

Course Syllabus

English 398: Professional Communication for Engineers

Fall 2023

COURSE SCHEDULE DOC

(<https://docs.google.com/spreadsheets/d/1PX4PgHh90RFcDLrMAaVBBf50YSBaBLIEMJ8s5RfC9-s/edit?usp=sharing>)

Contact Information

Instructor: Dr. Michelle Lyons-McFarland (she/her/hers)

Email: hml32@case.edu (<mailto:hml32@case.edu>)

Classroom: Sears 548

Course Website: Canvas, Slack workspace

Office Location: Bellflower 304

Office Hours: Wednesdays 2-5 or by appointment

Course Description & Objectives

English 398 introduces principles and strategies for effective communication in both academic and workplace engineering settings. Through analysis and creation of professional genres, this course develops the oral and written communication skills that characterize successful engineers. Students will prepare professional documents that focus specifically on communicating technical knowledge to diverse audiences. Because such documents are always situated within professional, social, and rhetorical contexts, this course requires students to explain and justify their communicative choices in order to navigate the work environments of professional engineers. As a SAGES Departmental Seminar, English 398 aims to prepare students for the writing they will do in Capstone projects.

Course Objectives

This course asks you to develop your written and oral communication skills while also honing your professional skills, including time management, organization, and punctuality. By the end of English 398, students should be able to:

- Produce written, goal-oriented texts that communicate effectively and adhere to professional ethical standards.
- Deliver clear and professional oral presentations on scientific and engineering related topics.

- Reflect on and justify the rhetorical choices involved in planning, writing, revising, editing, and presenting professional documents.
- Summarize scientific, engineering and business related research for a non-technical audience.
- Demonstrate the ability to work as part of a team, coordinating workflow and collaboratively presenting outcomes.
- Synthesize research and professional best practices related to a product or service design project.
- Demonstrate the capacity for life-long learning through sustained reflection, revision, and research.

ENGR 398

ENGL 398 complements ENGR 398, a 1-credit co-requisite lecture course that introduces practical, theoretical, and workplace issues that shape the communication environment among professional engineers. For details of the ENGR 398 objectives, work commitments, grade breakdown, and assignments, please see the separate syllabus for that course.

Course Materials

Required

[1] R. House, et. al. *The Engineering Communication Manual*. Oxford: Oxford University Press. ISBN 978-0-19-933910-5.

Additional readings are available through our Canvas site and Slack workspace.

Work Commitments

This course invites your thoughtful reflection about the ends and means of writing in a professional context. It demands not only that you produce clear and thoughtful texts, but also that you articulate the ways your communication practices (both oral and written) accommodate the needs of your audiences, both those you can predict and those you aren't aware of. These documents should be specific, detailed, and persuasive: they should make the case that you have carefully considered your options and made the best possible rhetorical choices (or explain poor rhetorical choices, the result, and plans for future success).

In-Class Exercises & Participation (15% or 150 points)

Various in-class assignments, activities, and homework exercises will be assigned throughout the semester, both online and in hard copy. Your active, thoughtful and productive completion of these activities is essential to your success in this course.

Unit One: Self-reflection and Actualization (15% or 150 points)

In this unit, you will focus on concrete describing objectives and goals both for yourself as well as for a specific audience. In the first assignment, you will describe your personal goals and your expectations within this course, the steps you will use to monitor progress in meeting those goals and expectations,

as well as corrective actions that you may take throughout the semester. The second and third assignments consist of an updated resume that is targeted for a specific opportunity, as well as a cover letter that effectively introduces both yourself and your documents to the reader. In the final assignment, you will reflect on your initial goals and expectations for the course and evaluate your progress in writing professional, purpose-driven documents. You should list specific skills and areas in which you have developed, provide examples of that development, and discuss any skills or areas that need continued work.

Unit One Assignments

1. Interview Material
2. Postmortem notes

Unit One Communication Skills

1. Demonstrating the capacity for analysis and self-evaluation in a professional, goal-oriented context
2. Designing and writing a document for a general audience
3. Editing written communication

Unit Two: Individual Project – Case Study on a previous innovation (40% or 400 points)

Individually, you will take a technology from a provided list of the best innovations of 2016 and re-trace its progression from original need, to research and design, to development, to determine whether it has lived up to its potential/what is its significance. Using research articles and other sources, you will study how a technological innovation moves from idea to product by backwards-engineering these steps. Your deliverables will require you to explain the original need or problem the innovation sought to address, the science behind the innovation, the innovation's benefits and perhaps novelty, as well as its success (or failure) and its common uses.

Unit Two Assignments

1. Topic Worksheet with Two Annotated Sources
2. Project Memo
3. Brief Presentation (an individual 3-minute overview of your case study) with Visual Displays

Unit Two Communication Skills

1. Writing and presenting for non-technical (managerial) audiences
2. Writing technical prose in a style appropriate for your audience
3. Finding, selecting and annotating scientific and/or engineering-related sources
4. Summarizing scientific research and other forms of information
5. Organizing information for non-technical audiences
6. Designing and writing documents and basic reports
7. Designing and creating visual materials appropriate for pitch presentations

8. Practicing and delivering brief presentations
9. Revising and editing written communication

Unit Three: Team Project – Research-Based Proposal (45% or 450 points)

This unit requires a *problem-solution orientation*. In other words, it requires your team to identify a problem, research engineering-based methods for solving that problem, and create a proposal for that project for a specific audience.

Unit Three Assignments

1. Team Charter (1-2 single-spaced pages)
2. Problem Statement/Literature Review (5-6 single-spaced pages)
3. Group Meeting with Dr. L-M (30 minutes)
4. Cover Letter and Summary (2-3 pages)

Unit Three Communication Skills

1. Writing technical descriptions and statements of method and procedure
2. Summarizing scientific and other forms of research
3. Writing brief literature reviews
4. Designing and writing value propositions, innovation plans, and budgets
5. Designing and composing proposal reports
6. Designing and creating data displays appropriate for non-technical audiences
7. Designing and creating visual materials appropriate for pitch presentations
8. Practicing and delivering pitch-like presentations
9. Revising and editing written communication

Grading

Your final grade for this course will be calculated based on the following:

Assignments

Points

Unit 1: Self-Reflection and Actualization (150 total)

1.1: Interview Material (1-2 pg.)	50
1.2: Postmortem meeting notes (2 pg.) *	100

Unit 2: Individual Project: Innovation Case Study (300 total)

2.1: Project Worksheet + Two Annotated Sources (2 pg.)	50
2.2: Presentation (individual) with Visual Displays (3 min.) *	100
2.3: Brief Case Study Memo (4-5 pg.) *	150

Unit 3: Team Project: Research-Based Proposal for Academy or Industry (400 total)

3.1: Team Charter (1-2 pg.)	50
3.2: Problem Statement/Literature Review (3-4 pg.)	100
3.3: Group Meeting with Dr. L-M	150
3.4: Cover Letter and Summary	100

Participation/In-Class Work (150 total) 150

Total Points: 1000

Grading Scale

A	900 points and above (90% and above)
B	800-899 points (80%-89.99%)
C	700-799 points (70%-79.99%)
D	600-699 points (60%-69.99%)

F Below 600 points (Below 60%)

Course Policies

Attendance & Participation

I will take roll for the first few weeks to learn your names and faces, but I do not take attendance except as a portion of your participation grade. Should you be unable to attend a class, I expect you to check Slack and/or talk with a classmate and get notes on the course content. I'll be setting up groups early in the semester, so you will have contact information for one another for that purpose.

I expect to see participation from each member of class at least once every week, whether in Slack or during a class session. Lack of participation will naturally impact your participation grade.

Don't let the fact that you might be participating at different times stop you from speaking. Add your own thoughts even if they seem similar to someone else's who has already posted; use emojis to agree or disagree with others, if nothing else. Even that level of interaction will encourage more creative and critical thinking, and that's vital to increasing your understanding of what makes professional writing effective.

Written Work

While we try to make the assignments as clear as possible, questions are inevitable when attempting significant shifts in a style of communication. If you have questions about the expectations for each assignment, check the individual assignment sheets and then ask me. General guidelines and models for individual genres and documents appear in our textbook, *ECM*; always consult *ECM* when creating your documents.

Written work should be single spaced and appear in a professional typeface with a 12-point font and margins of no larger than one inch on all sides -- note that heavily formatted documents such as resumes may vary, but no type should be smaller than a 10pt font regardless. Unless otherwise specified, all written work should be submitted as a .doc, .docx, or .PDF file. If a document is heavily formatted, default to .PDF to preserve the formatting across platforms.

Late Work

Work past the deadline without arranging an extension in advance is late work. I am very flexible with deadlines, but a penalty of 5 pts per day will be levied against an assignment more than 48 hrs past due.

Missing Assignments

Because this course is partly group work, we need to ensure that all students pull their own weight. Given the demands of a busy schedule, it can be particularly difficult (and yet particularly crucial) to stay

engaged and in touch with one's team. Students who "ghost" their group or do not do the work will receive a lower grade than their teammates on all group work.

Pandemic Pedagogy and Ethics

I am a reasonable individual, and we are living in an unreasonable time. I want to encourage pro-active communication as it benefits you both now and later in the workplace. As such, I'm happy to make allowances for specific instances of unavoidable late work, injury, illness, etc.

The caveat to this, however, is that you **MUST** communicate with me in good faith regarding the problem as soon as possible *prior to the event*. This is a class focusing on workplace communication; I therefore endeavor to reward such communication as befits our shared goals. Please keep this in mind throughout the semester. *I do not guarantee that I will always be able to grant extensions, etc.* Your record of attendance, participation, and effort will be taken into account in all such cases.

Revisions of Written Work

You will have the chance to revise one independently-produced work (from Unit 2) and one team-produced work (from Unit 3).

Keep in mind – if the assignment was an individual assignment, the revision should be your independent work. If the assignment was collaborative, the revision should be produced with collaborative effort.

To submit a revision, you or your team must follow these steps:

1. Make substantive revisions to the document (as opposed to, for example, correcting spelling or simple grammatical mistakes).
2. Write a short email that reflects upon and explains the decisions you or your team made while revising the document.
3. Turn in the revised document and the email between 1-2 weeks of the return of the original graded assignment.

Please note the following exclusions:

1. The revised assignment must have earned a B- or lower.
2. In-class assignments, class participation, and extra-credit exercises are not eligible to be revised or submitted after the scheduled date.
3. Revisions are unfortunately my lowest priority for grading. I always grade current work before revisions of previous work.

If you follow the above process and if I find the revisions substantive, I will assign a new grade; the higher of the two grades will serve as the grade for the assignment.

Academic Integrity

The ethical exchange of ideas is at the heart of academic inquiry and professional practice. Such exchanges require that you complete your own individual and collaborative work and that you give credit

to those whose ideas have influenced your own. Failing to give credit for ideas not your own constitutes plagiarism, which can be defined as the unacknowledged use of another's words and/or ideas. CWRU's Academic Integrity policy is available online:

[\(<http://studentaffairs.case.edu/groups/aiboard/policy.html>\)](http://studentaffairs.case.edu/groups/aiboard/policy.html)

[\(<http://studentaffairs.case.edu/groups/aiboard/policy.html>\)](http://studentaffairs.case.edu/groups/aiboard/policy.html)).

Work you create for another class may not be used for this course (or any other course) without the permission of the professor.

Regarding ChatGPT: ChatGPT and its fellow large-language model bots are not appropriate for use in this class for a number of reasons. While business writing does often rely on genre formulas to convey meaning AND this is an area that falls into ChatGPT's strengths, its output is designed to fit a model through appropriate use of language, not convey any sort of factual or truthful content. It cannot be relied upon in search results, to provide actual data without "hallucinations," or to maintain the privacy or confidentiality of either its users or the information entered into its prompts. It is entirely inappropriate for any workplace that deals with intellectual property, classified documents and data, or personal information, and thus are not acceptable for use in this course. I can discuss this more upon request.

Basic Needs

Any student who has difficulty affording groceries or accessing sufficient food to eat every day or who lacks a safe and stable place to live is urged to contact their Navigator for support. Furthermore, please notify me if you are comfortable doing so. You are not alone.

As a student, you may experience a range of challenges that can interfere with learning, such as illness or injury, strained relationships, increased anxiety, substance use, feeling down, difficulty concentrating and/or lack of motivation. These health and wellness concerns or stressful events may diminish your academic performance and/or reduce your ability to participate in daily activities. If you find yourself struggling, you can always talk to me or your advisor.

In addition, CWRU has services available to support the success of all students. You can find more information about services, walk-in hours, and appointments on the website for University Health & Counseling Services (<https://case.edu/studentlife/healthcounseling/>).

For 24/7 assistance, you can reach a Nurse on Call at 216-368-2450 or a Counselor on Call at 216-368-5872.

If you are having an emergency, call CWRU Police at 216-368-3333 (on-campus) or 911 (off-campus).

Students with Additional Needs

In accordance with federal law, if you have a documented disability, you may be eligible to request accommodations from Disability Resources. Please contact their office to register at 216.368.5230 or get more information: <http://students.case.edu/academic/disability/>


[\(<http://students.case.edu/academic/disability/>\)](http://students.case.edu/academic/disability/)

Please keep in mind that accommodations are cannot be retroactive.







Comments, Concerns & Emergencies


Should some unforeseen event occur that affects your ability to complete the work for this course, contact me as soon as possible. If you have comments or concerns about what is happening in class, talk to me during office hours or email me to make an appointment. If you are at any time feeling overwhelmed or confused, please see me to discuss strategies to handle workload, timetables for assignments, and ways to articulate ideas.

Additional Writing Support

All CWRU students are encouraged to seek additional writing support at the Writing Resource Center (WRC). All WRC appointments are online. You can sign up for a session using the online appointment system: <http://case.mywconline.com/>  (<http://case.mywconline.com/>).

Course Summary:

Date	Details	Due
Sun Sep 17, 2023	 <u>Assignment 1.1: Interview Material</u> (https://canvas.case.edu/courses/38777/assignments/509979)	due by 11:59pm
Mon Sep 25, 2023	 <u>Assignment 3.1: Team Charter</u> (https://canvas.case.edu/courses/38777/assignments/509983)	due by 11:59pm
Sun Oct 15, 2023	 <u>Assignment 2.1: Case Study Worksheet and Annotations</u> (https://canvas.case.edu/courses/38777/assignments/509980)	due by 11:59pm
Fri Oct 27, 2023	 <u>Assignment 2.2: Case Study Memo.</u> (https://canvas.case.edu/courses/38777/assignments/509981)	due by 11:59pm
Thu Nov 2, 2023	 <u>Assignment 2.3: Individual Presentation</u> (https://canvas.case.edu/courses/38777/assignments/509982)	due by 11:59pm
Sat Nov 18, 2023	 <u>Assignment 3.2: Problem Statement and Literature Review</u> (https://canvas.case.edu/courses/38777/assignments/509984)	due by 11:59pm

Date	Details	Due
Tue Dec 5, 2023	 <u>Assignment 3.3: Group Discussion with Dr. L-M</u> (https://canvas.case.edu/courses/38777/assignments/509985)	due by 11:59pm
Mon Dec 11, 2023	 <u>Assignment 3.4: Cover letter and summary of McMurdo proposal</u> (https://canvas.case.edu/courses/38777/assignments/509986)	due by 11:59pm
	 <u>Assignment: 3.5: Postmortem Meeting</u> (https://canvas.case.edu/courses/38777/assignments/509987)	due by 11:59pm
	 <u>Extra Credit</u> (https://canvas.case.edu/courses/38777/assignments/509988)	
	 <u>participation</u> (https://canvas.case.edu/courses/38777/assignments/509989)	