

COMP 465W: Software Engineering

Spring 2008

Course Syllabus and Class Policies

1. The three main **objectives** of this course are:
 - That you learn the **principles of software engineering**
 - That you apply these principles in practice when working on a **large programming project**
 - That you **significantly improve your proficiency in written English**, particularly in the area of **technical writing**.

2. The three main **components** of this course are:
 - The study of **software engineering** (following the “textbook/class/homework/exam” model)
 - Phased, systematic and disciplined development of a **large software project** in programming teams
 - Extensive practice of **reading and technical writing**.

If there is time, we may also discuss some case studies, based on the Internet material.

3. **Course topics** follow the textbook chapters. We will cover **the entire textbook**, with the approximate pace of one chapter per class meeting. The goal is to cover the entire textbook material by the end of April, so that you can focus on the project during the last two weeks of classes. The **major deadlines** for the **project** are:
 - **Introductory write-up** (not graded) of approved project: Wednesday, 2/6
 - **Draft of the Requirement Specification (SRS) document**: Monday, 2/18
 - **SRS document**: Monday, 2/25
 - **The first rewrite of the SRS document**: Friday, 3/7
 - **Draft of the Design Document**: Wednesday, 3/26
 - **Design Document**: Wednesday, 4/2
 - **The first rewrite of the Design Document**: Friday, 4/11
 - **Draft of the Test Plan Document**: Friday, 4/18
 - **Test Plan Document**: Friday, 4/25
 - **The second rewrite of the SRS document**: Wednesday, 4/30
 - **The second rewrite of the Design Document**: Wednesday, 5/7
 - **First version of the User Manual**: Monday, 5/12
 - **First version of the Test Report**: Friday, 5/16
 - **Complete project**, including the rewrites of **test report, user manual**, and the final project write-up is due Wednesday, 5/21/08, midnight.

4. COMP465 is a **W (writing)** course. You will be writing a lot in this class, perhaps more than in any other college course. Homework assignments will require writing essays. All assignments will be graded and subject to graded **rewrites**. The project will involve even more **extensive** writing, subject to a **four-step revision cycle: draft – paper – first rewrite – second rewrite**. In addition to project-related **documents** you will be writing weekly **progress reports** and the **final project write-up**. The exams will include written **essays**. Your homework assignments and project documents will be graded not only on the subject matter, but also on correctness (grammar, spelling, etc.), clarity, simplicity, economy and effectiveness of your writing.
5. The **textbook**: Ian Sommerville: Software Engineering. This comprehensive book is probably the most popular undergraduate-level software engineering text in the world. I will be assigning reading for each class meeting, and the class time will be spent mostly for discussion of the assigned reading. In addition to your work on the **project**, home reading is **the most important component of your subject-matter learning**.
6. The **course webpage**: <http://home.sandiego.edu/~pruski/c465ws08.html>. The webpage will contain assignments, course deadlines, links to other pages, and various announcements.
7. You will **work in class, in ad-hoc teams, on questions** related to the material you were assigned to read. The teams will present answers to the questions and we will discuss these answers in class. I used this mode of teaching in my previous CS 165/465W courses (1999 – 2005); the students overwhelmingly approved and liked it and, in my view, the approach resulted in much improved learning.

8. **Office hours:**

Monday	10:00 – 11:00, 3:30 – 4:30
Tuesday	2:30 – 3:30
Wednesday	12:30 – 1:30
Friday	1:15 – 2:15

and at other times, **by appointment**. (Usually, I am not available on Thursdays)

9. **Contact**: The best way to contact me is by using **e-mail**. I read e-mail many times a day and night, except for a few weekends when I may be out of town, loitering in the desert. I have voice mail (**x. 4035**), but sometimes I forget to check it. You may call our departmental executive assistant at x. 4706, as well.
10. There will be seven individual **homework assignments**. These will be questions requiring **essay answers** (three to four standard pages). Each assignment will be subject to the **revision cycle** that will require submitting the **actual papers** as well as their **rewrites**. Both components of the cycle **will be graded**. One of the essays will be a subject of **peer-grading**. Homework assignment scores will count for **20%** of the course grade. **Late assignments** will not be accepted unless you have a valid reason for not turning one on time **and you arrange it with me in advance**.
11. There will be a short **quiz** (about 5 - 7 minutes) at the beginning of **EACH CLASS MEETING** (except for the first class and the midterm day, of course), until about the end of April. The quiz question(s) will **always** be on the reading material assigned for the current class. The five lowest quiz scores will be dropped. The remaining scores will count for **15%** of the course grade. In general, quizzes cannot be made up, unless you have a valid reason to miss the class **and you notify me in advance**.

12. There will be one **midterm exam**, on Friday, **March 14**. The score will count for **10%** of the course grade. Midterm can be made up only if you have a truly important reason for missing the class and **if you notify me in advance about your absence**. Midterm exam will contain one “longer-essay” question and several short-essay questions.
13. The **final exam (Monday, May 19, 2 – 4:30)** will be cumulative and its score will count for **20%** of the course grade. The exam will also contain one “longer-essay” question.
14. The **large programming project** will be a team project, with teams consisting of three or four students. I will provide one or two project topics, but you are welcome to suggest project topics of your own choosing. We will discuss in class the logistics of team formation and the process of project topic submission/approval. The **project score** will consist of many components, such as scores for various **project documents (SRS document, design document, test plan, test report, user manual, etc.)** and for their **rewrites/revisions**, scores for **weekly progress reports**, scores for **project presentation**, scores for **final project documentation**, and, of course, for the **quality of the project** itself. The detailed allocation of credit among various components of the project will be given in class. The total project score will count for **35%** of the course grade (it is by far **the most significant component**). Note that it will not be possible to turn the project in late as the due date is the last day of the semester, just few days before the grades for graduating seniors are due.
15. **Grading criteria** are as follows (I generally do not use “curve”):

Total percentage	Grade
92% and above	A
90% - 92%	A-
88% - 90%	B+
82% - 88%	B
80% - 82%	B-
75% - 80%	C+
65% - 75%	C
60% - 65%	C-
50% - 60%	D
Below 50%	F

16. The Mathematics and Computer Science Department strongly promotes **Academic Integrity**. I hope issues related to academic integrity will not arise in our course. In the past, there have been several cases of cheating in programming courses – mainly the cases of submitting someone else’s work for homework or programming assignments. Depending on the severity of the case, the possible consequences include: assigning the score of 0 on the given assignment, lowering the course grade, or even assigning F in the course.