

## **Final Project**

### **Due Wednesday, July 1<sup>st</sup>**

1. Choose one of the following topics and prepare a 3 – 5 minute presentation for this class:
  - a. Describe the opportunities a bachelor's degree in engineering provides in today's society.
  - b. Convince high school students to major in engineering.
  - c. What field of engineering are you most interested in? What 4-year schools are you considering? To which companies might you one day apply? What is your career plan?

You will deliver this presentation in class on **Wednesday, July 1<sup>st</sup>**. You will not lose points specifically for your speaking ability (nervousness, jitters, etc.) but you will lose points if you do not present yourself professionally or if you are obviously unprepared. You should dress well for your presentation and try to speak clearly.

If you are going to use PowerPoint, you must either arrive in class 15 minutes early for set-up or email me the presentation by 10 pm on Tuesday, June 30<sup>th</sup> so I can load it onto the class computer. If you do not do either of these things, you will not be allowed to use your prepared slides.

The remaining portions of this project must follow the formatting requirements of this class. The lab report must be bound separately from the two essay questions.

2. Choose three different types of pasta (spaghetti, rotini, fettuccine, macaroni, etc.). Develop an experiment to determine which type of pasta cooks the fastest. For best results, set a specific amount of pasta (1/2 cup, 1/3 cup, etc.) and a specific amount of water for each test. Also be sure to use the same pot for each test, and always start with the water and pot at the same temperature. Write a lab report using the process shown in class to describe your method, results, and conclusions.

Note that you will need to decide how you determine that the pasta is “cooked.” You may, for example, just decide for yourself by taste, or use multiple tasters. You may decide to repeat the test for each type of pasta several times and take an average to get better results.

For any measurements that you take, be sure to use the error reporting methods discussed in class, and to also use units.

3. Imagine yourself in 10 years. Write a one-page profile of yourself that would appear in a professional magazine.
4. Consider the following regarding your academic and career goals:
  - a. List 5 academic and career goals that you have for the next five years.
  - b. What barriers do you see to achieving your goals?
  - c. Which of these goals are within your control and which ones are beyond your control?
  - d. What can you do to address those barriers within your control?
  - e. What strategies can you use to mitigate those barriers beyond your control?