

ENGSCI 9670 – Engineering Communications: Course Outline, Summer 2019

Objectives:

This course is intended to help students take a leadership role in their engineering careers. The emphasis is on the practical research, writing and interpersonal communication skills expected of engineers with a graduate degree. Upon completing this course, you should be able to persuasively and dynamically showcase your expertise to a wide variety of audiences. You will learn how to integrate the perspectives of other stakeholders, to ensure their agreement and commitment to action. You will also critically assess professional and public discourse relevant to your profession and develop an awareness of the social contexts and implications of engineering advancements.

Topics by Module:

1. Course objectives, assignments, evaluations; Canadian business culture; business sustainability; leadership; professionalism
2. Conducting business and technical research; stakeholder analysis; creating a 'business case' to obtain funding and other resources; working with top management
3. Organizational structure and behaviour; obtaining commitment from others; short meetings and presentations; emails
4. Report-writing for the technical audience; organizing detailed reports; writing style refresher
5. Details of business communication; scorecards; internal and external reporting; long meetings and presentations; correct and incorrect words & phrases
6. Leading in-person 'process workshops'; writing about processes; change management and obtaining commitment to change
7. Contracts and other legal documents; standards-writing; project and business 'health checks' and audits
8. Personal development; making contributions and being seen as effective
9. Hot topics; labour law; gender, race, religion, and disability; diversity, equity, and fairness; 'dressing for success'; intercultural competencies
10. Hot topics continued

Prerequisites:

This course is open to M.Eng. students.

Instructor:

- **Section 001:** David Sumpton dsumpton@uwo.ca
- **Section 002:** Garret Munch gmunch@uwo.ca

Contact Hours & Schedule:

Contact hours: 3 hours per class

- **Section 001:** Tuesdays 1:30 – 4:30 pm, May 7 – July 16; no class June 25; SH 2317
- **Section 002:** Wednesdays 1:30 – 4:30 pm, June 19 – August 21; UC 3220

Office hours: by appointment. In person meetings may be held before or after class. Telephone or video conference meetings may be scheduled as appropriate.

Textbook:

No required text. Other than the standard Office software which students have on their own computers, no special software is required for this course. However, a casebook must be purchased from Ivey Publishing.

Course Materials:

Essential readings, such as the PEO Professional Engineering Practice Guideline, are provided in OWL.

Students may consider acquiring the following for their personal use:

- Carnegie: How to Win Friends and Influence People; The Quick and Easy Way to Effective Speaking
- Lane, Maznevski: International Management Behavior: Global and Sustainable Leadership, 8th edition
- Riordan: Technical Report Writing Today, 10th edition
- Cambridge or Oxford: Grammar of the English Language

Evaluation:

The course grade is based on written reports, in-class presentations, and personal contributions. Based on a general 'statement of work' provided by the instructor, students propose a project to the instructor, and work on this project throughout the term in a series of iterative and cumulative assignments. Classes emulate a 'workplace meeting', consisting of a blend of formal instruction, discussion on the topic at hand, workshops and student presentations.

- Business proposal report: 1,000 words + oral presentation 20%
- Technical report: 1,500 words + oral presentation 20%
- Process report: 500 words plus diagrams 20%
- Final report: 2,000 words + oral presentation 25%
- Personal contributions: in-class discussion 15%

Note: The specified 'word count' is a minimum requirement to obtain a satisfactory grade on the written portion of the report. Your reports may be longer. Oral presentations must also include slides with sufficient detail in the body, or backup, to serve as a written summary of what was presented orally.

Evaluation Criteria:

Written work, including reports and presentation slides, is evaluated on a scale of 1-10 based on three criteria:

- **Analysis and Insight:** apply concepts with rationale; provide relevant insights
- **Follow instructions:** answer the question asked, in requested format & structure
- **Organization:** Organized, cohesive report with logical sections and subsections

Personal contributions are evaluated on a scale of 1-10 on the following criteria

- **Insight:** provide relevant and original insights during scheduled classes
- **Interaction:** professionally interact with the instructor and other students, including outside class time

A detailed rubric is provided in the course material.

Grading Standards:

Student's work and class contributions are evaluated on what would reasonably be expected of a Masters-level student who, upon graduation from their program, would demonstrate the skills shown in the Ontario Qualifications Framework <http://www.tcu.gov.on.ca/pepg/programs/oqf/certificate12.html>.

Penalties:

- **Assignments (written reports, presentations):** Late reports are subject to penalties of 25% of assignment grade weight per business day. Reports five business days late or more, may receive a zero grade. Penalties are waived for legitimate and documented reasons such as illness. In the event of unequal student contributions to any team projects, student team members may be asked to attend a mandatory meeting together with the instructor to discuss perspectives and solutions. The instructor may grade student contributions individually.
- **Contributions:** Interactions with others during and outside class must be professional, or the student's contribution grade may be reduced. There is no penalty for disagreement or difference of opinion. Students who do not attend a particular module in-class, will not receive the contribution grade for that module. Students who advise the instructor in advance of any planned absence may, at the instructor's discretion, receive credit for the Attendance portion of the grade. Students with legitimate unplanned absences, and who provide supporting documentation afterwards, may also receive credit for the Attendance portion of the grade.

Scholastic Offences:

Scholastic offences are taken seriously and students are directed to read the appropriate policy, specifically, the definition of what constitutes a Scholastic Offence, at the following Web site:

http://www.uwo.ca/univsec/handbook/appeals/scholastic_discipline_grad.pdf

Plagiarism:

University policy states that plagiarism, defined as the “act or an instance of copying or stealing another’s words or ideas and attributing them as one’s own.” (excerpted from Black’s Law Dictionary, West Group, 1999, 7th ed., p. 1170) is a scholastic offence. In submitting any written work as part of the coursework requirements for this course students must ensure that this work is written in their own words. Whenever students take an idea or a passage of text from another author, they must acknowledge their debt both by using quotation marks where appropriate and by proper referencing such as footnotes or citations.

All required papers may be subject to submission for textual similarity review to the commercial plagiarism-detection software under license to the University for the detection of plagiarism. All papers submitted for such checking will be included as source documents in the reference database for the purpose of detecting plagiarism of papers subsequently submitted to the system. Use of the service is subject to the licensing agreement, currently between The University of Western Ontario and Turnitin.com (<http://www.turnitin.com>).

A student who is found guilty of plagiarism in respect of any written work submitted as part of the coursework requirements for this course will be given a grade of zero for the submitted work. Repeated acts of plagiarism, either in this course or any other course subsequent to a first offence, will result in the student being given a failing grade for the course in which the subsequent offence occurs, and may also incur further penalties such as requiring the student to withdraw from the program in which they are enrolled in.

Attendance:

Any student who, in the opinion of the instructor, is absent too frequently from class, laboratory, or tutorial periods will be reported to the Dean (after due warning has been given). On the recommendation of the Department concerned, and with the permission of the Dean, the student will be debarred from taking the regular final examination in the course.

Accessibility:

Please contact the course instructor if you require material in an alternate format or if any other arrangements can make this course more accessible to you. You may also wish to contact Services for Students with Disabilities (SSD) at 661-2111 x 82147 for any specific question regarding an accommodation.

Conduct:

Students are expected to arrive at lectures on time, and to conduct themselves during class in a professional and respectful manner that is not disruptive to others. Late comers may be asked to wait outside the classroom until being invited in by the Instructor. Please turn off your cell phone before coming to a class, tutorial, quiz or exam.

On the premises of the University or at a University-sponsored program, students must abide by the Student Code of Conduct:

<http://www.uwo.ca/univsec/board/code.pdf>

Sickness and Other Problems:

Students should immediately consult with the Instructor or Department Chair if they have any problems that could affect their performance in the course. Where appropriate, the problems should be documented (see attached). The student should seek advice from the Instructor or Department Chair regarding how best to deal with the problem. Failure to notify the Instructor or Department Chair immediately (or as soon as possible thereafter) will have a negative effect on any appeal.

For more information concerning medical accommodations, please see:

http://www.uwo.ca/univsec/handbook/appeals/accommodation_medical.pdf

Notice:

Students are responsible for regularly checking their email, and the course OWL site for notices related to the course.