

Computer Engineering 174/174L

Software Engineering

Fall 2016

Mondays, Wednesdays, and Fridays

1:00 pm – 2:05 pm

Instructor

Instructor: Darren Atkinson
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Office hours: Tuesdays 1:15–2:15 pm and Wednesdays 10:00–11:00 am
Office: EC 245
Website: <http://www.cse.scu.edu/~atkinson/teaching/fa16/175/>

Teaching Assistant

Teaching assistant: Nathan Matsunaga
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Lab hours: Mondays 2:15 pm –5:00 pm, Tuesdays 9:15 am –12:00 pm, and Tuesdays 2:15 pm –5:00 pm

Textbook

Required: F. Tsui, O. Karam, and B. Bernal, *Essentials of Software Engineering*, Third Edition, Jones and Bartlett

Grading

Midterm exam: 20% (10/26)
Final exam: 40% (12/7)
Project – Technical: 35%
Project – Contribution: 5%

Project – Technical

Problem statement: 10% (9/26 or 9/27)
Design document: 20% (10/10 or 10/11)
Design review: 10% (10/17 or 10/18)
Initial operational system: 20% (10/31 or 11/1)
Final presentation: 10% (11/14 or 11/15)
Final report: 15% (11/28 or 11/29)
Final system: 15% (11/28 or 11/29)

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

Classroom Policies

You must be registered for both the lecture and the lab. Since the project grade is more than 20% (1 unit out of 5 units) of your course grade, you simply receive the same grade for both the lecture and lab in this course.

Recording (a video or audio replication or photographic image recorded on devices including, but not limited to, audio recorders, video recorders, cell phones, smartphones, digital cameras, media players, computers, or other devices that record images or sound) of classroom lectures is prohibited unless advance written permission is obtained from the class instructor and any guest presenters. Students who require recording or other adaptations of lectures as a reasonable accommodation for a disability should contact the Office of Disability Resources in advance of the lecture in order to obtain permission for the recording.

Disability Accommodation Policy

To request academic accommodations for a disability, students must be registered with Disabilities Resources located in Benson, room 216. If you would like to register with Disabilities Resources, please visit their office in Benson 216 or call (408) 554-4109. You will need to register and provide professional documentation of a disability 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.