

**San José State University**  
**Computer Science Department**  
**CS160, Software Engineering, Section 3 and 4, Spring 2016**

**Course and Contact Information**

<b>Instructor:</b>	Fain (Frank) Butt
<b>Office Location:</b>	MH218
<b>Telephone:</b>	(408) 924-5060
<b>Email:</b>	Frank.Butt@sjsu.edu
<b>Office Hours:</b>	TR 8:45 PM - 10:15 PM, Sa 3:45 PM - 5:15 PM
<b>Class Days/Time:</b>	Section 3: TR 6:00 - 7:15 PM Section 4: TR 7:30 - 8:45 PM
<b>Classroom:</b>	MH223
<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 or programming assignment.

**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.

## **Learning Outcomes**

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

1. SLO 1 - Design and build a project from end to end
2. SLO 2 - Write a Requirement Document
3. SLO 3 - Write High-level and low-level designs
4. SLO 4 - Iterative Implementation
5. SLO 5 - Stages of Quality Assurance
6. SLO 6 - Install, Packaging, Configuration
7. SLO 7 - Customer Support

## **Course Learning Outcomes (CLO)**

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

1. CLO 1 – Work in a team project which follows the steps of Agile SW Engineering Methodology.
2. CLO 2 – Produce the necessary documents for different steps of the development process.
3. CLO 3 – 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)

Succeeding with Agile; Mike Cohn (ISBN 0-321-57936-4)

## **Other Readings [Optional]**

None

## **Other equipment / material requirements (include if applicable)**

Additional Lecture Slides and class material is provided

## **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 open book and 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%
Group Project	500 points	50%
Total	1000 points	100%

The final "letter" grade will be determined from a curve at the end of the semester.

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. Therefore it is to 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**

#### **General Expectations, Rights and Responsibilities of the Student**

As members of the academic community, students accept both the rights and responsibilities incumbent upon all members of the institution. Students are encouraged to familiarize themselves with SJSU’s policies and practices pertaining to the procedures to follow if and when questions or concerns about a class arises. See [University Policy S90–5](http://www.sjsu.edu/senate/docs/S90-5.pdf) at <http://www.sjsu.edu/senate/docs/S90-5.pdf>. More detailed information on a variety of related topics is available in the [SJSU catalog](http://info.sjsu.edu/web-dbgen/narr/catalog/rec-12234.12506.html), at <http://info.sjsu.edu/web-dbgen/narr/catalog/rec-12234.12506.html>. In general, it is recommended that students begin by seeking clarification or discussing concerns with their instructor. If such conversation is not possible, or if it does not serve to address the issue, it is recommended that the student contact the Department Chair as a next step.

#### **Dropping and Adding**

Students are responsible for understanding the policies and procedures about add/drop, grade forgiveness, etc. Refer to the current semester’s [Catalog Policies](http://info.sjsu.edu/static/catalog/policies.html) section at <http://info.sjsu.edu/static/catalog/policies.html>. Add/drop deadlines can be found on the current academic year calendars document on the [Academic Calendars webpage](http://www.sjsu.edu/provost/services/academic_calendars/) at [http://www.sjsu.edu/provost/services/academic\\_calendars/](http://www.sjsu.edu/provost/services/academic_calendars/). The [Late Drop Policy](http://www.sjsu.edu/aars/policies/latedrops/policy/) is available at <http://www.sjsu.edu/aars/policies/latedrops/policy/>. Students should be aware of the current deadlines and

penalties for dropping classes. Information about the latest changes and news is available at the [Advising Hub](http://www.sjsu.edu/advising/) at <http://www.sjsu.edu/advising/>.

### Consent for Recording of Class and Public Sharing of Instructor Material

[University Policy S12-7](http://www.sjsu.edu/senate/docs/S12-7.pdf), <http://www.sjsu.edu/senate/docs/S12-7.pdf>, requires students to obtain instructor's permission to record the course and the following items to be included in the syllabus:

- “Common courtesy and professional behavior dictate that you notify someone when you are recording him/her. You must obtain the instructor's permission to make audio or video recordings in this class. Such permission allows the recordings to be used for your private, study purposes only. The recordings are the intellectual property of the instructor; you have not been given any rights to reproduce or distribute the material.”
  - It is suggested that the greensheet include the instructor's process for granting permission, whether in writing or orally and whether for the whole semester or on a class by class basis.
  - In classes where active participation of students or guests may be on the recording, permission of those students or guests should be obtained as well.
- “Course material developed by the instructor is the intellectual property of the instructor and cannot be shared publicly without his/her approval. You may not publicly share or upload instructor generated material for this course such as exam questions, lecture notes, or homework solutions without instructor consent.”

### Academic integrity

Your commitment, as a student, to learning is evidenced by your enrollment at San Jose State University. The [University Academic Integrity Policy S07-2](http://www.sjsu.edu/senate/docs/S07-2.pdf) at <http://www.sjsu.edu/senate/docs/S07-2.pdf> requires you to be honest in all your academic course work. Faculty members are required to report all infractions to the office of Student Conduct and Ethical Development. The [Student Conduct and Ethical Development website](http://www.sjsu.edu/studentconduct/) is available at <http://www.sjsu.edu/studentconduct/>.

### Campus Policy in Compliance with the American Disabilities Act

If you need course adaptations or accommodations because of a disability, or if you need to make special arrangements in case the building must be evacuated, please make an appointment with me as soon as possible, or see me during office hours. [Presidential Directive 97-03](http://www.sjsu.edu/president/docs/directives/PD_1997-03.pdf) at [http://www.sjsu.edu/president/docs/directives/PD\\_1997-03.pdf](http://www.sjsu.edu/president/docs/directives/PD_1997-03.pdf) requires that students with disabilities requesting accommodations must register with the [Accessible Education Center](http://www.sjsu.edu/aec) (AEC) at <http://www.sjsu.edu/aec> to establish a record of their disability.

### CS160, Software Engineering, Section 3 & 4, Spring 2016, Course Schedule (subject to change)

Event	Date	Time	Topics, Readings, Assignments, Deadlines
First Day	01/28/2016		Introduction and Overview
Week 1	02/02/2016		Waterfall Development Process Model; F&F Chapter 1, 2
Week 2	02/09/2016		F&F Chapter 2 - 7
Week 3	02/16/2016		Project Kickoff, Groups are formed;
Week 4	02/23/2016		Agile Chapter 1 - 3
Week 5	03/01/2016		Agile Chapter 4 – 7; Scrum Meetings & Checkpoints
Week 6	03/08/2016		Agile Chapter 8 - 11
Week 7	03/15/2016		Agile Chapter 12 – 16; Scrum Meetings & Checkpoints

<b>Event</b>	<b>Date</b>	<b>Time</b>	<b>Topics, Readings, Assignments, Deadlines</b>
Week 8	03/22/2016		Midterm on 3/22/16 cover F&F, Agile up to Chapter 11
Week 9	03/29/2016		Spring Break
Week 10	04/05/2016		Scrum Meetings & Checkpoints
Week 11	04/12/2016		Agile Chapter 17 - 19
Week 12	04/19/2016		Scrum Meetings & Checkpoints
Week 13	04/26/2016		Agile Chapter 20 - 22
Week 14	05/03/2016		Project Presentations
Week 15	05/10/2016		Final deliverables; Exam Review;
Final Exam	05/24/2016	Sec 3: 5:15 – 7:30 PM Sec 4: 7:45 – 10:00 PM	Covers Agile Chapter 12-22; Project related questions