

CEE 4920 PROFESSIONALISM AND ETHICS

Required Course

Catalog Description:

Lec. 1. Credit 1.

Prerequisite: Senior standing. A discussion of the ethical, social, and economic considerations in engineering practice, and professional and technical societies.

Math & Basic Sciences:	0 Credits	Course Coordinator:	David H. Huddleston
Engineering Topics:	1 Credits	Contains Significant Design:	No
General Education:	0 Credits	Updated:	10/21/2013
Other:	0 Credits	Specify Type if Other:	

Text Book(s) and Supplemental Material(s):

Suggested Reference: Engineering Ethics; Concepts and Cases (2005, 3rd Edition). Harris, Charles; Pritchard, Michael S.; and Rabins, Michael).

The textbook is not required; it will be supplemented with external articles and web material.

Course Goal(s):

The goal of CEE 4920 Professionalism & Ethics is to introduce students to the professional and ethical responsibilities inherent in the civil engineering profession, the significance of professional licensure, and some of the business, professional, and ethical challenges introduced by cultural differences.

Instructional Outcomes for the Course:

Students will be expected to:

1. Recognize ethical engineering problems when they occur.
2. Locate and apply the Codes of Ethics for ASCE, NSPE, and ABET.
3. Locate and apply the Rules of a Board of Architectural and Engineering Examiners in selected jurisdictions.
4. Complete the TTU online sexual harassment training and pass the associated online examination.
5. Locate and document resource material from professional organizations that can assist with ethical decision making and professional issues.
6. Initiate the professional registration process by graduating with the BSCE degree and taking the FE exam.

Criterion 3 Student Outcomes addressed by this Course:

- f) An understanding of professional and ethical responsibility (Level 3)
- g) An ability to communicate effectively (Level 3)
- h) The broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context (Level 2)
- i) A recognition of the need for, and an ability to engage in life-long learning (Level 2)
- j) A knowledge of contemporary issues (Level 2)

Program Criteria addressed by this Course:

- Explain basic concepts in management, business, public policy, and leadership (Level 1)
- Explain the importance of professional licensure (Level 2)

Course Topics:

1. General introduction (1 class)
2. Career services and professional presentation(1 class)
3. Non-discrimination and sexual harassment in the workplace (1 class)
4. Engineering codes of ethics, ethical decision making guidelines (3 classes)
5. Case study review and discussion (2 classes)
6. Professional registration, professional societies, and obligations (3 classes)
7. ASCE Body of Knowledge, curriculum design, and life-long learning (1 class)
8. External presentations (2 classes)
 - a. Professional registration
9. Testing and assessment (1 class)

Additional Topics/Assignments for dual-level (4000/5000) courses:

N/A