GUIDELINE FOR MID-TERM EXAM

1. The basic ideas in the two videos.

2. To identify factual, conceptual, application, and moral issues.

3. The basic ideas in the line-drawing and creative-middle way methodologies.

4. The characteristics of the three models of professional care (malpractice, due care, and good works) and the two models of professionalism (business and social contract).

5. To distinguish the different impediments to professional responsibility (self-interest, fear, self-deception, ignorance, egocentric tendencies, microscopic vision, uncritical acceptance of authority, and groupthink).

6. TV tower case – how it illustrates the malpractice model of professional care and some creative-middle way solutions that might have worked.

7. How to identify the three types of conflict of interest (actual, potential, and apparent) as they appear in examples, and how to define the differences in one sentence each.

8. Some of the ways that research data can be corrupted (cooking, forgery, etc.).

9. Why, according to the engineering instructors, ambiguity is such a serious fault in engineering communication.

10. Characteristics of professionalism (intellectual education, knowledge of value to the public, code of ethics, self-regulation, etc.). How engineering measures up to these characteristics. The fact that engineers do not have to be licensed to practice weakens the professional status of engineering with respect to several of these characteristics.

11. The difference between codes that have the force of law (codes of state boards for engineering, law, medicine, etc.) and the codes of the professional societies (NSPE, American Medical Association, American Bar Association, etc.) which do not have the force of law.

12. What is “Industry exemption”? It says that engineers who do not have to sign off on documents affecting public health and safety need not be registered. Consequently, most engineers are not registered. Engineers do not have to be registered to practice most types of engineering work, unlike physicians, lawyers, etc.

13. You should review the NSPE code and the code of the Texas State Board, both of which are on Dr. James’ website. One interesting difference is that the state code has a (very weak) provision on the environment, whereas the NSPE code says nothing about the environment.