

CVEN 1317 HW2 - Engineering Ethics (TWO WEEK ASSIGNMENT)
Write-Up due in class on Tues., Sept. 18. Be prepared to discuss in class

The purpose of this assignment is for you to be able to define and comprehend engineering ethics and professional standards. Inevitably application of these involves some uncertainty in making difficult moral judgments. The write-up and discussion will require that clearly express and justify your views with professional ethical codes as well as your own values in mind. **You are encouraged to discuss the assignment and cases with other students. However, your written work must be your own. Any evidence of copying will be considered an honor code violation.**

There are a number of web-sites devoted to engineering ethics provided in this assignment that are required for you to complete it.

In your written and in-class oral discussion of each situation, consider:

- Your own and societal values which are relevant to the case.
- The professional ethical standards or canons which are relevant to the case.
- What you would have done in the case.

Overall: Format [5 pts]:

- a) Put your name and page numbers on each page of your write-up.
- b) Write-up should be typed, printed, stapled and free of spelling/grammatical errors.
- c) Please include the total amount of time you spent on the assignment over the two weeks.

Part 1: Professional Codes. [5 pts] Learning professional norms of ethical behavior.

- a) Visit the National Society of Professional Engineers (NSPE) website.
<http://www.nspe.org/ethics/eh1-code.asp> Print out the NSPE Code of Ethics for Engineers.
- b) Visit the American Society of Civil Engineers (ASCE) website.
<http://www.asce.org/membership/codeofethics.cfm> **Print out the ASCE and NSPE Codes of Ethics.** You will use these codes to justify your arguments in the following ethical case studies.
- c) **Attach both of these documents to your assignment** (for 5 pts). *You will get these back, and can refer to them throughout your engineering career.*

Part 2: Engineering Ethics Cases. [30 pts] Below are websites for ethics cases from On-Line Ethics Center for Engineering and Science relevant to civil engineering. Read all the cases just to familiarize yourself with them. **Select any three of the cases in the websites below** and answer the questions provided with each case you select.

- REFER TO SPECIFIC RELEVANT PORTIONS OF THE CODES OF ETHICS (from PART 1) in your answers. You can cite either the ASCE or the NSPE code, or both. Cite as many relevant guidelines and/or canons as you think apply (with the code, number and letter; for example, “per ASCE code 1d”)
- Add your own and societal values as they apply.
- Each answer should be about a third to a half page long and using bullet format is optional.

Cases [SELECT ANY THREE @ 10 pts ea]:

- a) <http://www.onlineethics.org/cms/14280.aspx> “Use of CD ROM for Highway Design”
- b) <http://www.onlineethics.org/cms/14297.aspx> -“Conflict of Interest in a Feasibility Study”
- c) <http://www.onlineethics.org/cms/14301.aspx> “Conflict of Interest, Services on the same project”
- d) <http://www.onlineethics.org/cms/14319.aspx> “Protesting Low Fee Proposal”
- e) <http://www.onlineethics.org/cms/14288.aspx> “Engineer’s dispute with client over Design”
- f) <http://www.onlineethics.org/cms/14292.aspx> “Knowledge of damaging information.”
- g) <http://www.onlineethics.org/cms/14314.aspx> “Withdrawal of offer for employment”

Part 3: Academic Ethics. [15 pts]

- a) Read the discussion on cheating from the Markkula Center for Applied Ethics:
<http://www.scu.edu/ethics/publications/ie/v9n1/cheating.html>
- b) Print out the CU Honor Code & attach.
<http://www.colorado.edu/academics/honorcode/studentinfo/violation.htm>
- c) How is the CU Honor Code related to Professional Codes of Ethics? Cite three specific instances of the similarities.

Part 4. Moral Exemplars. [20 pts] Go to the Ethics Center for Engineering and Science website, and read all of the provided material about **ONE** of the following 3 moral exemplars and answer the related questions below:

Austin (environmental) <http://www.onlineethics.org/cms/9090.aspx>

- a) Discuss the portions of the NSPE Code of Engineering Ethics that relate to Inez Austin’s decisions regarding the waste at Hanford. (Cite a minimum of 3 with associated specific actions of Austin).
- b) Discuss the various portions of the Code of Ethics that relate to the responses of her employers. (Cite a minimum of 3 specific examples and 3 relevant areas of the Code).
- c) What interests or values did the final “resolution” of Austin’s case serve and not serve?

Cuny (general civil/developing countries)

<http://www.onlineethics.org/CMS/profpractice/exempindex/cunyintro.aspx>

- a) List 3 specific examples of various types of civil engineering work that Fred Cuny conducted during his various international projects [for example: Biafra he improved the drainage system, water resources part of civil engineering]
- b) Discuss 3 examples of ethical behavior on the part of Fred Cuny
- c) Discuss 3 examples of non-technical challenges faced by Cuny in his work.

LeMessurier (structural engineer)

<http://www.onlineethics.org/CMS/profpractice/exempindex/lemesindex.aspx>

- a) Based on the information provided, who was at fault for constructing the unsafe Citicorp building and why?
- b) Do you believe that the eventual resolution of the problem was handled adequately? What changes would you recommend?

- c) Give specific examples of both ethical and unethical behavior that the case illustrates, citing the appropriate portions of the Code of Ethics to support your statements.

At the bottom of your write-up for HW2 please state how many hours you spent on the assignment.