SJSU SAN JOSÉ STATE UNIVERSITY

College of Science · Computer Science

Software Project

CS 161

Spring 2026 Section 02 In Person 3 Unit(s) 01/22/2026 to 05/11/2026 Modified 02/03/2026

Contact Information

Instructor(s): Dominic Abucejo

Office Location: Onsite office location (DH 212)

Telephone: N/A

Email: dominic.abucejo@sjsu.edu

Office Hours:

- Hours:
  - Monday/Wednesday - 7:00am to 7:30am
  - Tuesday/Thursday 5:30pm to 6:00pm
- If requesting for a Zoom meeting (send email or notify in person)

Course Description and Requisites

A substantial project based on material from an advanced area of computer science. Includes lectures on the project topic and the design and testing of software systems. At least 50% of the course grade to be based on the project.

Prerequisites: CS 160 (with a grade of "C-" or better) or instructor consent. Computer Science and 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 and/or other similar social communication platform.

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 on laboratory, quiz, and 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)

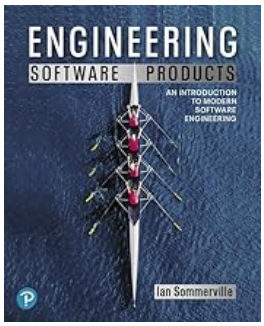
Upon successful completion of this course, students will be able to:

1. CLO 1 – Perform Teamwork roles and responsibilities such as project management
2. CLO 2 – Understanding SCRUM methodologies and meeting schedules/deadlines
3. CLO 3 – Improved presentation experiences i.e. with elevator pitch project descriptions
4. CLO 4 – Learn to use web development technologies that provides a service
5. CLO 5 – Learn and apply UML methodologies
6. CLO 6 – Learning different testing strategies
7. CLO 7 – Prepare specifications and documentation for a software project.
8. CLO 8 – Design and implement a product from end to end.

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.

Course Requirements and Assignments

Library Liaison

Anamika Megwalu, email: *anamika.megwalu@sjsu.edu*, website: https://libguides.sjsu.edu

Assignments

Assignments will be questions from the required book, and other assignments will be related to articles. The specific exercises will be specified in the Canvas assignment description. There will be at least one week to complete a programming assignment. Any late submission of any assignment will be awarded ZERO (0) points. No due date/time extensions will be given.

Team Project

There will be one project which will be broken up into smaller sub-projects i.e 3 to 4 sprints. Sprints are two weeks long and assignments are due by the end of each sprint. Any late submission of any sub-project assignment will be awarded ZERO (0) points. No due date/time extensions will be given.

Quizzes

Canvas quizzes will be assigned during class. All quizzes are closed book and with no helping notes (i.e. no cheat sheet). Quizzes will be based on any previously discussed (lecture/assignment). All classes are in-class exams.

Exam (Midterm)

Exams will be a paper exam or it will be a Canvas exam using lockdown browser. There will be one midterm exam throughout the semester. The exam is based on course material that was previously discussed in class and will be related to any or all assignments/labs up to the point of the exam. The exam is in-class exam.

Final Exam

There will be an accumulative final exam that will ask any material dealt with throughout the entire semester. The exam will be a closed-all-materials exam. The date and time of the final are fixed (please refer to the SJSU final exam schedule). This is an in-class exam.

About in-class exams and quizzes

These activities (in-class quizzes and exams) [require] your presence in the classroom. You cannot complete these outside of the classroom and these cannot be taken after the quiz date or exam date.

However, if you have any of the following valid reasons of not being available to take an exam, or quiz:

1. Medical appointments/injury/mental well-being(must be you and not someone else)
2. Family Emergency or Care/Home Emergency/Sick
3. Military duty
4. You are part of one of the University's sports team/Band/Orchestra/Club and you have to travel away from school
5. Car accident causing transportation issues (on the day of and before the quiz and exam)

then you are eligible to schedule a make up day (based on agreement and discretion by the course professor)

**** You may be asked to provide proof for some the above
**** For items (1) to (4), you must notify the professor, at least a minimum of 48 hours or soon as possible, before the start of any in-class quiz or exam.
**** For item (5), you must provide some incident report from law enforcement, or other official report (must message the professor immediately).

********** Missing a quiz or exam and notifying your professor after the in-class/quiz/exam start date and time will not be accepted; you will not be given an opportunity to receive a make up date/time for the quiz/exam, and so you will receive a score of ZERO (0) points. Remember you have enough time to provide

a heads up notification to your professor for items (1) to (4). For item (5), an incident report or vehicle repair report is required. If it is a last minute vehicle accident on the day of the quiz/exam and before the start time of the quiz/exam, notify your professor as soon as possible and follow up with clear documentation.

A few examples of many of what will not be accepted as excuses:
(1) Skipping the activities by going to a concert or going anywhere else unrelated to the main reasons that are described above.
(2) I woke up a late....
(3) I was stuck in traffic....

✔ Grading Information

Grades will be posted to Canvas. Your final course grade will be determined by grading weights (category percentages). The following grading categories are described below:

- 7.5% Assignments
- 7.5% Quizzes (in-class)
- 50% Team Project
- 15% Exam (in-class)
- 20% Final Exam (in-class)

Note 1: Any late submission of a regular assignment or project assignment will is considered late and ZERO (0) points will be awarded for that particular assignment

Note 2: In this course, there are no extra credit point assignments or extra credit questions

For this course, the final letter grade is determined by the grading table (below).

Grade Letter	Corresponding Grade Percentage
A	*>= 93.00%*
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	*< 60.00%*

Note 3: The calculated final grade percentage is never rounded off (grades are earned exactly as computed and described)

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

Exam Schedule

Exam	During	Date
Exam #1	Week 9	Wednesday- March 16, 2026 @ MH 222
Final Exam	Week 17	Wednesday, May 13, 2026 (8:30-10:30 AM) @ MH 222

Course Schedule (Subject to change with fair notice, which will be posted in Canvas)

Week #	Month Overview	Monday Start	Sunday End	Topic
Week 1	January	Jan 19	Jan 25	First Week of School

Week #	Month Overview	Monday Start	Sunday End	Topic
Week 2		Jan 26	Feb 1	Course Introduction / About Software Projects / About Project Failures /
Week 3	February	Feb 2	Feb 8	Documentation (specifications) / Architectural Block Diagrams/ Sequence Diagrams
Week 4		Feb 9	Feb 15	Class Relationships / Use Case Scenarios
Week 5		Feb 16	Feb 22	UML Methodologies
Week 6		Feb 23	Mar 1	Special Topic
Week 7	March	Mar 2	Mar 8	Agile Development / SCRUM Methodologies
Week 8		Mar 9	Mar 15	Customer & Team Status Updates
Week 9		Mar 16	Mar 22	EXAM / Testing strategies (Validation/Quality Testing)
Week 10		Mar 23	Mar 29	Customer Support / Field Issues / Bug Reporting / Bug Fixes
Week 11	April	Mar 30	Apr 5	No classes - Spring Break/Caesar Chavez Day
Week 12		Apr 6	Apr 12	Deployment Strategies
Week 13		Apr 13	Apr 19	Project Maintenance
Week 14		Apr 20	Apr 26	Special Topic / Project Demos
Week 15	May	Apr 27	May 3	Project Demos
Week 16		May 4	May 10	Project Demos

Week #	Month Overview	Monday Start	Sunday End	Topic
Week 17		May 11	May 17	Topics Review / Last week of class / May 11 - Last Day of Instruction Final Exam (Wednesday, May 13)

Team Project Schedule

Sprint #	During	Start and End Dates
N-2	Week 3	Team Formation / Project Idea Planning / Project Survey
N-1	Week 4, 5	Report Preparation / Architecture document write up
1	Week 6, 7, 8	February 23 to March 15
2	Week 9, 10, 11	March 16 to April 5
3	Week 12, 13, 14	April 6 to April 26
N+1	Week 15	Project Demo
N+2	Week 16	Project Demo