University of Victoria Humanities

University of Victoria Engineering

ENGR 120:
Communications Course Outline
Spring

TERRITORIAL ACKNOWLEDGMENT

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

1. Your Communications Contact:

Instructor:

Classes Meet:

Office Hours:

2. The Course in a Nutshell:

ENGR 120 is a 2.5 unit course which presents instruction in technical writing and engineering design in an integrated manner. In the Communications side of the course, you'll be provided with a practical introduction to the essential skills needed to write and present information as a technical professional. The Communications side provides you with an opportunity to develop your skills as a writer, practice the techniques and strategies used by technical writers, and work with other students to prepare a complete formal report following the model of the Faculty of Engineering co-op work term report. Your major written assignments will be based primarily on the design work that you complete in the lab part of this course.

Grade Distribution

Engineering Design grade	40%
Technical Communication grade	60%
Total	**100%**

The weighting of the communication and the design aspects of this course is 60% communication and 40% engineering design. The contact hours for this course are 4-2-0, allocated as follows:

Activity	Hrs/Wk	Section Size	Taught by
Communications lecture	3	30	ATWP Instructors
Plenary lecture	1	All students	ENGR Instructors
Engineering design laboratory	2	≤30	ENGR Instructors

Communication Classes

Communications classes combine a mixture of lecture, discussion, practice, and team meetings to enable you to practice the various technical writing skills covered in the course.

3. What you can Expect to Achieve: Course Goals and Learning Outcomes

The course goals in the table below show what you should learn and, given due diligence on your part, demonstrate during and at the end of the course:

Engineering Design	Technical Communications
• Follow a standard structured process to design a system comprised of computer, electrical, mechanical, and software subsystems	• Follow a structured writing process to plan, draft, revise, and edit the types of documents commonly required of technical professionals, including routine correspondence, proposals, reports, presentations, and other forms of informational writing
• Apply discipline-specific technical knowledge in the design process and understand the relevance of that knowledge to the disciplines in professional practice	• Apply a problem-solving approach to a communication task, including defining the problem (need, goal, objectives, constraints); identifying the purpose, audience, and content; and developing an effective production plan to communicate your solution
• Demonstrate teamwork skills in the successful accomplishment of an engineering design project	• Work effectively as part of a team, applying an understanding of team dynamics, effective communication in groups, conflict management, and shared leadership
• Identify business, social, environmental and regulatory considerations relevant to the execution of an engineering design project	• Incorporate research sources effectively, ethically, and correctly into technical documents, using IEEE style
• Apply selected tools for effective management of time and resources in the context of an engineering design project.	• Design documents for readability, using headings, lists and visual graphics effectively, and choosing a form and design appropriate to the purpose and audience
	• Edit your own and others' writing so that it is clear, concise, and complete, conforming with the basic conventions of standard written English
	• Prepare and deliver oral presentations using appropriate visual aids.

4. What you Need to do to Earn a Passing Grade: Communication Assignments

The purpose of the Communication portion of ENGR 120 is to prepare you for the writing and speaking demands of your co-op placements and eventual career as a technical professional. All assignments and activities are designed to help you achieve the course learning goals listed above.

Attendance

As per UVic calendar (Regulations on Attendance), you're expected to attend all classes in which you are enrolled. If you fail to meet minimum attendance requirements, you may be deemed unable to meet minimal learning objectives for the course.

To pass the course, you must meet the following requirements:

Design

Attended all Design Laboratories
Design Exercises
Design Project
Quiz

Communications

Attended all classes and workshops
Completed all graded assignments presentations, quizzes, etc.

HERE ARE THE COMMUNICATION ASSIGNMENTS YOU'LL COMPLETE

Detailed descriptions of all assignments are posted on Brightspace, though I'll also go through each assignment with you during our live sessions on Zoom. Graded assignments are listed in the table below:

Assignment	Length	Weight	Due Date
Diagnostic	~300 words	0%	
Discussion Posts	Misc.	10%	
Report 1: **Problem Definition**	~500 wds	10%	
Short Pair Presentations	6-8 mins.	10%	
Report 2: Pair Proposal	~1200 wds	15%	
Reflection Memo	~300 wds	5%	
Report 3: Team Report	~2500 wds	20%	
Short assignments, quizzes, milestones, etc.	Misc	30%	
	TOTAL	**100%**	

IMPORTANT

To pass the course, you must complete all graded assignments. Failure to complete any one or more graded assignment will result in a grade of "N" regardless of the cumulative percentage of other elements of the course. "N" is a failing grade and factors into your GPA as O ("zero").The maximum percentage that can accompany an N on a student's transcript

USEFUL DETAILS ABOUT DUE DATES AND SCAFFOLDING ACTIVITIES

The Communication course has been designed to allow you to complete readings, tasks, and assignments on a schedule that allows you to learn in different ways and at different times. Even so, deadlines are necessary to keep your work on track and to enable your instructor to give you timely feedback on assignments.

Late Assignments: If you anticipate that you cannot meet a deadline for a major assignment, let me know. To request an extension, please send an email indicating the assignment, the original deadline, a reason you need more time, and a proposal for a new deadline. Otherwise, your assignment will be graded as a late assignment.

Scaffolding activities: In this course, you're learning *procedural knowledge*, meaning how to build successful assignments step-by-step. Hence, ENGR 120 provides scaffolding activities to help you plan, outline, draft, and revise your assignments. Complete each of the steps, and use the formative feedback you receive to do well and avoid losing marks.

5. HOW YOUR WORK FOR THE COURSE WILL BE ASSESSED AND EVALUATED

Each assignment sets different requirements and tests different skills. Your ability to fulfill requirements and demonstrate these skills forms the basis of assessment. As appropriate for an academic writing course, every assignment will be carefully evaluated on **content, format**, **citation,** and **quality of writing**. Before submitting your assignments, ask yourself the following: is expression clear and correct? Are sentences and paragraphs well composed? Have expectations for organization and format been met? Assignments that

meet the requirements of the assignment and demonstrate stated learning outcomes will achieve a high grade; assignments that do not will likely to earn a poor grade. Be sure to read and follow assignment instructions carefully; make sure you understand what's required (ask if you don't!) to ensure good learning and good grades.

Grading Scale

Your assignments will be returned with a letter grade and its numerical equivalent—e.g., "B/74.5"—as instituted by the university senate in 2012. Final letter grades for the course will be calculated in accordance with the UVic standard undergraduate grading scale as follows:

Undergraduate Grading Scale			
Grade	**GPA**	**Percentage**	**Description**
A+ A A-	9 8 7	90 – 100 85 – 89 80 – 84	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.
B+ B B-	6 5 4	77 – 79 73 – 76 70 – 72	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.
C+ C	3 2	65 – 69 60 – 64	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 class activities.
D	1	50 – 59	A D is earned by work that indicates minimal command of the course materials and/or minimal participation in class 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.

Academic Concession

If your academic performance is affected by injury, family or personal affliction, or illness, immediately consult with University Counseling Services, University Health Services, or another health professional. When accompanied by supporting documentation, you may request an Academic Concession, which can grant you deferrals on due dates and so forth, with no loss of grades.

Grade Appeals

If you feel that an assignment you submitted has been improperly evaluated, your first step is to discuss your concerns with me. I strive to grade your work in a way that is fair, appropriate, and reasonable, based on the grading standards for first-year writing, and I will be open to listening to your concerns.

8. Supportive and Respectful Learning: Core Expectations

Everyone in the course is on a learning journey, and it is up to each and every person to support a learning environment that respects that goal for everyone. As UVic's Policy on Human Rights, Equity, and Fairness puts it, "all members of the university community are responsible for promoting a supportive, safe, and inclusive learning environment and for dealing respectfully with each other" (sec. 5.1).

COMMITMENT TO LEARNING

Everything depends on each person making a commitment to learning in positive, respectful ways. Take ownership of your learning: come to class ready and prepared, with activities completed ahead of time as needed; bring an eager and inquiring mind; ask questions to clarify understanding; and engage in discussion with your peers, offering comments and observations to deepen learning, both for yourself and the learning community you're part of in this course.

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

Your instructor will expect you to	You can expect your instructor to
Attend all classes unless otherwise excused	Be on time and prepared for class
Prepare for class by completing readings and assigned work in advance	Teach to the course goals
Actively participate in classroom 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

SAMPLE ENGR. 120 Weekly Schedule: Modules, Outcomes, Resources, Due Dates

Go through assigned readings, links, or slides *BEFORE* class

Due dates may change, as needed, but advance notice will always be given

Modules	Dates	Learning Outcomes *With due diligence and commitment on your part, you should achieve the following learning outcomes each week*	Tasks, Resources, Due Dates
Orientation	**Pre-Term** **Jan 4-10**	**Orientation & Welcome! Learn about the Course** • Identify course outcomes, requirements, and resources • Explore Brightspace: find assignments, browse resources • Build a Learning Community: post self-introductions and respond to others' posts	*Read one of the following to prepare for the Diagnostic assignment:* • Chuck Letourneau, "The Plain Web" • Petroski, "Engineers as Writers" • Tufte "Powerpoint does Rocket Science" **Coming Due** Go through the Course Outline by Read one of the above articles by
Module 1 & 2 **Technical Communication: Writing and Speaking**	**Weeks 1-2** **Jan 11-22**	**Style Matters: Designing Paragraphs and Presentations** • Discuss the connection between clear writing and ethical engineering in well-written unified paragraphs • Identify key requirements for Report 1 • Apply core ingredients of successful public speaking: plan, prepare, rehearse, practice	*Read and review the following:* • Ch. 1: What is technical writing? • Ch. 2: Professional Style • Ch. 8: Oral Presentations **Coming Due** Diagnostic Assignment Sign up for a presentation topic Prob Def Discussion Forum Prob Def Case Study Forum
Module 3 **Workplace Genres, Document Design**	**Week 3** **Jan 25-29**	**Style Matters: Designing Documents** • Attend to and apply Document Design for professionalism and readability: white space, font style, listing, borders, graphic elements • Identify format and function of a professional memo • Create a professional document template, mapping the main headings of a formal proposal	*Read and review the following:* • Ch. 3: Document Design • Ch. 7: Memos • Sample proposals **Coming Due** Presentations/ Feedback Forum, ongoing Doc Design Quiz Peer Review Forum for Report 1 Report 1
Module 4 **Proposals**	**Weeks 4-5** **Feb 1-19**	**Collaborate and Quantify → Winning Proposals** • Identify and draft the 4 ingredients of a Problem Definition statement • Identify qualities and structure of a technical description and apply when drafting your Technical Plan • Supply properly captioned graphics to supplement your written description • Present all components of a Management Plan, using properly formatted tables as needed	*Read and review the following:* • Ch. 7.2: Proposals • Ch. 7.4: Technical Descriptions • Ch. 5: Research Methods **Coming Due** Presentations/ Feedback Forum, ongoing Proposal draft

NO CLASSES	**Week 6** **Feb 15-19**	**READING BREAK** Arrange to work with your partner on your Proposal over the Reading Break. Finalize your draft and post it for Peer Review. Refer closely to the given criteria for analyzing and evaluating your peers' work, to provide constructive feedback as needed	**Coming Due** Presentations/ Feedback Forum, ongoing Proposal Assignment
Team Forming and Planning	**Week 7** **Feb 22-26**	**Strategies for Successful Collaboration** • Describe key tasks and deliverables of a recommendation report • Form teams and plan for project completion • Establish a Team Charter: implement team roles, bylaws, and goals; create a work schedule breakdown; employ "tracking" documents (e.g. Recorders Docs, worklogs) to ensure accountability to yourself, your team, your clients, and other stakeholders	*Read and review the following:* • Ch. 4: Teamwork & Communication • McCahan on Teamwork • Sample Reports **Coming Due** Presentations/ Feedback Forum, ongoing Teamwork Quiz Milestone 1
Module 5 **Style Matters**	**Week 8** **Mar 1-5**	**Style Matters: Designing Strong, Clear Sentences** • Recognize features and benefits of Plain Language: clear + concise; honest + accurate; positive + helpful • Use a basic grammatical vocabulary to discuss and apply rules of punctuation and parallelism • Apply audience-centered plain language to enable mixed audiences to follow and understand technical documents	*Read and review the following:* • Plain language slides • Punctuation handout • Parallelism handout **Coming Due** Presentations/ Feedback Forum, ongoing Practice Revision Exes Midterm Style Matters Quiz
Module 6 **Team Report**	**Weeks 9-13** **Mar7-Apr 1**	**Remaining Accountable: Planning, Mapping, Tracking, and Reporting** ▪ Identify and map required sections of a recommendation report, applying doc design principles • Draft a problem Definition, Weighted Objectives Matrix, and Methods section • Identify key goals and features of a progress report and create a design template • Compose and arrange front and back matter • Present an informative progress report, organized to meet expectations for professionalism and other given criteria	*Read and review the following:* • Ch. 7.5 Long Reports • ENGR Coop Guidelines • Ch. 7.3: Progress Reports • Sample Progress Reports **Coming Due** Presentations/ Feedback Forum, ongoing Milestone 2 Milestone 3 Milestone 4
NO CLASSES	**April 2-5**	**EASTER BREAK**	
Module 8: **Publishing and Wrapping up**	**Week 14** **April 6-9**	**Onwards and Upwards: Best Reports Ever!** • Refer closely to stated criteria to analyze and evaluate your own and others' writing, providing constructive feedback as needed • Pull together everything you've learnt in the course to finalize a quality technical report • Engage in Self-Reflective Learning (SRL) to monitor progress in tackling team projects, assess strengths, and target areas for improvement • Celebrate your achievements!	**Coming Due** Reflection Memo Team Report