

CEE 320 Course Concepts

This document describes what I expect from you, the student; what you should expect from me; the basic homework format; team concepts; examination philosophy; and grading procedures.

Expectations

Expectations of the Student

- **Conduct yourself as a responsible member of the academic community.** This basically means honesty, integrity, respecting the rights of others, etc. All of this is outlined in 478-120 WAC as described at:
<http://www.washington.edu/students/handbook/conduct.html#020>.
- **Adhere to deadlines.** Turn in homework assignments on time: the schedule is set to give you adequate time to complete them and the instructor adequate time to grade and return them.
- **Respect other students' time.** Everyone is paying for their education in one way or another. Class time and time spent working on assignments should be productive and meaningful; respect this by contributing your fair share on team assignments and minimizing class disruptions (e.g., talking in the background, sleeping in class, etc.)
- **Respect the instructor's time.** The instructor has put forth substantial effort to make this class as productive and insightful as possible. Respect this effort by paying attention if you choose to attend class and putting forth appropriate effort on the homework and exams.

Expectations of the Instructor

- **Clear communication.** I should clearly communicate what is expected of you and how you will be evaluated. If you are at any time unclear on this, let me know.
- **Availability.** I will make myself available to you for discussion and consultation including but not limited to class readings, homework assignments, future courses and career stuff.
- **Big picture.** I will try and contextualize topics so that you are aware of their significance, why they are being covered, and how they translate to industry use.
- **Timeliness.** I will keep my posted office hours and be accountable for getting your homework assignments and exam graded and returned in a timely manner. Just as you are responsible for deadlines, so am I.
- **Fairness and Reasonableness.** Assignments and exams will be fair and reasonable. It is my intention to achieve a fair workload that allows you time to play as well.
- **Respect your time.** As you are putting forth substantial effort and paying good money for this course and others, I will make our class time productive and insightful and hopefully somewhat entertaining. I will not waste your time.

Homework Assignments

Homework will consist of five regular assignments, 3 writing assignments and 2 projects. The regular assignments and writing assignments will be individual efforts while the projects will be team efforts. All assignments are due at the beginning of class on the day it is listed as due. I do not accept e-mailed assignments unless there are special circumstances which you have worked out with me in advance.

Late Homework

Late homework assignments will be discounted at 10% per day it is late. For example, if homework is due on a Tuesday, and you or your group turns it in on Thursday, it would amount to a deduction of 20% for homework turned in two days late. No credit will be given for homework turned in over one week late.

Regular Assignments (100 points each)

The four regular homework assignments will each consist of the following two sections:

1. **Several (3 to 6 typically) assigned problems from the textbook.** I will give you the answers to most, if not all, of these problems; it is your responsibility to work them out correctly. Typically, I will look for completion of all the problems and grade one or two in-depth. Problems may be completed by hand in pencil/pen on regular or engineering paper. As always with these types of problems, solution steps should be clearly shown with answers clearly denoted (e.g., box or underline the answer).
2. **Additional required work.** One or two additional problems that are not from the book. They are meant to reinforce concepts covered in class and often require a bit of sleuthing outside of the textbook (e.g., online).

Writing Assignments

I believe communication is extremely important in the engineering field, and thus it should be part of the curriculum. There are three writing assignments:

1. **Divided Highways paper (80 points).** After watching *Divided Highways*, you will be asked to write a short (two to three page) paper addressing a subject in the documentary. You will have plenty of time to complete this and it will be graded as homework. Grading will be based on writing quality, structure, continuity and clarity. Note that this assignment is worth quite a lot of points.
2. **Abstracts 1 (10 points).** There are 4 “other readings” (accessible via the class Website) assigned during the first half of the course. You will be asked to write abstracts for 2 of these articles. The total length of this assignment should be about 1 page.
3. **Abstracts 2 (10 points).** Same as abstracts 1, but covering the 4 “other readings” during the second half of the course.

Projects

There are two small projects (100 points each) meant to closely mimic what is done in the profession. As such they require thought, rational and substantiated assumptions, and clearly communicated results. A project report should be typed and submitted as if you were a consultant submitting it to a client. It should be written in clear English, contain the relevant answers, be relatively short (5 to 10 pages including pictures) and be backed up by additional pages of relevant equations, assumptions, etc. These equations, assumptions, calculations, etc. need not be typed but should still be neatly presented – I should be able to follow what you did. If you use a program to solve something (e.g. MatLab, Excel), please give me at least one example of the method or process your program follows. Extremely long submittals (substantially over 10 pages – not including additional pages of equations, assumptions, etc.) will not be graded.

Homework Grading

We will grade each assignment and endeavor to return them in a timely manner. Answers to the textbook problems will be posted on the course Website the day after the assignment is due.

Teams

The two projects are designed to be completed by teams of students. Teams will consist of 3 to 4 members of your own choosing. At the end of the quarter each team member will fill out a peer evaluation on all team members including himself/herself. In this evaluation you will be asked to divide up 100 points amongst your team members according to their contributions to the team. The results of this peer evaluation may be used to adjust homework scores based on individual contribution to the team. An individual's grade for team assignments will be a product of the team's overall assignment grades weighted by the individual's contribution to the team. Therefore, it is possible to score more than or less than your team's homework assignment grade.

Examinations

Exams will be open-book and open-notes. Everyone should respect each other's space and keep their books and notes within their own space. Many questions will be similar to the homework, although there may be one that requires a little extra thinking beyond the basic concepts. I will try and hold in-class reviews before each examination.

Final Grade Determination

Your final grade will be determined by a two-step process. First, I will combine your homework and exam grades using the following weights to determine a raw score:

- Homework: 17.5%
- Projects: 17.5%
- Midterm: 25%
- Final: 40%

From here I may adjust your score up based on the class performance overall. Your score will not be adjusted down. This adjustment is necessary to calibrate my teaching and grading. If the class turns out to be a bit difficult and raw scores are a bit low overall, I will adjust grades up accordingly. I will keep you apprised of how this adjustment is working out as the quarter goes along. This scheme has a couple of advantages:

1. **You can help your classmate without fear of it hurting your own grade.** In classes graded strictly on the curve, this is not true. Few classes are graded on a strict curve anymore.
2. **You can track your “not lower than” grade throughout the quarter.** By tracking raw scores, you can determine your minimum grade – your final grade will be this grade or higher.

On average, I believe that this scheme may count homework and projects a bit more than some classes, but I think the type of work represented by the homework assignments is much more reflective of actual practice. Because homework is so heavily weighted, it will be strictly graded. I believe examinations are necessary to check individuals' comprehension of material and to assess teaching effectiveness.