SJSU SAN JOSÉ STATE UNIVERSITY

College of Science · Computer Science

Software Engineering

CS 160

Fall 2025 Section 02 In Person 3 Unit(s) 08/20/2025 to 12/08/2025 Modified 09/13/2025

Contact Information

Instructor(s): Dominic Abucejo

Office Location: Via Zoom

Telephone: N/A

Email: dominic.abucejo@sjsu.edu

Office Hours:

- Zoom (by appointment only - send email or notify in person)
- Hours: Monday/Wednesday 5:30pm to 6:30pm

Course Information

Class Days/Time: Tuesday/Thursday from 6:00pm to 7:15pm

Classroom: Sweeney Hall, Room 346

Prerequisites: CS 146, CS 151 (with a grade of "C-" or better in each); CS 100W (with a grade of "C" or better).

Instruction Mode: In person

Course Description and Requisites

Software engineering principles, software process and process models, requirements elicitation and analysis, design, configuration management, quality control, project planning, social and ethical issues. Required team-based software development, including written requirements specification and design documentation, oral presentation, and tool use.

Prerequisite(s): CS 146, CS 151 (with a grade of "C-" or better in each); CS 100W (with a grade of "C" or better) or instructor consent. Computer Science, Forensic Science: Digital Evidence, or Software Engineering Majors only.

Letter Graded

Classroom Protocols

Collaboration Policy

Collaboration is encouraged, but you must cite the classmates you work with and you cannot copy their code. This includes sharing large blocks of code on discord.

Cheating

If a student is caught cheating on a homework assignment, the student will receive a 0 on that assignment. If a student is caught cheating on an exam, the student will receive a 0. A second incident of cheating will result in the student receiving an F in the course. All incidents of cheating must be reported to the University per University Policy F15-7.

Classroom Protocol

- You are expected to arrive for class on time, and to have your laptop available for each class, including exam days.
- Do NOT share any course material publicly (on Canvas, GitHub, etc.) without permission, including but not limited to lecture notes, lecture videos, passwords, homework/exam solutions, and class meeting links.

Program Information

Diversity Statement - At SJSU, it is important to create a safe learning environment where we can explore, learn, and grow together. We strive to build a diverse, equitable, inclusive culture that values, encourages, and supports students from all backgrounds and experiences.

Course Learning Outcomes (CLOs)

Upon successful completion of this course, students will be able to:

1. CLO 1–Understand the different stages in a software development lifecycle.

2. CLO 2–Apply agile practices throughout software development.

3. CLO 3–Create features, scenarios, and stories for project planning.

4. CLO 4–Prepare specifications and documentation for a software project.

5. CLO 5–Design and implement a product from end to end.

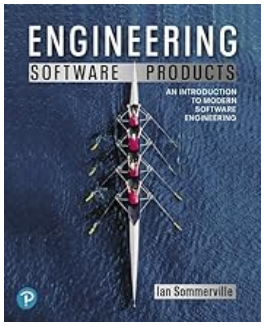
6. CLO 6–Usereliable programming and testing to ensure product quality.

7. CLO 7–Identify common security and privacy concerns.

Course Materials

Required Texts/Readings

Textbook:



Sommerville, Ian. Engineering Software Products: An Introduction to Modern Software Engineering. 1st Edition. Pearson Education, 2020.

ISBN-13: 978-0135210642

ISBN-10: 013521064X

Readings

Other readings may be assigned from articles and journals. The links for these materials will be provided on Canvas.

Grading Information

Grades will be posted to Canvas. There will be at least 260 points available. More details will be given in class.

- Team Project (100 points), Individual Team Contribution Assessment (50 points)
- Final Exam (50 Points)
- Exercises/In-Class Activities (20 points)

- Quizzes (40 points)

Note: There are no extra credit point assignments

Your course grade will be determined by your final weighted average:

Grade Letter	Corresponding Grade Percentage
A+	*98.00% or higher*
A	*93.00% to 97.99%*
A-	*90.00% to 92.99%*
B+	*87.00% to 89.99%*
B	*83.00% to 86.99%*
B-	*80.00% to 82.99%*
C+	*77.00% to 79.99%*
C	*73.00% to 76.99%*
C-	*70.00% to 72.99%*
D+	*67.00% to 69.99%*
D	*63.00% to 66.99%*
D-	*60.00% to 62.99%*
F	*0%. to 59.99%*

All students have the right, within a reasonable time, to know their academic scores, to review their grade-dependent work, and to be provided with explanations for the determination of their course grades. See University Policy S20-2 for more details.

University Policies

Per University Policy S16-9 (PDF) (http://www.sjsu.edu/senate/docs/S16-9.pdf), relevant university policy concerning all courses, such as student responsibilities, academic integrity, accommodations, dropping and adding, consent for recording of class, etc. and available student services (e.g. learning assistance,

counseling, and other resources) are listed on the Syllabus Information (https://www.sjsu.edu/curriculum/courses/syllabus-info.php) web page. Make sure to visit this page to review and be aware of these university policies and resources.

Course Schedule

CS 160 Software Engineering, Spring 2025, Course Schedule

*Subject to change with fair notice at least one class period in advance. Students will be notified in class and/or via course web site should any changes occur.

Week	Date	Topics / Readings	Assignments, Deadlines	Notes
1	8/21	Introduction to Software Engineering	HW 1 assigned	First day of class
2	8/25 - 8/29	Software products (Ch 1) Waterfall/Agile intro		
3	9/1 - 9/5	Agile: Scrums, Stories, Personas (Ch 2 & 3)		
4	9/8 - 9/12	Agile topics continued Wrap up on Agile topics	Team Survey assigned Team Survey due	Groups formed
5	9/15 - 9/19	Software Architectures (Ch 4 & 6) & Projects Overview		Sprint 1 Begin
6	9/22 - 9/26	Continue Software Architectures (Ch 4 & 6) & Projects Overview Software Testing (Ch 9)	Project design proposal due	Sprint 1 End

7	9/29 - 10/3	Continue Testing (Ch 9) Code management & DevOps (Ch 10)		Sprint 2 Begin
8	10/6 - 10/10	Continue Code management & DevOps (Ch 10)		Sprint 2 End
9	10/13 - 10/17	UI/UX		Sprint 3 Begin
10	10/20 - 10/24	Security (Ch 7)		Sprint 3 End
11	10/27 - 10/31	Cloud (Ch 5) & Virtualization		Sprint 4 Begin
12	11/3 - 11/7	Git low level object model		Sprint 4 End
13	11/10 - 11/14	Distributed Systems 11/11 - No class (Veteran's Day - Campus Closed)		Sprint 5 Begin
14	11/17 - 11/21	Continue Distributed Systems Internet of things		Sprint 5 End

15	11/24 - 11/28	Discussion of what to prepare for the project demo / Talk about what to prepare for on the final No class from 11/26 to 11/28 (Thanksgiving)		Project Prep for demos
16	12/1 - 12/5	Project Demos, The last week of instruction		
Final Exam	12/11	Thursday (12/11) - 5:30-7:30 PM		