- to enumerate various possibilities with respect to their resolution
- to assess the consequences of each alternative, and determine which is preferable, and why
- to lead philosophical discussions
- to write an argumentative essay/case study

Grades will be based on a 100 point scale distributed as follows:

Requirement		Final grade	
<b>Exam 1</b>	(25%) 25 points	<b>A</b>	100 – 90 points
<b>Exam 2</b>	(25%) 25 points	<b>B</b>	89 – 80 points
<b>Exam 3</b>	(25%) 25 points	<b>C</b>	79 – 70 points
<b>Case Study</b>	(25%) 25 points	<b>D</b>	69 – 60 points
		<b>F</b>	59 – 0 points

Course Requirements

**READINGS:** Students will be expected to keep up on the weekly reading assignments, to have read the material prior to class, and to locate the most important ethical points in each case.

**EXAMS:** There will be 3 in-class examinations on the readings and topics discussed in class, and there will be no make-up exams.

**ESSAY:** Each student will be required to examine an engineering ethics case of their own choice (approximately 1000 words). The paper is due on or before the last day of class, and will not be accepted late. For that reason, students should pay close attention to current news issues (both in order to determine the relevance of ethical theories to issues affecting engineers today, and to generate a variety of possible paper topics). The case study must be submitted in both a hard copy and digital version (via Moodle).

*DISABILITY ACCOMMODATIONS: UNO is committed to providing for the needs of students who have disabilities under Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990. Students who qualify for services will receive academic modifications to which they are legally entitled. It is the responsibility of students who may require such services or modifications to register each semester with the Office of Disability Services (UC 260, 280-6222) and follow its procedures for obtaining assistance.*

**ACADEMIC INTEGRITY:**

Academic integrity is fundamental to the process of learning and to evaluating academic performance. Academic dishonesty will not be tolerated. Academic dishonesty includes, but is not limited to, the following: cheating, plagiarism, tampering with academic records and examinations, falsifying identity, and being an accessory to acts of academic dishonesty. Refer to the UNO Judicial Code for further information. The Code is available online: [http://www.uno.edu/~stlf/Policy%20Manual/judicial\\_code\\_pt2.htm](http://www.uno.edu/~stlf/Policy%20Manual/judicial_code_pt2.htm)

**ATTENDANCE:**

Regular *attendance* is also required, and will count toward the final grade. Missing more than 2 days of class will result in the loss of one letter grade (e.g. A + 3 days of absence = B). *And use of objects external to the course (e.g. cell phones, calculators, novels) equals absence, as does unconsciousness.*

**AUDITS:**

Whether an audit is successful will depend only on your class participation performance.

**CLASSROOM CONDUCT/  
SEXUAL HARASSMENT:**

Feel free to say anything to me or to your peers, but tailor your remarks so as not to be uncivil, abusive, or inappropriate. I will not tolerate ANY abusive behavior in the one minute argument discussions, so do not engage in any personal attacks or name calling.

**COMPUTERS/PADS:**

You may use a computer or tablet with to take notes or access an e-version of the textbook. But you may NOT go online during class – including to check email (Facebook, Twitter, etc.).

**INCOMPLETES:**

Incompletes are **STRONGLY** discouraged. Should you need to take an incomplete, arrangements must be made with me well before the last class meeting.

**MAKE-UPS:**

There are no make-up exams.

**PHONES:**

Phone calls and texting interrupt class (for both you and your fellow students). So, all phones should be turned off before class begins. And NO texting during class.

**WITHDRAWALS:**

You may withdraw from this course for any reason. Withdrawal is strictly up to you and none of my business. Look in the course listings for the last day to withdraw without a penalty — a 'W' appearing on your transcript.

**PROCTORING**

*The University of New Orleans partners with Proctor U, a live, online proctoring service that allows students to complete exams from any location using a computer, webcam, and reliable internet connection.*

**PHIL 2244 Fall 2014 Timeline**  
(subject to revision)

DAY	TOPIC/READING
(Week 1) Aug. 20, 22, 25	Introduction – Ethics in Engineering
(Week 2) Sept. (1),3,5	Chapter One – Why Professional Ethics (pp.1-21)
(Week 3) Sept. 8,10,12	Chapter Two – Responsibility in Engineering (pp.22-46)
(Week 4) Sept. 15,17,19	Chapter Three – Framing the Problem (pp.47-70)
(Week 5) Sept. 22,24,26	Chapter Four – Resolving Problems (pp.71-89)
(Week 6) Sept. 29, Oct. 1,3	<i>First Exam: Chapters 1-4</i>
(Week 7) Oct. 6,8,10	Chapter Five – Social & Value Dimensions of Technology (pp.90-114)
(Week 8)* Oct. 13,15,17	<i>Mid-Semester Break – No Class</i>
(Week 9) Oct. 20,22,24	Chapter Six – Trust and Reliability (pp.115-134)
(Week 10) Oct. 27,29, 31	Chapter Seven – Risk and Liability in Engineering (pp.135-164)
(Week 11) Nov. 3,5,7	<i>Second Exam: Chapters 5-7</i>
(Week 12) Nov. 10,12,14	Chapter Eight – Engineers in Organizations (pp.165-190)
(Week 13) Nov. 17,19,21	Chapter Nine – Engineers and the Environment (pp.191-210)
(Week 14) Nov. 24,26,28	<i>Thanksgiving - No Class</i>
(Week 15) Dec. 1,3,5	Chapter Ten – International Engineering Professionalism (pp.211-226)
December 13 (10 am)	<i>Third Exam: Chapters 8-10 (Case Studies Due)</i>

Final: Wednesday, December 10 (3 pm)

\*Final date to drop courses or resign from the University: 10/15