

Western University
Faculty of Engineering
Thompson Centre for Engineering Leadership and Innovation

ELI 9600 – Engineering Communications

COURSE OUTLINE 2022-2023

DESCRIPTION

In this course, we will investigate why strong communication competencies are of crucial importance within engineering leadership and innovation. We will explore strategies for ‘engineering’ your communication, and for how to operationalize language, emotional intelligence, and critical and creative thinking to help you thrive professionally.

Students will have the opportunity to study, build, and practice foundational strategies for effectively communicating in the field, and for cultivating meaningful experiences on the job, and in life. Developing the capacity to listen effectively, foster empathy, engage with audiences, design interactions for psychological safety, and identify and respect intercultural contexts will help prepare students for professional practice. In addition to providing students with the opportunity to assess which communication skills may help them succeed *in* the workplace, the course gives students a platform to critically reflect on which communication skills will help them thrive during the job search.

ENROLLMENT RESTRICTIONS

Enrollment in this course is restricted to graduate students in the Graduate Diploma in Engineering Leadership and Innovation, and Master of Engineering programs.

INSTRUCTOR CONTACT INFORMATION

Course instructor: Natalie Mathieson, MA
Email address: nmathie@uwo.ca
Office: ACEB 3474
Office hours: TBD

TOPICS

Please note the below table is tentative.

Topic #	Description	Learning Activities	Tentative timeline
1	Foundations of Communication		
	Introduction and Emotional Intelligence	<ul style="list-style-type: none">• Class discussion and exercises• Additional Readings• Personal Communication Assessment (pass/fail)	Week 1 (May 3 + 5)
	Shifting Perspective	<ul style="list-style-type: none">• Class discussion and exercises	Week 2 (May 10)

		<ul style="list-style-type: none"> • Additional readings • Critical Reflection 1 assignment 	
	Psychological Safety	<ul style="list-style-type: none"> • Case discussion and class exercises • Additional readings • Critical Reflection 2 assignment 	Week 2 (May 12)
2	Making Connections		
	Collaboration + Teamwork	<ul style="list-style-type: none"> • Case discussion • Class exercises • Additional readings 	Week 3 (May 17)
	Inspiring Understanding + Connections Project	<ul style="list-style-type: none"> • Class exercises • Class discussion • Additional readings • Connections Project assignment components, including presentation 	Weeks 3-5 (May 19, 24, 26, 31)
3	Career Development		
	Recruitment Communication Strategies + Conclusion	<ul style="list-style-type: none"> • Class exercises • Career Development Quiz • Class discussion • Additional readings 	Week 5 (June 2)

SPECIFIC LEARNING OUTCOMES

Degree Level Expectations	Approx. Weight	Assessment Tools	Outcomes
Depth & Breadth of Knowledge	10%	<ul style="list-style-type: none"> • Critical Reflections • Career Development Quiz • Connections Project • Participation 	<ul style="list-style-type: none"> • Use diverse communication methods, and practice related mindsets, to foster collaboration and achieve team goals • Identify and understand key course theories and themes related to engineering leadership and innovation communications
Research & Scholarship	5%	<ul style="list-style-type: none"> • Critical Reflections • Participation 	<ul style="list-style-type: none"> • Review and synthesize literature on best reporting and related communicating practices within engineering leadership and innovation

Degree Level Expectations	Approx. Weight	Assessment Tools	Outcomes
Level of Application of Knowledge	15%	<ul style="list-style-type: none"> • Critical Reflections • Career Development Quiz • Connections Project • Participation 	<ul style="list-style-type: none"> • Practice essential career management communication skills and rehearse techniques to enhance employability • Understand and articulate the role of emotional intelligence and critical and creative thinking in engineering communication, and apply related skills in a nuanced fashion • Practice ability to adapt and tailor communication to different individuals' needs, leveraging diverse communication methods and mindsets
Professional Capacity / Autonomy	10%	<ul style="list-style-type: none"> • Critical Reflections • Career Development Quiz • Connections Project • Participation 	<ul style="list-style-type: none"> • Demonstrate the capability to work independently and take leadership • Build awareness and practice application of ethical communication strategies for developing a meaningful career
Level of Communication Skills	50%	<ul style="list-style-type: none"> • Critical Reflections • Career Development Quiz • Connections Project • Participation • Resource Review 	<ul style="list-style-type: none"> • Develop understanding of diverse rhetorical practices, and adapt relevant communication strategies intended to serve and reach specific audiences • Evaluate communication competencies and theories, and articulate evidence that supports a hypothesis and personal position related to said theories • Synthesize information from research literatures on best communication practices for meaningful collaboration
Awareness of Limits of Knowledge	10%	<ul style="list-style-type: none"> • Critical Reflections • Career Development Quiz • Connections Project • Participation 	<ul style="list-style-type: none"> • Identify limits of understanding related to course concepts, and areas of growth within personal communication identity • Demonstrate ability to develop communication skills that will support contingency planning in engineering leadership and innovation practice

ASSESSMENTS

Tentative - please note further details will be finalized in the coming days.

Assessment Type	Material Covered	Tentative Due Date	Weight
Participation and Contribution in Class Activities	All	Throughout	25%
Critical Reflections (two)	Week 2	May 9	Critical Reflection 1 – 10%
	Week 3	May 15	Critical Reflection 2 – 15%
Connections Project	Weeks 9600	Multiple individual and team components throughout May 18-31: Individual Research (pass/fail) – May 18	30%
		Team Charter (pass/fail) – May 23	
		Team Outline – May 23	
		Team Update Meeting with Prof (pass/fail) – May 24	
		Team Progress Update Presentation – May 26	
		Team Presentation – May 31	
		Individual Reflection and Worklog – June 2	
Career Development Quiz	Week 5	Take-home/Open Book – due June 5	20%

Activities in which collaboration is permitted:

- Class discussion, exercises, and activities, including case studies – students are expected to contribute to class discussion, including building and commenting on contributions of other students, and to collaborate in group exercises in class
- Team components of the Connections Project

Activities in which students must work alone (collaboration is not permitted):

- Career Development Quiz
- Critical Reflections
- Individual components of the Connections Project

REQUIRED TEXTBOOK

- Required readings will be posted on OWL and discussed in class.
- There will be additional Ivey Publishing and Harvard Business Cases to read (instructions for purchasing print copy or digital download copy will be provided)

OPTIONAL COURSE READINGS

Optional readings will be posted on OWL and discussed in class.

NOTES RELATED TO COVID-19 PANDEMIC

Course Absences due to Daily COVID Screening Questionnaire

Missed assessments (e.g., presentations, essays, quizzes, tests, midterms, etc.) require formal academic considerations (typically self-reported absences and/or academic counselling).

Methods for dealing with missed work and course content are at the discretion of the instructor(s). Students should be aware that some learning outcomes cannot be easily made up and may need to be completed in a subsequent year. Your instructor will provide you with further information as to how this applies within this course.

Students who demonstrate a pattern of routinely missing coursework due to self-reported COVID symptoms, and therefore do not demonstrate mastery of the learning outcomes of the course, will not receive credit for the course.

Course delivery with respect to the COVID-19 pandemic

Although the intent is for this course to be delivered in-person, the changing COVID-19 landscape may necessitate some or all of the course to be delivered online, either synchronously (i.e., at the times indicated in the timetable) or asynchronously (e.g., posted on OWL for students to view at their convenience). The grading scheme will not change. Any assessments affected will be conducted online as determined by the course instructor.

When deemed necessary, tests and examinations in this course will be conducted using a remote proctoring service. By taking this course, you are consenting to the use of this software and acknowledge that you will be required to provide personal information (including some biometric data) and the session will be recorded. Completion of this course will require you to have a reliable internet connection and a device that meets the technical requirements for this service. More information about this remote proctoring service, including technical requirements, is available on Western's Remote Proctoring website at: <https://remoteproctoring.uwo.ca>.

CHEATING, PLAGIARISM/ACADEMIC OFFENCES

Academic integrity is an essential component of learning activities. Students must have a clear understanding of the course activities in which they are expected to work alone (and what working alone implies) and the activities in which they can collaborate or seek help; see information above and ask instructor for clarification if needed. Any unauthorized forms of help-seeking or collaboration will be considered an academic offense. University policy states that cheating is an academic offence. If you are

caught cheating, there will be no second warning. Students must write their essays and assignments 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. Plagiarism is a major academic offence. Academic offences are taken seriously and attended by academic penalties which may include expulsion from the program. Students are directed to read the appropriate policy, specifically, the definition of what constitutes a Scholastic Offence at the following website:

https://www.uwo.ca/univsec/pdf/academic_policies/appeals/scholastic_discipline_grad.pdf

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>).

CONDUCT

Students are expected to follow proper etiquette to maintain an appropriate and respectful academic environment. Any student who, in the opinion of the instructor, is not appropriately participating in course activities and/or is not following the rules and responsibilities associated with the course activities, will be reported to the Associate Dean (Graduate) (after due warning has been given). On the recommendation of the Department concerned, and with the permission of the Associate Dean (Graduate), the student could be debarred from completing the assessment activities in the course as appropriate.

HEALTH/WELLNESS SERVICES

As part of a successful graduate student experience at Western, we encourage students to make their health and wellness a priority. Western provides several health and wellness related services to help you achieve optimum health and engage in healthy living while pursuing your graduate degree. Information regarding health- and wellness-related services available to students may be found at <http://www.health.uwo.ca/>.

Students seeking help regarding mental health concerns are advised to speak to someone they feel comfortable confiding in, such as their faculty supervisor, their program director (graduate chair), or other relevant administrators in their unit. Faculty of Engineering has a Student Wellness Counsellor. To schedule an appointment with the counsellor, contact Kristen Edwards (khunt29@uwo.ca) via confidential email and you will be contacted by our intake office within 48 hours to schedule an appointment.

Students who are in emotional/mental distress should refer to Mental Health@Western: <http://www.uwo.ca/uwocom/mentalhealth/> for a complete list of options about how to obtain help.

SICKNESS

Students should immediately consult with the Instructor (for a particular course) or Associate Chair (Graduate) (for a range of courses) if they have problems that could affect their performance. The student should seek advice from the Instructor or Associate Chair (Graduate) regarding how best to deal with the problem. Failure to notify the Instructor or the Associate Chair (Graduate) immediately (or as soon as possible thereafter) will have a negative effect on any appeal. Obtaining appropriate documentation (e.g., a note from the doctor) is valuable when asking for accommodation due to illness.

Students who are not able to meet certain academic responsibilities due to medical, compassionate or other legitimate reason(s), could request for academic consideration. The Graduate Academic Accommodation Policy and Procedure details are available at:

<https://www.eng.uwo.ca/graduate/current-students/academic-support-and-accommodations/index.html>

ACCESSIBLE EDUCATION WESTERN (AEW)

Western is committed to achieving barrier-free accessibility for all its members, including graduate students. As part of this commitment, Western provides a variety of services devoted to promoting, advocating, and accommodating persons with disabilities in their respective graduate program. Graduate students with disabilities (for example, chronic illnesses, mental health conditions, mobility impairments) are strongly encouraged to register with Accessible Education Western (AEW): http://academicsupport.uwo.ca/accessible_education/index.html

AEW is a confidential service designed to support graduate and undergraduate students through their academic program. With the appropriate documentation, the student will work with both AEW and their graduate programs (normally their Graduate Chair and/or Course instructor) to ensure that appropriate academic accommodations to program requirements are arranged. These accommodations include individual counselling, alternative formatted literature, accessible campus transportation, learning strategy instruction, writing exams and assistive technology instruction.