SJSU SAN JOSÉ STATE UNIVERSITY

Charles W Davidson College of Engineering · Interdisciplinary Engineering

Engineering Reports Section 33/34

ENGR 100W

Fall 2023

Contact Information

Office Hours

By appointment

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Course Information

Sections 33/34

Class Day and Time:
MW 6:00p.m. – 8:20 p.m.

Classroom: Engineering 388

Course Description and Requisites

Classroom Protocols

Course materials such as syllabus, handouts, notes, assignment instructions, etc., can be found on the Canvas Learning Management System course login website at http://sjsu.instructure.com.

You are responsible for regularly checking Canvas to learn of any updates. Additionally, the **Turnitin.com** plagiarism-checking tool is an integral part of Canvas. When activated by the instructor, it will check your assignments for plagiarism automatically.

Housekeeping:

- All assignments should be uploaded to Canvas.
- Please observe common-sense rules of decorum when in lecture. You are expected to play an active role in class discussions.

Program Information

Welcome to this General Education course.

SJSU's General Education Program establishes a strong foundation of versatile skills, fosters curiosity about the world, promotes ethical judgment, and prepares students to engage and contribute responsibly and cooperatively in a multicultural, information-rich society. General education classes integrate areas of study and encourage progressively more complex and creative analysis, expression, and problem solving.

The General Education Program has three goals:

Goal 1: To develop students' core competencies for academic, personal, creative, and professional pursuits.
Goal 2: To enact the university's commitment to diversity, inclusion, and justice by ensuring that students have the knowledge and skills to serve and contribute to the well-being of local and global communities and the environment.
Goal 3: To offer students integrated, multidisciplinary, and innovative study in which they pose challenging questions, address complex issues, and develop cooperative and creative responses.

More information about the General Education Program Learning Outcomes (PLOs) can be found on the GE website (https://sjsu.edu/general-education/ge-requirements/overview/learning-outcomes.php).

Course Learning Outcomes (CLOs)

Writing in the Disciplines

Writing in the Disciplines (WID) courses develop students' abilities to communicate effectively in their major course of study and in their careers. With an emphasis on critical thinking, these upper-division core courses advance students' understanding of the genres, audiences, and purposes of college writing while preparing them for successful communication in their chosen professions.
Completing Writing in the Disciplines with a C or better is an SJSU graduation requirement.

Writing in the Disciplines Learning Outcomes

Upon successful completion of a Writing in the Disciplines course, students should be able to:

1. explain, analyze, develop, and critique ideas effectively, including ideas encountered in multiple readings and expressed in different forms of discourse;
2. organize and develop complete discipline-specific texts and other documents for both professional and general audiences, using appropriate editorial and citation standards; and
3. locate, organize, and synthesize information effectively to accomplish a specific purpose, and to communicate that purpose in writing;
4. produce discipline-specific written work that demonstrates upper-division proficiency in language use, grammar, and clarity of expression.

GE Area R: Earth, Environment, and Sustainability

SJSU Studies courses -- Areas R, S, and V -- help students integrate knowledge between and among disciplines. Area R: Earth, Environment, and Sustainability courses apply the scientific method and quantitative reasoning to engage in ethical, civic-minded inquiry around sustaining the earth, its environments and its inhabitants.

GE Area R Learning Outcomes

Upon successful completion of an Area R course, students should be able to:

1. apply scientific principles and the scientific method to answer questions about earth, the environment, and sustainability while recognizing the limits of both the method and principles;
2. apply mathematical or quantitative reasoning concepts to the analysis and generation of solutions to issues of earth, the environment, and sustainability;
3. communicate a scientific finding, assertion, or theory to a general audience with the integrity and rigor of the underlying science; and
4. explain ethical, social, and civic dimensions of scientific inquiry.

Writing Practice: Students will write a minimum of 8000 words, at least 4000 of which must be in revised final draft form.

Course Materials

1. Required Text

Environmental Science text:
Cunningham, W. P., & Cunningham, M. A. (2023, 10th edition). Principles of Environmental Science.
ISBN10: 1264091184
ISBN13: 9781264091188 Copyright:
2023

This textbook has two versions:

a. Ebook:

Students have free access to the ebook version of this textbook through Leganto on the Canvas website of the class.

b. Connect:

McGraw Hill can discount the Connect price substantially at a net price of $70. After the instructor sets up the course, students can click on the McGraw-Hill Connect link or any Connect assignment on Canvas to purchase and use the book.

McGraw Hill Tech Support & FAQ:

Call: (800) 331-5094

Email & Chat: www.mhhe.com/support

The instructor will announce whether the class will use the ebook or the Connect version.

2. Technical Writing Text: (Optional)
Markel, M. Technical Communication. (13th Edition) Macmillan Learning. Spartan Bookstore. Second-hand earlier editions are generally usable as well – check with your instructor.

3. Other support sources

McMurrey, D. Online technical writing https://mcmassociates.io/textbook/ (https://mcmassociates.io/textbook/)

SJSU Writing Center Homegrown Handouts: https://www.sjsu.edu/writingcenter/resources/handouts.php (https://www.sjsu.edu/writingcenter/resources/handouts.php)

SJSU Writing Center External Resources: https://www.sjsu.edu/writingcenter/resources/external-resources.php (https://www.sjsu.edu/writingcenter/resources/external-resources.php)

Citation guidelines:

Excelsior OWL: https://owl.excelsior.edu/writing-process/ (https://owl.excelsior.edu/writing-process/)

Or Purdue OWL: https://owl.purdue.edu/owl/purdue_owl.html (https://owl.purdue.edu/owl/purdue_owl.html)

Course Requirements and Assignments

Assignment	Learning Outcomes To Be Met	Percent of Course Grade	Total Number of Pages Expected (NB: Guide only; consult assignment instruction PDFs for exact word length)
GreenTalk Labs: In-class environmental and technical writing assignments Ethics Presentation	WID All LO1 R LO3 R LO4	25% 8 Labs	4 memos: each memo is 1.5 single-spaced pages (other activities could include summary, outline, or poster)
In-class activities, drafts, peer-reviews, and revisions	WID LO3	5%	2 double-spaced pages
Environmental science textbook	All Area R	5%	Varies
Letter and Resume/LinkedIn Page	WID LO4	5%	2 single-spaced pages with proper letter and resume formatting
Quantitative Analysis of a Professional Journal Article on Environmental Solutions	WID All R LO2	10%	1 worksheet 2 double-spaced pages of analysis
Interview with an Engineer (career, technical, and environmental content)	WID LO3, LO4	10%	4 double-spaced pages
Group Environmental Proposal Planning Memo: Written memo and oral presentation with PPT slides	WID All	5%	1.5 single-spaced pages per group
Group Environmental Proposal (Library research and APA format required)	WID All LO2, LO3 R LO1	15%	4 double-spaced pages per student (plus front matter, group introduction and conclusion, visuals, references, and other necessary items); 3 peer-reviewed journal articles per student.

Formal Oral Presentation of Group Environmental Proposal (Group presentation with PPT, but individual grading)	WID LO1, WID LO3	5%	5-minute oral presentation per student with PPT slides
Final Reflection Memo	WID All	5%	1.5-2 pages
Final Environmental Memo (Final Exam)	WID All, LO3 R LO3	10%	1.5-2 pages
TOTAL	**--**	**100%**	

Grading Information

Criteria Breakdown

Grade	Range	Notes
A-	90-92.5	
B+	87-89.5	
B	83-86.5	
B-	80-82.5	
C+	77-79.5	
C	73-76.5	
C-	70-72.5	
D+	67-69.5	
D	63-66.5	
D-	60-62.5	
59 or Below	F	

University Policies

Per University Policy S16-9 (http://www.sjsu.edu/senate/docs/S16-9.pdf), 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) (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.

Assignment Schedule

Assignment	Due
GreenTalk* Memos and Writing Activities	
*Activities and Group in-Class Projects, e.g. Outlines, group memos, team research and presentations, communications graphics	Regularly
Resume and Cover Letter	
Quantitative Analysis form and paper	
Interview with a professional engineer	
Group Environmental Proposal Planning Memo (pitch): Written memo and presentation (PPT slides to be submitted at this time)	
Group Environmental Written Proposal (Library research and APA format required)	
Formal Oral Presentation of Group Environmental Proposal (Group presentation with PPT, but individual grading)	
Final Reflection Memo	
Final Exam (Timed Memo)	

*Assignments will include both in-class and out-of-class writing. Students will write a minimum total of 8000 words throughout the course, providing the opportunity for frequent practice and feedback.

GreenTalks focus on current environmental topics delivered by experts from both on and off campus. Writing assignments and team presentations during each week's lab will be based on speakers' topics. As much as possible, readings from the Cunningham text will be related to the talks.

Course Schedule

Date	Topics, Assignments, Deadlines
8/21	Introduction to the course
8/23	Orientation to technical communication
8/28	Cover letters and resumes I
8/30	Cover letters and resumes II
9/4	NO LECTURE – LABOR DAY
9/6	Ethics and ethical decision-making
9/11	Plagiarism, and how to avoid it
9/13	Presentations I: Do's and don'ts
9/18	Presentations II: Slide design, delivery, and questions
9/20	Research I: basic principles
9/25	Research II: skills and resources
9/27	**Ethics presentation: Session I**
10/2	**Ethics presentation: Session II**
10/4	Understanding your audience
10/9	Developing and testing verbal and visual information
10/11	APA format I: Paraphrasing & citation
10/16	APA format II: How to write clearly and concisely (avoiding bias)
10/18	APA format III: Headings, organization, formatting
10/23	Organizing your information and emphasizing important information
10/25	Communicating persuasively I: crafting a persuasive argument
10/30	Communicating persuasively II: Avoiding logical fallacies
11/1	Writing style I: Writing correct and effective sentences
11/6	Writing style II: Continuity, topic sentences, and transition devices
11/8	Corresponding in print and online
11/13	Writing proposals
11/15	Writing informational reports
11/20	Writing recommendational reports
11/22	NO LECTURE – THANKSGIVING
11/27	
11/29	**Formal Oral Presentation of Group Environmental Proposal: session I**
12/4	**Formal Oral Presentation of Group Environmental Proposal: session II**
12/6	**Formal Oral Presentation of Group Environmental Proposal: session III**
7/27	Revision session (or makeup session if necessary)

Schedule is subject to change with notice.

Late Work and Missed Work Policy

On submission dates, students have until 11:59pm to submit their work to Canvas. While I am open to the issuing of short extensions for individual pieces of work based on need, requests for such extensions must be submitted on email no later than 24 hours before the deadline. Rewrites are not accepted. Late work may not be accepted, with the exception of the larger assignments (quantitative analysis, interview with an engineer), which may be submitted up to five days late, but which will incur a penalty of 10% for each day (or part of each day) that they are late. As an example, a quantitative analysis submitted 36 hours after the deadline will be awarded a *maximum* grade of 80%.

As presentations are given in groups, it is generally not possible to reschedule presentations. Non-attendance on the scheduled day of your group's presentation will result in an automatic grade of 0% given to the student or students who failed to attend.

Assignment Length Policy

While the estimated number of pages for a given assignment may be indicated as a way of giving a quick and easy impression of the amount of work entailed, **students should ensure that their work conforms to the word length** specified for each assignment. A 10% tolerance is applied to each word length, meaning that students can produce anywhere between 90% and 110% of the specified length for their assignments without incurring a penalty. Therefore, for an assignment that specifies, say, a length of 1,000 words, students may submit anywhere between 900 and 1,100 words. Any work submitted below or above these limits is liable to be penalized for length.

The reasoning behind this is to ensure that students both know how to produce work of a given length, and also that they are able to exercise brevity and edit their own work down to length where necessary, skills which are useful in the work sector. In highly exceptional circumstances, the penalty for assignments that are too short or too long may be waived, if the instructor feels the work submitted is of a sufficiently high quality to do so.

Diversity Statement

ENGR 100W intends to create an inclusive environment for students of different backgrounds. Instructors and students are expected to respect and appreciate the diverse backgrounds of all class members. Students in ENGR 100W will also explore diversity issues by examining environmental justice matters and social, ethical, and civic impacts of scientific inquiries. Students are encouraged to discuss any diversity questions or concerns with their instructors.

Plagiarism and Academic Integrity Policy

San José State University Policy F15-7 on academic integrity defines plagiarism as "the act of representing the work of another as one's own without giving appropriate credit, regardless of how that work was obtained, and submitting it to fulfill academic requirements." Student submissions with plagiarism will automatically receive a zero grade, and cannot be rewritten for credit. Faculty members are required to report all infractions to the Office of Student Conduct and Ethical Development.

Policy Regarding the Use of AI

Students in ENGR 100W are expected to produce their own work based on critical thinking, problem solving skills, and learning. Any work generated by AI (such as ChatGPT) cannot be accepted as students' own work. Students may not submit any AI-generated text and claim it as their own. ENGR 100W instructors will check the AI score in the Turnitin.com report for student submissions, and may refuse to accept a student's submission as the student's own work based on the AI score in Turnitin.com and the instructor's investigation of the situation. Inappropriate use of AI in students' work will be considered academic misconduct, and will be subject to disciplinary action stated in SJSU's Academic Integrity Policy. ENGR 100W instructors will discuss with their classes about how to use AI tools to facilitate learning in an appropriate manner that does not violate academic honesty and integrity principles and policies. If students have any questions about appropriate use of AI tools, they should discuss with their instructors.

How Can You Avoid Plagiarism?
To avoid plagiarism, you must give credit whenever you:

- **Use someone else's <u>direct words</u> (use quotation marks around exact words that you are quoting—and give source at end of quotation marks)**

"In the midst of Silicon Valley and all over the globe, SJSU engineers are designing and building high impact innovations, with a particular focus on challenges to global sustainability." (Wei, 2011)

The full reference will be in the back of the report, using APA format.

- **Use someone else's ideas, in your words, that are not common knowledge**

Through the Global Technology Initiative at SJSU, 25 students are selected each year to travel for two weeks to India or China, all expenses paid by GTI. (College of Engineering, 2012). (Note this is not the exact words, so there are no quotation marks.) The full reference and website will be in the back of the report, using APA format.

- **Use specific statistics, graphs, drawings, that are not yours**

College of Engineering, San Jose State University, is ranked **2nd** overall among the West's top public universities offering bachelor's and master's degrees according to the 2013 edition of "American's Best Colleges" (U.S. News & World Report, 2013).

San Jose State University is ranked **8th** overall among the West's top public universities offering bachelor's and master's degrees according to the 2013 edition of "American's Best Colleges" (U.S. News & World Report, 2013).

- **Self work**

One should cite his or her own (or co-authored) work. If your company has copyrighted work that you or your team have written as part of your job, or you share a patent, or have previously published material that you have written, credit must be still given. There are times permission from the company must also be given. Please check with both your company and your instructor.

Plagiarism will result in a grade of F in E100W. **Papers with plagiarism cannot be rewritten for credit. Your Department Chairperson will be notified.** We will work on this in class. **Remember, plagiarism is a serious issue.** Learning proper documentation is one of the key goals of E100W.

<u>Academic integrity statement from the Office of Judicial Affairs</u>

"Your own commitment to learning, as evidenced by your enrollment at San Jose State University, and the University's Academic Integrity Policy requires you to be honest in all your academic course work. Faculty members are required to report all infractions to the Office of Judicial Affairs." The policy on academic integrity can be found at http://www2.sjsu.edu/senate/S04-12.pdf