San José State University
Computer Science Department
CS160, Software Engineering, Section 1, Fall 2024

Course and Contact Information

Instructor:	Fain (Frank) Butt
Office Location:	SH435 / Online
Telephone:	(408) 924-5060
Email:	Frank.Butt@sjsu.edu
Office Hours:	M 7:15 PM – 8:45 PM (or by appointment)
Class Days/Time:	Section 1: MW 6:00 – 7:15 PM
Classroom:	Sweeney Hall 435
Prerequisites:	Prerequisite: CS 146, CS 151 (with a grade of "C-" or better in each); CS 100W (with a grade of "C" or better)

Course Format

All your programming project deliverables must be able to compile and run before packaging for submission. Otherwise you will not earn many points if we can't verify your results. You are expected to spend 15-20 hours a week on homework and/or project.

Faculty Web Page and MYSJSU Messaging

Course syllabus and the rest of the course information will be published via Canvas. You are responsible for regularly checking with the messaging system through MySJSU and Canvas to learn of any updates.

Course Description

Software engineering principles, 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.

Course Learning Outcomes (CLO)

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

1. CLO 1 – Design and build a project from end to end
2. CLO 2 – Write a Requirement Document
3. CLO 3 – Write High-level and low-level designs
4. CLO 4 – Iterative Implementation
5. CLO 5 – Understanding Different Stages of Quality Assurance
6. CLO 6 – Install, Packaging, Configuration, and Support
7. CLO 7 – Work in a team project which follows the steps of Agile SW Engineering Methodology.

8. CLO 8 – Produce the necessary documents for different steps of the development process.
9. CLO 9 – Perform design, development, and QA for a sizable team project.

Textbook

Facts and Fallacies of Software Engineering; Robert L. Glass (ISBN 0-321-11742-5) - <mark>Optional</mark>

Engineering Software Products: An Introduction to Modern Software Engineering (1st Edition); Sommerville (ISBN-13: 978-0135210642)

Other Readings [Optional]

Provided by instructor

Other equipment / material requirements (include if applicable)

None

Course Requirements and Assignments

SJSU classes are designed such that in order to be successful, it is expected that students will spend a minimum of forty-five hours for each unit of credit (normally three hours per unit per week), including preparing for class, participating in course activities, completing assignments, and so on. More details about student workload can be found in University Policy S12-3 at http://www.sjsu.edu/senate/docs/S12-3.pdf.

There will be two exams, one group project, homework and quizzes. All the exams and quizzes will be conducted in person, and they are close book but open notes. There will be no laptops, calculators, or any personal digital devices allowed unless you are instructed to do so. I strongly suggest that you attend each class and take good notes during the semester. There will be **_NO_** make-up exams and quizzes.

All programming portions of the project, and its related documentations must be handed in electronically. Programs that are handed in after the late submission date will not be accepted. Additional information about each project will be given in separate handouts. Your project must be able to compile and execute before you turned it in.

NOTE that University policy F69-24 at http://www.sjsu.edu/senate/docs/F69-24.pdf states that "Students should attend all meetings of their classes, not only because they are responsible for material discussed therein, but because active participation is frequently essential to insure maximum benefit for all members of the class. Attendance per se shall not be used as a criterion for grading."

Grading Policy

Final Exam	250 points	25%
Midterm Exam	200 points	20%
Quizzes & HW	100 points	10%
Group Project	450 points	45%
Total	1000 points	100%

The final "letter" grade will be determined from a curve at the end of the semester. Any assignment that are submitted past the due date will incur a minimum of 20% deduction.

Note that "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 F13-1 at http://www.sjsu.edu/senate/docs/F13-1.pdf for more details.

Classroom Protocol

All the classes are in person including all the quizzes and exams. Even though we don't use attendance as part of your final grade, you will be graded on a weekly classroom team presentation after the project begins.

University Policies

Per University Policy S16-9, 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 Syllabus Information web page (https://www.sjsu.edu/curriculum/courses/syllabus-info.php). Make sure to visit this page to review and be aware of these university policies and resources.

CS160, Software Engineering, Section 1, Fall 2024, Course Schedule (subject to change)

Event	Date	Class Time	Topics, Readings, Assignments, Deadlines
First Day	08/21/2024	Sec 1: 6:00 – 7:15PM	Introduction and Overview; Front End / UI development;
Week 1	08/26/2024		Waterfall Development Process Model; F&F; Chapter 1, 2
Week 2	09/02/2024	"	Labor Day; Chapter 2; Agile practice/videos;
Week 3	09/09/2024	"	Chapter 3; Back End / Web Server / Database; Project Kickoff, Groups are formed; Chapter 4
Week 4	09/16/2024	"	Chapter 5; Scrum Meetings & Checkpoints; Project P3 kickoff;
Week 5	09/23/2024	"	Quiz#1 Ch 1-3, F&F; Scrum Meetings & Checkpoints;
Week 6	09/30/2024	"	Quiz Review; Chapter 6; Scrum Meetings & Checkpoints
Week 7	10/07/2024	"	Midterm covering F&F, Chapter 1-5, Agile, and any additional handouts; Midterm Review, Scrum Meetings & Checkpoints
Week 8	10/14/2024	"	Chapter 7, Scrum Meetings & Checkpoints
Week 9	10/21/2024	"	Chapter 8; Scrum Meetings & Checkpoints
Week 10	10/28/2024	"	Chapter 9 (QA); Scrum Meetings & Checkpoints
Week 11	11/04/2024	"	Chapter 10; Scrum Meetings & Checkpoints
Week 12	11/11/2024	"	Veterans Day; Scrum Meetings & Checkpoints
Week 13	11/18/2024	"	Project Part 4 & Part 5 kickoff; Scrum Meetings & Checkpoints
Week 14	11/25/2024	"	Project P3 presentation/demo; Thanksgiving;
Week 15	12/02/2024	"	Exam Review; Part 4 Due; Scrum Meetings & Checkpoints;
Last Day	12/09/2024	"	Part 5 Due; Last Day of Class
Final Exam	12/11/2024	Sec 1: Wed, 5:15 PM - 7:30 PM	Final Exam covering F&F, Chapter 1-10, Agile, and any additional handouts; Project related questions