## **IE 380**

## The Responsible Engineer Class Discussion Questions for Chapter 2, Moral Reasoning and Codes of Ethics

Martin, M.W. & R. Schinzinger. *Ethics in Engineering*, fourth edition. Boston: McGraw Hill, 2005.

Answer the following questions. Questions in **boldface** are required. Others are optional, but you might be required to answer them in class.

- 1. What is an ethical (moral) dilemma?
- 2. Apply the five-step process for resolving ethical dilemmas (text, pp. 21-35) to Case 1 on p. 38<sup>1</sup>.
- 3. What were some of the moral values brought out in the aluminum cans case described in this chapter?
- 4. Should US companies "off-shore" manufacturing and other jobs to foreign countries? Why or why not?
- 5. Is the off-shoring issue a right/wrong issue or a better/worse issue? Explain.
- 6. How is the process of moral reasoning like the process of engineering analysis and design?
- 7. Give two or three examples of how the NSPE Code could apply to any of the cases considered above.
- 8. In general, of what value is an engineering code of ethics?
- 9. What are some limitations to engineering codes of ethics?
- 10. How can engineering codes of ethics be abused?
- 11. Define the following terms found in the Code:
  - a) "welfare" in I.1 (Fundamental Canon 1)
  - b) "paramount" in I.1
  - c) "faithful agent" in I.4
  - d) "integrity" in III.1
- 12. "Does a profession's code of ethics create the obligations that are incumbent on members of the profession, so that engineers' obligations are relative to their code of ethics? Or does it simply record the obligations that already exist?" (Martin & Schinzinger 48) Answer and explain.

<sup>1</sup> This is an example of a micro ethical issue.

<sup>2</sup> As presented, this is a macro ethical issue, but it could be recast as a micro ethical issue by posing the problem to a single company or to a decision maker in that company. In either case, this might not be considered to be a problem of <u>engineering</u> ethics, but in reality, industrial or manufacturing engineers or engineering managers might be involved in the decision making and legal compliance processes.