San José State University
College of Engineering/Computer Engineering
CMPE/SE 195A, Senior Design Project I, Section 01, Spring 2018

Course and Contact Information

Instructor:	Rod Fatoohi
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Office Hours:	Tuesday & Thursday 3 – 4 pm
Class Days/Time:	Wednesday 6 – 8: 45 pm (as outlined in the schedule)
Classroom:	ENG 337
Prerequisites:	***For CMPE Majors***: CMPE 127; CMPE 130; CMPE 131; ISE 130 (all with a C- or better); ENGR 100W (with a grade of "C" or better); in good standing in the major and graduation application on file. ***For SE Majors***: CMPE 131, ISE 130 or MATH 161A (with a grade of "C-" or better), ENGR 100W (all with a grade of "C" or better); in good standing in the major, graduation application on file.

Course Format

In Person (Web Supplements)

Faculty Web Page

Class website: https://sjsu.instructure.com
Students are required to check the class website regularly (at least twice a week).

Course Description

Comprehensive plan and preliminary design of a group computer/software engineering project; integration of knowledge in science, technologies and team processes; group written report and oral presentation; global and social issues in engineering; individual professional development plans.

CMPE/SE 195A-01 is a 1 unit course. Students who have fulfilled their Area S & V requirements are to enroll in either CMPE 195A-01 or SE 195A-01.

CMPE/SE 195A-02 is a 2 unit course. This is for students who will fulfill their Area S requirement by concurrently enrolling in ENGR 195A and address assignments covering SLO 1-4 in this course and Area V through ENGR 195B at the same time as they take CMPE 195B.

Course Learning Outcomes (CLO)

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

1. Have an ability to conduct and manage a computer hardware/software senior project using basic project planning and management techniques.
2. Have an ability to analyze, design, and document a computer hardware/software component/system based on the given requirements and constraints.
3. Have an ability to identify and understand the contemporary issues of a special computer hardware/software subject and related societal and environment impacts.
4. Have an ability to use and select different solutions to solve problems.
5. Have an ability to use various communication methods and skills to communicate with their teammates to conduct their practice-oriented senior projects in computer engineering.

Required Texts/Readings

Textbook

No Required Textbook

Other Readings

1. The Purdue Online Writing Lab: http://owl.english.purdue.edu/
2. APA 6.0
   http://www.youtube.com/results?search_query=apa+format+word+2007&aq=1
3. Table of Contents, etc.
   http://www.youtube.com/watch?v=OkyisWIE3kQ
4. Publication Manual of the American Psychological Association, 6th edition, 2009, ISBN 978-1-4338-0561-5

Library Liaison

Megwalu, Anamika
Phone: 408-808-2089
Email: anamika.megwalu@sjsu.edu

Course Requirements and Assignments

This capstone course is the first in a two-semester sequence where students work in groups as Computer/Software Engineers who are co-founders of a startup tasked with the creation of an abstract, requirements, architecture, analysis, design and implementation of a specific project that they actually decide on themselves with the support and approval of a faculty advisor. Intermixing between the two majors is encouraged.

The first portion of this course focuses on developing artifacts which meet the second Course Learning Objective for students to demonstrate the ability to develop requirements and constraints, and then analyze, design, and document computer hardware/software systems that meet them. IEEE Standards are used in aspects of a project workbook to guide students through the project lifecycle process while preparing them to the realities of following company standards in the real world.

Project Advisor Responsibilities

1. Assist students in developing a sound project abstract
2. Meet with students regularly to:
   a. Mentor the technical challenge of the project,
   b. Monitor the progress of the project
   c. Ensure the quality of the project reports

3. Participate in Project committee meetings to:
    a. Review and approve project abstract
    b. Review and approve project report
4. Assess the performance of each student and provide feedback
5. Grade project components on time as requested by the instructor.

Student Responsibilities as Individuals

A student will receive a passing grade only if the student and his/her team satisfy all following requirements:
1. Complete a Prerequisite Agreement and Honesty Pledge along with the student's transcript
2. Actively access and follow all postings on Canvas class site.
3. Complete all individual deliverables as described in the Course Schedule section and on Canvas including, but not limited to:
    a. A life-long learning report
    b. An engineering ethics assignment
4. Demonstrate attention to punctuality and sensitivity to time requirements in all matters
5. Provide feedback of other student's participation in the group

Student Responsibilities as part of a Project Team

1. Engage with his/her project team
2. Secure a committed project advisor and actively interact and seek assistance from the project advisor
3. Deliver the latest syllabus to the project advisor
4. Attend weekly meetings with the team
5. Attend regular meetings with the project advisor as committed to at the beginning of the semester
6. Participate in project reviews and presentations
7. Complete all team-oriented deliverables as described in the Course Schedule section and Canvas
8. Attend and participate in the Project Exposition
9. Deliver a:
    a. Project abstract
    b. Project plan
    c. Project Presentation
    d. Project report

Final Examination or Evaluation

Each student must participate in Expo, which is provided in lieu of a final exam.

Grading Information

Grades will be based on (1) the technical challenge of your project, (2) the progress of your project, and (3) the quality of you reports.
All reports and presentations should be uploaded to the class website by the deadline posted. A deduction of 10% of the maximum allowed grade per week is enforced until the assignment is graded and posted (by that time the assignment receives zero grade).
Students fail to participate in a presentation will receive zero grade for the presentation.

CMPE 195A-1	Percentage (×1.25)	Learning Objectives
Project Components	45	CLOs 1, 2, 3, 4, 5
Non-project & Group Assignments	15	CLOs 5
Presentations	20	CLOs 5

Determination of Grades

A+ : > 94	A : 90 – 93.99	A- : 85 – 89.99
B+ : 80 – 84.99	B : 75 – 79.99	B- : 70 – 74.99
C+ : 65 – 69.99	C : 60 – 64.99	C- : 55 – 59.99
D+ : 50 – 54.99	D : 45 – 49.99	D- : 40 – 44.99
F : < 40	(0.5 - 0.9) = 1	(0.1 - 0.4) = 0

Classroom Protocol

You are expected to arrive in time for class. Cell phone: While in class, mute your cellphone and do not text nor accept/make calls. Offenders who do not stop once requested by the instructor will be referred to the Judicial Affairs Officer of the University.

In the classroom, faculty allow students to use computers only for class-related activities. If you use your laptop for class related activities, sit in the front row of the room. Otherwise, close your laptop. These include activities such as taking notes on the lecture underway, following the lecture on Web-based PowerPoint slides that the instructor has posted, finding Web sites to which the instructor directs students at the time of the lecture, or developing software in conjunction with the instructor's code development on the projector screen. Students who use their computers for other activities or who abuse the equipment in any way, at a minimum, will be asked to leave the class, and, at a maximum, will be referred to the Judicial Affairs Officer of the University for disrupting the course (such referral can lead to suspension from the university). Students are urged to report computer use that they regard as inappropriate (i.e., used for activities that are not class related) to their instructors.

Eating and/or drinking (except water) is prohibited in the classroom as it can disrupt the 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 at http://www.sjsu.edu/gup/syllabusinfo/"

CMPE/SE 195A Senior Project I – Section 1, Spring 2018, Course Schedule

Please note the schedule is subject to change with fair notice.

Course Schedule

Week	Date	Topics	Assignment Deadlines
1	1/24	**Lecture:** Course Overview starts @ 6 pm	
2	1/31	No Class Meeting: Meet with your advisor	Honesty Pledge, Release Form, Prerequisites, Transcript, and Enrollment Check Due
3	2/7	**Lecture:** Abstract presentations	Abstract (Document and Presentation) Due Project Schedule Due
4	2/14	No Class Meeting: Meet with your advisor	
5	2/21	No Class Meeting: Meet with your advisor	Workbook Part 1: Literature Search and Project Requirements Due

Week	Date	Topics	Assignment Deadlines
6	2/28	No Class Meeting: Meet with your advisor	
7	3/7	No Class Meeting: Meet with your advisor	Workbook Part 2: Design & Schedule Due
8	3/14	**Lecture:** Project Milestone Check Presentations	Project Milestone Check Due
9	3/21	No Class Meeting: Meet with your advisor	Mid-semester Schedule update Due
10	4/4	No Class Meeting: Meet with your advisor	Project Report Chapter 1 & 2 Due
11	4/11	No Class Meeting: Meet with your advisor	
12	4/18	No Class Meeting: Meet with your advisor	
13	4/25	No Class Meeting: Meet with your advisor	Project Report Chapter 3 Due
14	5/2	**Lecture:** Final Project Presentations	Final Project Presentations Due Individual Contribution Due
15	5/9	No Class Meeting: Meet with your advisor	Project Report Final Submission Final Schedule Update Due
16	5/19	Expo http://cmpe.sjsu.edu/expo: **Saturday 5/19**	