



ENGR 240 Technical Communication: SAMPLE Course Outline & Syllabus

ACKNOWLEDGMENT

The University of Victoria acknowledges the Songhees, Esquimalt and WSÁNEĆ peoples on whose traditional territory the university stands and whose historical relationships with the land continue to this day.

CONTACT INFORMATION

Instructor:

Course client:

Email:

Office:

Class meets:

Office Hours:

THE COURSE IN A

NUTSHELL

This course offers a practical introduction to essential skills and strategies you will need to communicate effectively in the **technical workplace**. Nearly every job ad you read requests candidates with the following qualities:

- Excellent communications skills
- The ability to work effectively as part of a team

This course is designed to develop your skills as a writer and presenter, practice the techniques and strategies used by technical writers, and work collaboratively with other students to compose a formal technical report. This will ready you to meet the Faculty of Engineering's requirement, following co-op, for you to produce a detailed, properly structured and formatted co-op work term report.

WHAT YOU CAN EXPECT TO ACHIEVE:

COURSE OUTCOMES

The purpose of ENGR 240 is to prepare you for the writing and speaking demands of your co-op placements and eventual career as a technical professional. *The learning outcomes below state what you should be able to do during and at the end of the course:*

- Apply a problem-solving approach to any communication task, identifying purpose, audience, and an appropriate production and delivery plan to achieve intended outcomes
- Apply academic research, analysis, and critical thinking to determine design feasibility: develop a research plan; gather and document information from primary and secondary sources (using IEEE citation style); analyze and evaluate data to arrive at an evidence-based recommendation
- Plan, draft, and revise a variety of informational and persuasive documents routinely used by technical professionals (e.g. correspondence, proposals, reports)

- Recognize and implement key components of a Problem Definition (i.e. Need, Goal, Objectives, Constraints) as defined by engineering professionals for use in writing proposals and reports
- Apply plain language principles to generate clear, concise prose accessible to a mixed audience of experts and non-experts
- Edit and proofread your own and others' writing, using self-reflection and feedback to ensure appropriate organization, formatting, and Standard English usage
- Apply team and interpersonal strategies including team roles and bylaws; worklogs and other documentation as relevant; constructive communication and feedback; and self- and team evaluation to encourage productive, accountable, equitable collaboration
- Design documents for readability and professional appeal, including appropriate use of headings, lists, and visuals
- Apply industry conventions for writing units of measure, numbers, and abbreviations
- Prepare and deliver professional oral presentations using appropriate visual aids

PRE-REQUISITES

ENGL 135/ 146/ 147; ENGR 110/111, or equivalent in transfer credit. All students registered in a 200-level writing course are expected to have proficient, university-level skills in Standard English usage, paragraphing and essay writing; comprehension, analysis, and evaluation; research and citation; evidence-based argumentation; and academic honesty and integrity.

Full mastery of these skills is not expected, but basic *competence* is; work that does not demonstrate basic competence in these areas is unlikely to earn a passing grade.

WHAT YOU CAN EXPECT TO DO AND LEARN:

ASSIGNMENTS

Detailed descriptions of assignments are posted on Brightspace; review these at the start of the course, though I'll also go through them with you during our live sessions on Zoom.

To pass the course, you need to complete all graded assignments, listed below:

	Weight	Due Date
Report 1: Reading and Responding	5%	Module 1
Oral Presentations (w/ leave-behind)	15%	Ongoing
MIDTERM Quiz: Style Matters	15%	Module 3
Memo Proposal	20%	Module 4
Team Presentations (Progress Report)	15%	Module 6
Report 2 (Team Feasibility Report)	30%	Module 7
TOTAL	100%	

Successful assignments are built **step-by-step**. ENGR 240 provides **scaffolding activities** designed to help you with **planning, outlining, drafting, revising**, and so forth and hence are mandatory. Please complete these not only to do well in the course but to avoid losing marks for failing to complete each given step of an assignment

HOW YOUR WORK FOR THE COURSE WILL BE ASSESSED & GRADED

As appropriate for a communications/ writing course, every assignment is carefully evaluated on **content, format, and style**. Each assignment sets different requirements and tests different skills. The ability to meet requirements and demonstrate these skills forms the basis of assessment.

Assignments that meet given requirements and demonstrate stated learning outcomes will achieve high grades assignments that do not will likely to earn a poor grade. It is therefore important to closely follow instructions (learning outcomes) for best results. Make sure you understand what's required, and please ask if you don't, to ensure good learning and good grades.

N GRADES: To pass the course, you must **complete all graded assignments**. Failure to complete any one or more assignments results in an **Incomplete (N) grade** for the course, regardless of your cumulative percentage on other elements of the course. An N is a failing grade, and it factors into a GPA of 0. The maximum percentage that can accompany an N grade on a student's transcript is 49.

Final letter and numerical grades for the course are calculated in accordance with the [UVic Undergraduate Grading Scale](#) as laid out in the University Calendar:

Undergraduate Grading Scale			
Grade	GPA	Percentage	Description
A+	9	90 – 100	An A+, A, or A- is earned by work which is technically superior, shows mastery of the subject matter, and in the case of an A+ offers original insight and/or goes beyond course expectations. Normally achieved by a minority of students.
A	8	85 – 89	
A-	7	80 – 84	
B+	6	77 – 79	A B+, B, or B- is earned by work that indicates a good comprehension of the course material, a good command of the skills needed to work with the course material, and the student's full engagement with the course requirements and activities. A B+ represents a more complex understanding and/or application of the course material. Normally achieved by the largest number of students.
B	5	73 – 76	
B-	4	70 – 72	
C+	3	65 – 69	A C+ or C is earned by work that indicates an adequate comprehension of the course material and the skills needed to work with the course material and that indicates the student has met the basic requirements for completing assigned work and/or participating in WEEK activities.
C	2	60 – 64	
D	1	50 – 59	A D is earned by work that indicates minimal command of the course materials and/or minimal participation in WEEK activities that is worthy of course credit toward the degree.
F	0	0 – 49	F is earned by work, which after the completion of course requirements, is inadequate and unworthy of course credit towards the degree.

LATE ASSIGNMENTS: In fairness to students who submit assignments on time, late assignments lose marks for each day late and are returned graded but without written feedback unless compelling reason can be provided to excuse the late submission. Likewise, if you hand in an assignment 7 or more days late, your assignment is graded on a pass/fail basis (0%, 50%) and receives no written feedback.

GRADE APPEALS

If you feel an assignment has been improperly or unfairly evaluated, I invite you to discuss your concerns with me first. I strive to evaluate your work in a way that is fair, appropriate, and reasonable, based on the given grading criteria, and I am open to listening to your concerns.

For your part, if you request a grade review, please be ready to show how your work matches the standards for the letter grade (as described in the given grading criteria) you feel you should have received. If you're not satisfied with our discussion, you can apply for a [formal grade review](#), described in the UVic Academic Calendar.

ACADEMIC CONCESSION

If your academic performance is affected by illness, injury, or family or personal affliction, immediately consult with University Counseling Services, University Health Services, or another health professional, and let me know that you need special consideration. Supporting documentation allows you to request an extension or deferral without grade penalty. The University's full policy on [Academic Concession](#) is outlined in the UVic Calendar.

STANDARDS OF PROFESSIONAL BEHAVIOR

The Faculty of Engineering has defined [standards for professional behavior](#) for all its members in order to support an effective learning environment and to prepare you for your career as a technical professional. Professionals perform all tasks required of them to successfully complete a project; by the same token, it makes sense for you to complete all given tasks and activities to successfully complete course assignments.

SUPPORTIVE AND RESPECTFUL LEARNING: POLICES AND EXPECTATIONS

You're learning to become professional writers and engineers. We therefore encourage courteous and professional communication, written and spoken, both inside and outside the classroom.

Everyone in the course is on a learning journey, and it is up to each person in the course to maintain an environment that respects that goal for everyone. UVic's [Policy on Human Rights, Equity, and Fairness](#) states that "all members of the university community are responsible for promoting a supportive, safe, and inclusive learning environment and for

ATTENDANCE

According to the [UVic calendar \(Regulations on Attendance\)](#), habitual absenteeism qualifies as "a failure to meet the responsibilities of the course" and may result in a fail grade. This applies to online courses as much as face-to-face courses. If you miss class, please alert me to any difficulties you might be having; arrange to get notes from other students; catch up on learning activities and assignment instructions by checking Brightspace; and complete any tasks you may have missed.

COMMITMENT TO LEARNING

Everything depends on each person making a commitment to learning in positive and respectful ways.

Two-way responsibilities will make your learning experience at UVic successful and rewarding:

Your instructor will expect you to	You can expect your instructor to
Attend all WEEKes unless otherwise excused	Be on time and prepared for WEEK
Prepare for WEEK by completing readings and assigned work in advance	Teach to the course goals
Actively participate in WEEKroom activities	Give clear instructions for assignments and exercises
Ask questions if you do not understand	Advise and support students in their course work
Submit all assignments according to instructions, complete, and on time	Treat students with respect
Use instructor comments and feedback to improve future work	Act in a fair manner
Cooperate with and act respectfully toward other students and the instructor	Be available during office hours or, if necessary, arrange an alternative time to meet
Communicate with the instructor about problems or concerns as soon as possible	Evaluate students fairly and constructively, based on criteria made clear to students beforehand
Put focused and disciplined effort into the course assignments	Return assignments in a timely manner Give useful feedback

I am here to support your learning

If you have any questions or concerns about the course, or need help with assignments, please check with me or Sajib, our course TA, for advice and assistance



ENGR 240 Technical Communication: Work Schedule Breakdown

Refer to this syllabus to know what to expect and what to prepare ahead of WEEK. The middle column for each Module lists learning outcomes you should be able to achieve, given due diligence and commitment on your part

MODULES	LEARNING OUTCOMES	DUE DATES, TASKS, ACTIONS
Module 1	WEEK 1: Welcome to the Course! - Discuss the connection between clear, readable writing and engineering design in well detailed, unified paragraphs - Put Tuckman's "forming" stage into practice to lay an effective foundation for productive collaboration, exchange, and cooperation - Discuss course outcomes, requirements, and resources; describe key qualities of technical writing: Professionalism; Problem-Solving; Problem → Solution → Benefits - Identify basic requirements for the course's major pair and team assignments WEEK 2: Effective Public Speaking: Prepare, Organize, Practice - Explore core ingredients of successful presentations - Use principles of visual rhetoric to create readable, attractive documents, using fonts, whitespace, listing, headings, borders, graphic elements, etc. to create instructive, helpful documents - Use a Speech Skeleton to organize a clear, impactful presentation appropriate to audience + purpose	Go through my slides on <i>Features and Qualities of Technical Writing</i>; read Tufte, OR Leturneau, OR Petroski Report 1 DUE (30 mins in class) Partner up for the public speaking presentations; explore your topic Go through my slides on <i>Public Speaking</i> and <i>Document Design</i> Practice creating a Leave-Behind; start work on your Speech Skeleton
Module 2	WEEK 3: The Lego Blocks of Persuasion: Words and Sentences - Revise for Plain Language: implement action verbs, everyday words, clear subjects, and short sentences - Use a basic grammatical vocabulary to explain and apply standard rules of punctuation to enhance clarity and correctness - Identify and correct faulty grammatical parallelism to create effective sentences and lists WEEK 4: Informing, Proposing, and Persuading - Use voice and visuals as tools to establish rapport with an audience and generate a clear, engaging public presence; listen attentively as an audience member to learn, respect, respond, and question - Identify the goals, audience, and obligations of a proposal; select useful tools for collaborative writing (e.g. Google Docs, One Drive, DropBox, Facebook, etc.); identify uses of a workplace memo; apply document design principles for headings - Establish Topic + Purpose + Audience; draft a Client Background to help generate usable, relevant design solutions; apply IEEE citation to acknowledge information sources	Review links under Wk 2; go through my slides on <i>Plain Language</i>; go through my handouts on <i>Punctuation</i> and <i>Grammatical Parallelism</i> Partner up for the proposal assignment STUDENT PRESENTATIONS begin Go through my slides on <i>Proposal Goals and Tasks</i> and <i>Client Background</i>; review the client RFP and related resources under Wk 2

Module 3	WEEK 5: Building the Body: Problem Definition & Plan of Action - Describe and draft the 4 ingredients of a Problem Definition statement - Generate multiple questions to create a strong action plan (research methodology); create a Gantt Chart to map project timeline - Apply principles of visual rhetoric, integrating and labeling graphics as per industry conventions	STYLE MATTERS QUIZ due STUDENT PRESENTATIONS continue all Module Go through my slides on <i>Problem Definition</i> and <i>Technical Plan</i> Review my handout on <i>Integrating and Labeling Graphics</i> Go through my slides on a proposal's <i>Management Plan</i> Read McCahan on <i>Teamwork</i> ; review links under Wk 3
	Problem Definition Peer Review Forum due Refer closely to given criteria to analyze and evaluate your own and others' writing, providing constructive feedback as needed	
	WEEK 6: Strategies for Successful Collaboration - Determine how long and how much: establish a timeline and budget for your proposed design solution - Form teams and discuss requirements for Report 2; put Tuckman's "forming" stage into practice; exchange contact information; select an online platform for sharing documents; discuss proposal topics - Share team building tips; create a Team Charter listing team roles, goals, and bylaws; generate a WSB (work schedule breakdown); use "tracking" documents (e.g. work logs, recorder's documents) to promote accountability to the team, clients, and other stakeholders	
	Team Review Checklist due	
Module 4	WEEK 7: Concept Verification: Planning, Mapping, and Checking - Plan for project completion: delegate tasks for Report 2 based on members' skill sets; review sample reports to determine appropriate rhetorical strategies for your own document; identify required sections of a feasibility report - Create a document template mapping key report sections with MS Word's Headings function; apply document design principles; use the Headings function to automatically create a Table of Contents - Use given feedback to build a better Client Background and Problem Definition Statement on your second time round WEEK 8: Ethical Research = Ethical Solutions - Conduct primary and secondary research to answer your research questions and thus determine the feasibility of your proposed design solution - Recognize the ethical implications of 'using' human subjects as information sources - Following HREB guidelines, putting research into action in ways that acknowledge, respect, and safeguard principles of academic integrity	STUDENT PRESENTATIONS continue all Module PROPOSAL due Go through my slides on <i>Report Layout</i> ; review sample reports Read Chapter 5.4, "Human Research Ethics" in <i>Technical Writing Essentials</i>

Module 5	WEEK 9: Remaining Accountable: Tracking & Reporting Progress - Identify key goals and features of a progress report - Lay out a slide template for a Progress Report according to given conventions, complete with all document design elements in place - Delegate responsibility for drafting individual components of your report, while remaining mindful of the report as a whole WEEK 10: Revise and Improve: Plain Language, Clear Solutions - Build on your Proposal's Topic + Purpose, Client Background, and Problem Definition, using feedback from that assignment, plus course resources on plain language, to correct existing errors and make improvements in focus, content, and style - Cite sources in-text using IEEE citation style; cross reference in-text citations with a properly-formatted IEEE style References list - Describe your proposed design solution; identify how it would work "in action" to solve the given problem	STUDENT PRESENTATIONS continue all Module Go through my slides on <i>Progress Reports</i>; review Dr. Mike Alley's "Assertion Evidence" slide template under Wk 5 Review and refresh: return to my slides on <i>Plain Language</i> and check related links under Wk 2; review course resources on citation, IEEE style
Module 6	WEEK 11: Taking Stock: Reflect, Assess, Draft - Pause for check-ins; remain accountable to oneself and others - Build the body of the report: draft preliminary Results and Discussion - Apply industry standards for representing numbers, units of measure, and abbreviations WEEK 12: Wowing the Client: Showcasing Team Results - Present an informative progress report as a team, organized to meet expectations for professionalism and other given criteria - Listen attentively to provide comments, questions, and feedback to presenting teams - Use "open" WEEK time to make advances on Report 2; request feedback to make sure you're on track	STUDENT PRESENTATIONS continue in WEEK 11 Review and refresh: return to McCahan on <i>Teamwork</i>; go through links under Wk 6 on how to display data in technical documents TEAM PRESENTATIONS due
Module 7	WEEK 13: Small but Important Stuff: Monitor, Check, Calibrate - Engage in Self-Reflective Learning (SRL) to monitor progress in tackling team projects: assess strengths and target areas for improvement - Compose and Arrange Front Matter: Title Page; Cover Letter; Table of Contents; Executive Summary - Consolidate learning and drafting: attend to style as well as content WEEK 14: Best Reports Ever: Keep on Growing & Learning! - Arrange Back Matter: compile References and Appendices (Recorder's Documents; Work Logs) as required - Conclude: check, finalize, and sign off on all details from content to format to style, so everyone feels good about handing in a well supported final recommendation and all round stellar report - Celebrate! Peer Review Forum due Refer closely to given criteria to analyze and evaluate your own and others' writing, providing constructive feedback as needed	STUDENT PRESENTATIONS continue all Module Review Dr. Mike Alley's writing tips for engineers under Wk 7) FEASIBILITY REPORT due