Computer Engineering 174
Software Engineering

Fall 2009
Tuesdays and Thursdays
11:50 am − 1:35 pm

Instructor

Instructor:	Darren Atkinson
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Office hours:	Tuesdays 1:45–2:30 pm and Thursdays 10:15–11:00 am
Office:	EC 245
Website:	http://www.cse.scu.edu/~atkinson/teaching/fa09/174/

Teaching Assistant

Teaching assistant:	Sree Gudreddi
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Lab hours:	Thursdays 2:15–5:00 pm

Textbook

Required: R. Pressman, *Software Engineering: A Practioner's Approach*, McGraw-Hill, 7th edition

Grading

Midterm exam:	30%
Final exam:	40%
Project:	30%

Course Outline

1. Requirements

2. Requirements . . . . Problem statement due in lab (10%)

3. Design

4. Design . . . . Design document due in lab (20%)

5. Quality Assurance . . . . Design review in lab (10%)

6. Midterm Exam

7. Testing . . . . Initial operational system due in lab (20%)

8. Metrics and Management

9. Maintenance . . . . Presentations in lab (10%)

10. Process Models . . . . Final report and final system due in lab (15% each)

11. Final exam

Course Objectives

Students will be able . . .

1. To understand that the design and implementation of a successful software product requires making intelligent choices with a consistent rationale.

2. To work with team members of diverse backgrounds and skill levels, and to structure teams accordingly.

3. To meet stated project requirements.

4. To understand software engineering as a profession.

Learning Outcomes

Students will . . .

1. Know the phases of the traditional software engineering development process, including the various levels of design and testing.

2. Compare and contrast different software development processes, specifically heavy processes versus light processes, and choose the best process given a scenario.

3. Specify, design, and/or implement a software product.

4. Document and formally present artifacts of the software engineering process.

5. Compare and contrast different software architectures, and choose the best architecture given a scenario.

6. Define terms, constraints, and patterns of an object-oriented methodology.

7. Compare and contrast different team structures.

8. Know the IEEE/CS code of ethics for software engineers.

Policies

Disability Accommodation Policy

To request academic accommodations for a disability, students must contact Disabilities Resources located on the second floor of Benson. Phone numbers are (408) 554-4111; TTY (408) 554-5445. Students must register and provide documentation of a disability to Disabilities Resources prior to receiving academic accommodations.

Academic Integrity Policy

The University is committed to academic excellence and integrity. Students are expected to do their own work and to cite any sources they use. A student who is guilty of a dishonest act in an examination, paper, or other work required for a course, or who assists others in such an act, may, at the discretion of the instructor, receive a grade of F for the course.

In addition, a student found guilty of a dishonest act may be subject to sanctions up to and including dismissal from the University as a result of the student judicial process as described in the *Community Handbook*.

A student who violates copyright laws, including those covering the copying of software programs, or who knowingly alters official academic records from this or any other institution is subject to similar disciplinary action.