

**GUIDELINES FOR HOMEWORK AND REPORTS**

1. Use a word processor for preparing your answers to qualitative and written problems. Always spell check anything you turn in. Use a minimum of 10-point font. Use one font throughout the document and use bold and italics sparingly. Double space narratives to leave room for comments.
  2. For quantitative problems (involving calculation) please use free sheets of paper (i.e. NOT paper torn from your notebook) and present your answers neatly, clearly and understandably.
  3. I would prefer you to get into the habit of using engineering paper, but that is not a requirement.
  4. All reports and homework will include a grading sheet. The grading sheet should be turned in you're your own individual work or with the group report.
  5. All homework must include
    - a. Your name
    - b. The course name and number
    - c. The title (e.g. Homework 8)
    - d. Page numbers
1. Staple (do not paper clip) multiple pages together.
  2. Calculations should be neatly presented including units and intermediate steps. Include a sketch or diagram if appropriate. Include units. Use tables to organize data. The final answer should be underlined.
  3. Remember:
    - a. What you turn in is intended to tell me what you know.
    - b. Intermediate steps and explanation help us to give you partial credit. If we only have an answer and the answer is incorrect, or unreadable, we can't give you partial credit.
    - c. If your work is untidy, illegible or undecipherable, we have no obligation to grade it.

**ADDITIONAL GUIDELINES FOR NARRATIVE RESPONSES**

Throughout the semester, you will hear a number of guest lectures, complete activities, field trips and be shown videos on important topics in civil and Environmental Engineering. The lectures will be given by members of our faculty and by practicing engineers from off-campus. These individuals will discuss their research, professional activities, and/or personal experiences. The purpose of these lectures is to give you an idea of the breadth of the field and to help you understand what it is like to be an engineer. Similarly activities, field trips and videos will be used to enhance your understanding of the material.

The lectures will be short (about 45-50 minutes.) In the regular homework, you will be given a short assignment covering the material presented. The assignment will generally consist of one or two questions that require written responses. You should answer the questions concisely in a single paragraph using complete sentences. You will need to take careful notes during the lecture or video, about what the speaker is saying rather than merely copying what is on the board. During the activities you will need to think about the principles. Ask questions from time to time if you don't understand certain points.

In order to earn a "100%" grade, your paper needs to satisfy the following criteria:

1. Your written statements must correctly answer the questions as completely as possible without exceeding 100 words.

2. There should be no extraneous information.
3. The statements should be grammatically correct without misspellings or typographical errors, and should be neatly typed.

You may work together in organizing your notes and in choosing the correct answers to the questions. However, the writing of the statements **must** be done individually.

Reports and homework will be collected at the beginning of class on the due date; late papers will not be accepted.

We recognize that these types of assignment may be difficult for many of you. The process of learning totally new information from a speaker and putting this information in writing takes practice. Nevertheless, careful note taking and writing are essential skills for an engineer. Developing these skills now will also help your performance in classes throughout your stay at CMU.

The *Elements of Style* by Strunk and White is a useful resource. This short book provides numerous useful hints on effective writing.

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**CIEG 125**  
**Fall 2005**

**Introduction to Civil Engineering**  
**Instructor: Sue McNeil**

#### **EXAMPLE OF GUEST LECTURER QUESTION AND SOLUTION**

The following questions and solution are based on an introductory lecture on air pollution.

**Discuss the difference between air quality standards and emission standards. Upon what factors is each type of standard based?**

Air quality standards specify the maximum allowable airborne concentration, usually expressed in grams/m<sup>3</sup> of pollutant in the air. Emissions standards specify the maximum amount of pollutant allowed to be released from a source, such as individual stack or a motor vehicle, usually expressed in grams/second or grams/unit of production. Air quality standards are based on effects of pollutants, such as deterioration of human health, ecosystem damage, and materials degradation. Emissions standards are based on the desired air quality as well as available technology.