

## SYLLABUS ENGR 4402: ENGINEERING ETHICS Spr 2025-Section 1

### **Course Information**

Class meeting time: Mondays 10.10-AM-11.00AM

Modality and Location: Face to Face course; Engineering Technology Center- 104

Syllabus is posted in D2L

The course will be delivered weekly on Mondays, in one 50-minute lecture and discussion session. Case examples will be included, as frequently as practicable, as part of the weekly class discussions.

Students' expected reading requirements shall be included under the reference section - lecture slides.

Expected due dates for assignments and quizzes for the semester shall be updated via D2L.

## **Instructor Information**

Name: Omar Rawdah

Email:

Office Location: - Office phone: Office Hours:

Preferred method of communication: KSU email (from students' KSU email)

**Course Communication** – The best way to communicate with me outside of office hours is to send a message to either my email account or through D2L. Any communications sent to me by email or D2L will typically be answered within 24 hours, except for weekend communications, where my response time may be 48 hours. Please note that direct email communication will generally be answered faster than communication through D2L.

## **Course Description**

1 Class Hour 0 Laboratory Hours 1 Credit Hour

Prerequisite: Engineering Standing

EE4402 is an introduction to engineering ethics. The course looks at the practice of engineering in the context of ethics and ethical theory. Issues of safety, liability, professional responsibility, legal obligations are considered in the context of case studies. Emphasis is given to the application of the Professional Engineering (PE) Code of Ethics published by the National Society of Professional Engineers (NSPE), while looking at the professional codes of other professional engineering Organizations. Students will consider the resolution of ethical dilemmas through the development and the evaluation of various courses of action related to specific case studies.

Our society places a great deal of responsibility on its professionals and requires that they conduct themselves in a manner fitting to the place of prominence accorded to them by the community.

Studying and understanding professional ethics is as much a part of your development as an engineer as is the study of other engineering key topics. It is important that you learn to share ideas and concepts although you may not always agree; hence the emphasis on working in teams in this course.

By the end of this course, you will have a feel for what it is like to think systematically and analytically about particular ethical dilemmas.

### **Course Materials**

Engineering Ethics by Charles Fleddermann, 4th edition ISBN-13: 9780137848263 (eTextbook 2022) & ISBN-13: 9780132145213 (Print Textbook 2011)

### **Technology requirements:**

- 1. Access to a computer with reliable Internet access and media capable
- 2. Use of D2L (frequently)
- 3. Proficiency with MS Office tools or the equivalent
- 4. Check campus email frequently

Able to submit assignments as a single PDF formatted file

# **Course Learning Outcomes**

By the end of the semester, you will be able to:

- ✓ Discuss the Code of Ethics published by the National Society of Professional Engineers NSPE
- ✓ Identify ethical conflicts in the work environment (whether industry, academia, or other)
- ✓ Articulate ways in which ethical decisions conform to or conflict with the Code of Ethics
- ✓ Discuss the concept of professional responsibility with respect to relevant constituents and do so in an interdisciplinary manner (clients, profession, society, and peers)
- ✓ Develop reasonable responses to work-place situations that require ethical choices.

## **Course Requirements and Assignments**

Your final grade will be determined based on participation quizzes, discussions, assignments, mid-term exam, and a detailed case study / presentation on Ethics Code Applications, described below.

### **Participation Quizzes**

Short quizzes on D2L to check classroom and textbook reading participation.

### **Homework Assignments**

Homework assignments will be posted on D2L and will cover an ethical issue related to engineering.

#### **Midterm Test**

The midterm will consist of several multiple-choice questions (MCQs).

#### Final Exam

N/A