

**San José State University**  
**Computer Science Department**  
**CS160, Software Engineering, Section 2, Spring 2020**

**Course and Contact Information**

<b>Instructor:</b>	Fain (Frank) Butt
<b>Office Location:</b>	DH282 / SCI311
<b>Telephone:</b>	(408) 924-5060
<b>Email:</b>	Frank.Butt@sjsu.edu
<b>Office Hours:</b>	MW 7:15 PM – 8:30 PM (by appointment)
<b>Class Days/Time:</b>	Section 2: MW 6:00 – 7:15 PM
<b>Classroom:</b>	SCI311
<b>Prerequisites:</b>	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 deliverable 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)

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](http://www.sjsu.edu/senate/docs/S12-3.pdf) at <http://www.sjsu.edu/senate/docs/S12-3.pdf>.

There will be two exams, one group project, several homework and quizzes. All the exams and quizzes will be closed book but open notes unless noted. There will be no laptops, or any personal digital devices allowed. 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 due 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](http://www.sjsu.edu/senate/docs/F69-24.pdf) 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	200 points	20%
Midterm Exam	200 points	20%
Quizzes & HW	100 points	10%
<u>Group Project</u>	<u>500 points</u>	<u>50%</u>
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](http://www.sjsu.edu/senate/docs/F13-1.pdf) at <http://www.sjsu.edu/senate/docs/F13-1.pdf> for more details.

## Classroom Protocol

There will be no lecture notes given out. It is your best interests to attend class and take good notes. You must turn off any cell phone ringer at the beginning of each class!

## University Policies

Per University Policy S16-9, university-wide policy information relevant to all courses, such as academic integrity, accommodations, etc. will be available on Office of Graduate and Undergraduate Programs' [Syllabus Information web page](http://www.sjsu.edu/gup/syllabusinfo/) at <http://www.sjsu.edu/gup/syllabusinfo/>"

## CS160, Software Engineering, Section 2, Spring 2020, Course Schedule (subject to change)

Event	Date	Class Time	Topics, Readings, Assignments, Deadlines
Week 1	01/27/2020	Sec 2: 6:00 – 7:15PM	Introduction and Overview; Waterfall Development Process Model; F&F Chapter 1, 2
Week 2	02/03/2020	“	F&F Chapter 3 - 7
Week 3	02/10/2020	“	Text book Chapter 1-3; Project Kickoff, Groups are formed;
Week 4	02/17/2020	“	Text book Chapter 4
Week 5	02/24/2020	“	Text book Chapter 4, 5; Scrum Meetings & Checkpoints
Week 6	03/02/2020	“	Text book Chapter 6, 7; Scrum Meetings & Checkpoints
Week 7	03/09/2020	“	Text book Chapter 8; Scrum Meetings & Checkpoints
Week 8	03/16/2020	“	Midterm cover F&F, Engineering Software Products; Any additional handouts; Project related questions; Scrum Meetings & Checkpoints
Week 9	03/23/2020	“	Text book Chapter 9, QA; Scrum Meetings & Checkpoints
Week 10	03/30/2020	“	Spring Break;
Week 11	04/06/2020	“	Text book Chapter 10; Scrum Meetings & Checkpoints
Week 12	04/13/2020	“	Scrum Meetings & Checkpoints
Week 13	04/20/2020	“	Scrum Meetings & Checkpoints
Week 14	04/27/2020	“	Final Project Presentations; Part III deliverables
Week 15	05/04/2020	“	Scrum Meetings & Checkpoints
Last Day	05/11/2020	“	Exam Review
Final Exam	05/13/2020	Sec 2: Wed, May 13, 5:15-7:30PM	Covers some F&F book content and Engineering Software Products; Any additional handouts; Project related questions