

Bruno Grenier

ENCS 282: Technical Communication

Center for Engineering in Society, Summer 2014, 3.0 Credits

Professor : Bruno Grenier

Office Hours: Tuesday 13:00 to 14:30 and 16:00 to 17:30

Thursday 13:00 to 14:30

Office: EV-2.231

Phone: 848-2424 ext. 4038

Email: bruno@encs.concordia.ca

Prerequisite: Students must have satisfied the requirements in §71.20.7 by passing the Engineering Writing Test (EWT), or by passing ENCS 272 with a grade of C- or higher.

Course Description: Technical writing form and style. Technical and scientific papers, abstracts, reports. Library research and referencing methods for engineers and computer scientists. Technical communication using information technology: document processing software, computer-assisted presentation, analysis and design of Web presentation, choice and use of appropriate tools. Students will prepare an individual major report and make an oral presentation.

Objectives: In ENCS 282, students can and should learn professional norms of technical communication and dominant forms of sharing knowledge within the fields of engineering and computer science. This course covers the following material: technical writing form and style; technical and scientific papers, abstracts and reports; definitions, descriptions and instructions; visual rhetoric; oral presentation; interpersonal communication; library research and referencing methods; and rhetorical strategies for persuasion. This class also asks the following set of questions: How do we know what we know? In what ways do language and communication shape knowledge? How does persuasion work? What is the difference between demonstration and argumentation? What do the forms and styles of technical communication tell us about the practice and profession of engineering? The goals of addressing the above topics and pursuing the preceding questions are: to promote students' ability to think critically, clearly and analytically; to improve students' capacity for effective writing and public speaking; to help students learn the basic norms and standards for professional, technical communication; to help students improve their abilities to read and listen critically, to respond reflectively and reasonably to others, and to craft successful communicative acts.

This course emphasizes and develops the CEAB graduate attributes of Communication skills. This graduate attribute is defined by the CEAB as: An ability to communicate complex engineering concepts within the profession and with society at large. Such abilities include reading, writing, speaking and listening, and the ability to comprehend and write effective reports and design documentation, and to give and effectively respond to clear instructions. Each assignment in this course evaluates this particular graduate attribute, including writing exercises and speaking exercises.

Academic Integrity – The work students complete for this course will be their own, which is to say that cheating, plagiarism, and other forms of academic dishonesty will not be tolerated. Any written assignment that borrows from other sources without giving proper credit or that is plagiarized in whole or in part from another source (including other student's work) is grounds for an "F" on the assignment, or depending on the severity of the infraction, is grounds for an "F" in the course. Concordia University recognizes as a punishable offence "any form of cheating, plagiarism, personation, falsification of a document as well as any other form of dishonest behaviour related to the obtention of academic gain or the avoidance of evaluative exercises" (Code of Academic Conduct, Section 16.3.14, Paragraph III). For questions about the University's policy on cheating

and plagiarism, please consult the Undergraduate Calendar at <http://registrar.concordia.ca/calendar/16/sec16.html>

This course emphasizes and develops the CEAB graduate attributes of Communication Skills. The Communication Skills attribute is defined by the Canadian Engineering Accreditation Board (CEAB) as: An ability to communicate complex engineering concepts within the profession and with society at large. Such abilities include reading, writing, speaking and listening, and the ability to comprehend and write effective reports and design documentation, and to give and effectively respond to clear instructions. More specifically, students will be assessed on their abilities to:

- Identify audience needs, interests and level of knowledge
- Frame supportable, significant theses and arguments
- Develop appropriate expository and argumentative strategies
- Identify and utilize relevant, high quality resources
- Create drafts and revisions
- Respond to critical feedback
- Demonstrate understanding of cognitive and conceptual differences between oral and written presentation
- Create appropriate scope for treatment of topic in oral presentation
- Adapt written text to oral presentation
- Identify audience needs, interests and level of knowledge
- Plan, design and effectively utilize visual materials
- Utilize effective presentation techniques
- Identify strategies to overcome linguistic difference
- Adapt presentation to heterogeneous audiences
- These attributes will be assessed in both the final proposal for the course as well as the oral presentations for the course.

For the TA/instructor:

Under the “Communication Skills” attribute we will be assessing both the “Documentation” indicator as well as the “Research Methods” indicator. The final proposal will assess the former while the feasibility report will assess the latter. You may simply use the grades for each of these assignments as the assessment

Assignments:

1. Final Exam (25%) – There will be a written, comprehensive exam during the final exam period (date and time to be determined by the final exam’s office), which will test your writing skills and your understanding of the key concepts and ideas for the course.
2. Proposal (20%) – In this short writing assignment, you will be asked to prepare a proposal for solving some particular technical problem within your chosen major. Your report will include a detailed technical description of the problem you aim to solve and a suggestion for how to solve that problem. Your report will be 7-9 pages long (2000 words).
3. Mechanism Description – Short Writing Assignment #2 (15%) – In this assignment, you will be asked to describe an object according to criteria given in class and to specific audience. Your mechanical description will be 4-6 pages long.
4. Professional Package (15%) – In response to a mock job advertisement, you will produce a professional application package that includes a letter and a resume, and a short interview.

5. Oral Assignment (10%) – During the tutorial, you will have to prepare a five-minute presentation of your proposal.

6. Tutorial Writing (15%) – Throughout the semester you will do ten writing assignments in your tutorial sections. Each of these will be a short response to particular questions/problems posed by your tutorial leader. You cannot make these assignments up (which means you have to be in tutorial to complete them).

Assignment Submission Guidelines – For each assignment (with the exception of the final exam and the short tutorial writing exercises) students will receive a detailed assignment sheet that will explicitly describe the requirements and expectations for the assignment. The assignments are due on the date specified. Late submission will be accepted but penalized by 10%. All written assignments must be submitted to obtain a passing grade. Each assignment should also have a cover page that states your full name, student identification number, the name of the class, the name and title of the assignment, and the date.

Recommended Text book – For this course, you will be asked to buy the Technical Communication: ENCS 282 Course Pack written by Mary Silas. The course pack is available at the Concordia BookStore.

Course Outline

Week Class content Due dates

- 1 Introduction to course and syllabus, definitions of communication, communication model, introduction to technical writing
- 2 Type of audience, correspondence, proposal project overview
- 3 Definitions, visual rhetoric, website analysis
- 4 Audience analysis and document style, types of technical writing, form and style
- 5 Technical descriptions – Mechanism and process descriptions
- 6 Instructions, Library session Mechanism Description
- 7 Collaborative writing, Editing guidelines, Writing process
- 8 Reports, abstracts and summaries
- 9 Other technical reports, Writing persuasively, Writing ethically
- 10 Logos, ethos and pathos, Inductive/deductive reasoning, Toulmin's argumentation, Report peer review.
- 11 Resumes, job search, Revisions, Job interviews, Oral communication, business meetings Report
- 12 Short presentation about yourself Oral
- 13 Short presentation about yourself Résumé, Oral

Note: The break is usually between week 6 and 7.