San José State University
College of Engineering/Computer Engineering Department
CMPE 295W, Masters Project, Spring, 2023

Course and Contact Information

Instructor	Name	Email	Office Hours/Class Zoom Links
	Younghee Park	younghee.park@sjsu.edu	Wed. 11:00 am – 12:00 pm, https://sjsu.zoom.us/j/87156169311 Password: 295wOff
ISA	Michelle Jones	michelle.jones@sjsu.edu	
Class Schedule On Zoom	Thursday, 4:00-8:00 pm https://sjsu.zoom.us/j/89922699767 (Password: 295w23)		

Catalog Description: Course equals 3 units

In-depth developmental engineering work relating to problems of interest. Project includes proposal formulation, analysis, design, implementation, and testing.

Course Description

Designed to meet university Graduate Writing Assessment Requirement (GWAR) including developing a portfolio of required assignments, totaling at least 3000 words, that will count 30 percent of the student's grade and that will be written to meet professional standards, such as including scholarly referencing and using style guides.

Course Learning Outcomes (CLO)

Program Outcomes (PO): MS Software Engineering and MS Computer Engineering

	Description
PO 1	Be able to demonstrate an understanding of advanced knowledge of the practice of software engineering, from vision to analysis, design, validation, and deployment.
PO 2	Be able to tackle complex engineering problems and tasks, using contemporary engineering principles, methodologies, and tools.
PO 3	Be able to demonstrate leadership and the ability to participate in teamwork in an environment with different disciplines of engineering, science, and business.
PO 4	Be aware of ethical, economic and environmental implications of their work, as appropriate.
PO 5	Be able to advance successfully in the engineering profession, and sustain a process of life-long learning in engineer or other professional areas.
PO 6	Be able to communicate effectively, in both oral and written forms.

Course Learning Objectives (CLO)

	Description
CLO 1	Demonstrated advanced knowledge of the practice of software engineering, from requirements, analysis, design, implementation, and testing.
CLO 2	Demonstrated capability to solve complex software engineering problems and tasks, using contemporary engineering principles, methodologies, and tools
CLO 3	Demonstrated leadership and capability to participate in teamwork in an environment with different disciplines of engineering, science and business, as appropriate.

	Demonstrated awareness of ethical, economic and environmental implications of their work, as
CLO 4	appropriate.
CLO 5	Demonstrated the potential to advance successfully in the engineering profession and sustain a process of life-long learning in engineer or other professional areas.
CLO 6	Demonstrated effective communication skills of software subjects, in both oral and written forms.
CLO 7	Understand the concept of plagiarism and recognize instances of plagiarism

Course Learning Objectives Support Program Outcomes Matrix

	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6
CLO 1	295W 295B					
CLO 2		295W 295B				
CLO 3			295W 295B			
CLO 4				295W		
CLO 5					295W	
CLO 6						295B
CLO 7			295W	295W	295W	295W

Required Texts/Readings

Textbook

- Markel, Mike and Selber, Stuart A. (2018) *Technical Communication, 12th edition.* New York: Bedford/St. Martin's. ISBN-13: 978-1319058616

Other Readings

- *IEEE Style Guide*: https://www.ieee.org/content/dam/ieee-org/ieee/web/org/conferences/style_references_manual.pdf

- *SJSU Master's Thesis and Doctoral Dissertation Guidelines*: https://www.sjsu.edu/cgs/docs/Thesis-and-Dissertation/ThesisForms/2017_Thesis_Guidelines.pdf

- The Purdue Online Writing Lab: http://owl.english.purdue.edu/

Other technology requirements / equipment / material

Canvas

Canvas will be used for lecture notes and other class materials, class activities, on-line discussions, a drop box for assignment submittal, rubrics/grading of assignments, and a plagiarism detection mechanism. Please use your MySJSU login to access Canvas at https://sjsu.instructure.com.

Student can register for workshops entitled "Getting started with Canvas" at:
http://www.sjsu.edu/at/ec/aboutus/ecampusevents/index.html
If you are having problems logging on, please submit a ticket at:
https://isupport.sjsu.edu/ecampus/ContentPages/Incident.aspx

Canvas student resources:

- http://www.sjsu.edu/at/ec/canvas/student_resources/index.html
- For questions regarding the course or course materials, the instructor. For log in, password issues, and technical issues related to Canvas, please contact the University Help Desk. The Help Desk can give

technical support for password reset, browser problems, and other issues encountered in Canvas Courses. The help desk can be contacted at:

Phone: (408) 924-2377

Submit a help ticket using the University Help Desk Submit Ticket page

Microsoft Office

Microsoft Office can be used for written assignments. If you do not have Office already, you can obtain it as an SJSU student either at a deep discount or for free if you choose the Microsoft 365 version. For further information regarding obtaining Microsoft Office as an SJSU student, go to https://ischool.sjsu.edu/post/microsoft-office to learn more about your options or go directly to Microsoft at https://www.microsoft.com/en-us/education/products/office for Microsoft 365.

Course Requirements and Assignments

Project Committee

- The supervision of each project is under a project committee.
  - Technical advisor (must be a SJSU faculty or Industry advisor that works with a Computer Engineering department faculty. The advisor must be skilled in the project topic area)
  - Optional member(s) or readers
    - SJSU Faculty
    - Industry representative willing to work with your advisor
  - CMPE 295W instructor
  - CMPE department chair

Project Advisor Responsibilities

- Assist students to develop a project abstract
- Meet with students regularly to
  - Mentor the technical challenges of the project
  - Monitor the progress of the project
  - Ensure the quality of the project assignments
- Provide input for all assignments:
  - Project Abstract
  - Project Workbook
  - Project Report
- Enter rubric values and grading on Canvas.
- Host student project presentations

Student Responsibilities

Each CMPE 295W student must:
- Be familiar with Canvas functions.
- Actively access (2-3 times a week) and follow all postings on the Canvas class site and your email that was registered with mySJSU
- Attend ALL lectures and activates as described in the Course Schedule section and Canvas.

- Complete all individual deliverables in a timely manner as described in the Course Schedule section and Canvas.
- Be part of a project group that consists of 4 students.
- Complete all group-oriented deliverables in a timely manner as described in the Course Schedule section and Canvas.

Project

- These are both individual and group-based deliverables.
- Each deliverable must conform to a required template.
- Each group is required to submit deliverables as described on Canvas.
- Grading is based on each individual's contribution to the assignment following SJSU's policy on group grading.

Graduate Writing Assessment Requirement (GWAR) Portfolio: Requirement for Each Student

- Students will individually be responsible for submitting a portfolio with assignments totaling ~3000 words, which will contain assignments, written to a professional standard, using either IEEE or APA style guides and templates as appropriate. This portfolio will be worth 30% of the student's grade in this course.
- All assignments will be initially turned in on assigned dates for the instructor's preliminary review and grading. Students will then be expected to review instructor feedback and incorporate what they have learned into their final versions of their assignments, which they will then submit in portfolio form to their instructors at the end of the term. The grade that the student receives will be based on the quality of this final portfolio, not the individual preliminary assignments that preceded it.

GWAR Portfolio Requirements

Description	Est. # of Words	% Course Grade
Literature Survey Brief summary describing the professional literature in a specific area of study with an attached IEEE-formatted bibliography	750	7.5%
Paraphrase Paraphrase of a short selection of scholarly text, rephrasing its contents for lay audiences	250	2.5%
Graphics Project A figure and a table that demonstrate ability to create meaningful graphics and format them properly	250	2.5%
Interview w/Advisor and/or Professional Summary of what students have learned interviewing an advisor/professional	750	7.5%
Common Errors Project Oral presentation that provides instruction on how to avoid errors commonly found in graduate theses, based on guidance in SJSU Style Guide for Graduate Theses	250	2.5%
Design Specification Each member of a project team should select a portion of their project and write a design specification for that subset of their project	750	7.5%
Total—Portfolio Project	3000	30.0%

Collaborative Work

A significant portion of the work in the course is completed in groups. The names of all contributors on any project component that is submitted and that is the result of collaborative efforts must identify precisely *who* contributed *what*.

Grading Information

Policy on Due Dates

All assignments must be submitted in Canvas by the due date and time. A 25% penalty will be assessed if the assignment is late as determined by the Canvas submission.

Grading
- Grades are based on (1) the technical challenge of the project, (2) the progress of the project, (3) the quality of Canvas submissions, and (4) the participation in class discussions and presentations.
- The grading is letter grade (ABCDF). The letter grade will be assigned based on a curve.
- Grading components:
  - Each assignment has rubrics defined in Canvas. The rubrics define the total points assigned for each assignment
  - If an assignment is designated as a "writing" one, the rubric associated with it will also emphasize the quality of the student's communication skills.

In accordance with the SJSU Graduate School guidelines, the following grading scale will be used:

Grade	Percentage
A plus	98 to 100%
A	94 to 97%
A minus	90 to 93%
B plus	87 to 89 %
B	84 to 86%
B minus	80 to 83%
C plus	77 to 79%
C	74 to 76%
C minus	70 to 73%
D plus	67 to 69%
D	64 to 66%
D minus	60 to 63%
F	0 to 59%

Classroom Protocol
- This course meets weekly via Zoom. Attendance in each scheduled class is mandatory. You must come to the class on-time and participate until the class is dismissed.

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/"

In particular, all students must carefully understand and follow the university policies for academic integrity as defined in the document F15-7, University Policy, Academic Integrity found at http://www.sjsu.edu/studentconduct/docs/Academic%20Integrity%20Policy%20F15-7.pdf.

CMPE 295W / Masters Project, Summer 2021, Course Schedule

Note that the schedule is subject to change with fair notice through email or the course website. Please check the detailed deadlines on Canvas.

Week	Date	Meeting Type	Meetings, Lectures, Assignments, Presentations
1	12/15/22	Project/ Writing **Online Class**	**Lecture:** Class, Project, Syllabus/Assignment Overview **Lecture:** Overview of SJSU Library Resources/Databases **Writing Assignments:** Portfolio Project, Interview with Advisor, Diagnostic, Literature Survey **Project Assignments:** Abstract (Group)
2	12/22/22	Project/Writing **Online Class**	**Presentation:** Project Presentation (Group) **Lecture:** Introduction to Professional Communications & Overview of the Writing Process; Introduction to Portfolio Project; Tips for Writing Abstracts. **Project Assignments:** Workbook1 (Group) **Due:** Diagnostic (by 12/28), Abstract (Group) (by 12/21)
	12/29/22		**Campus Closed. No class**
3	01/06/23	No Class	**Group Work**: Workbook 1 outline draft
4	01/12/23	Writing **Online Class**	**Lecture:** Plagiarism and Documentation, Using Templates, Common Errors, Document Design, and Graphics **Assignments:** Paraphrase, Common Errors Project, Graphics Project **Presentation**: Project Abstract and Design Presentation
5	01/19/23	**Online Class**	**Lecture/Discussion/Group Work**: Style Guides and Introduction to Editing, Editing Workshop, Giving Presentations **Lecture/Discussion/Workshop**: Giving Presentations **Due**: Workbook 1 (Group) by Jan. 18 at 11:59 p.m. in PST
6	01/26/23	No Class	**Group Work:** Workbook 1 (Group) & Meeting log submission (Group) **Due**: Literature Survey by Jan. 20 at 11:59 p.m. in PST
7	02/02/23	Writing	**Group Meetings:** Common Errors Reports **Writing Assignments:** Design Spec (Individual)
8	02/09/23	Project/Writing **Online Class**	**Due:** Final Common Errors Reports/ Interview with Your Advisor/Professional **Group Work:** Workbook 2 outline draft (Group),
9	02/16/23	Project No Class	**Group Work:** Workbook 2 (Group), Design Spec (Selected Individuals) Project Status **Due**: Workbook 2 (Group) by Feb. 15, 2023 at 11:59 p.m. in PST
10	02/23/23	Project No Class	**Group Work:** Workbook 2 (Group) **Assignment:** Design Spec (Selected Individuals) & Individual project contribution (**Due**: Design Spec (Individual) on Feb. 28 at 11:59 p.m.)
11	3/2	Project **Online Class**	**Presentation:** Workbook 2 (Group), Design Spec (Selected Individuals) Project Status **Due**: First Two Chapters (Group), individual contributions by March 1, 2023 at 11:59 p.m. in PST PST