

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

**ELI 9600 – Engineering Communications**

**COURSE OUTLINE 2021-2022**

---

**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: TBD  
Office hours: By appointment

**COURSE FORMAT**

The course will be primarily delivered in face-to-face format. There may be occasional sessions that will be online, however, all students must be available to attend in person, on campus. Contingency plans are in place in the event public health guidelines require us to switch to online format.

**TOPICS**

*Please note the below table is tentative. A full course timetable will be released at start of term.*

Topic #	Description	Learning Activities	Tentative timeline
1	Foundations of Communication		
	Introduction and Emotional Intelligence	<ul style="list-style-type: none"> <li>• Class discussion</li> <li>• Class exercises</li> <li>• Additional Readings</li> <li>• Critical Reflection 1 assignment</li> <li>• Personal Communication Assessment (ungraded)</li> </ul>	Weeks 1-2
	Critical and Creative Thinking	<ul style="list-style-type: none"> <li>• Class discussion</li> <li>• Class exercises</li> <li>• Additional readings</li> </ul>	Week 2
	Beyond the Tip of the Iceberg – Intercultural Communication	<ul style="list-style-type: none"> <li>• Guest facilitator – Melanie-Anne Atikins, PhD, Acting Associate Director, Graduate Programs, Centre for Teaching and Learning</li> <li>• Class discussion</li> <li>• Class exercises</li> <li>• Additional readings</li> <li>• Critical Reflection 2 assignment</li> </ul>	Weeks 3-4
	Psychological Safety + Emotional Intelligence Revisited	<ul style="list-style-type: none"> <li>• Case discussion</li> <li>• Class exercises</li> <li>• Forum discussion</li> <li>• Additional readings</li> <li>• Critical Reflection 3 assignment</li> </ul>	Weeks 4-5 *note: there will be no synchronous class on Week 5, due to Thanksgiving Holiday
2	Making Connections		
	Collaboration and Teamwork	<ul style="list-style-type: none"> <li>• Case discussion</li> <li>• Class exercises</li> <li>• Additional readings</li> </ul>	Week 6

		<ul style="list-style-type: none"> <li>• Team Project assignment components</li> </ul>	
	Audience and Form + Critical Thinking in the Workplace (Critical Thinking Revisited)	<ul style="list-style-type: none"> <li>• Class exercises</li> <li>• Class discussion</li> <li>• Additional readings</li> <li>• Guest Lecturer – Chris Urbaniak, MAsc, P.Eng.</li> <li>• Team project assignment component</li> </ul>	Week 7
	Inspiring Understanding	<ul style="list-style-type: none"> <li>• Class exercises</li> <li>• Class discussion</li> <li>• Additional readings</li> <li>• Team Project assignment components</li> </ul>	Weeks 8-9
3	Career Development		
	Designing your Value + Recruitment Communication Strategies	<ul style="list-style-type: none"> <li>• Class exercises</li> <li>• Class discussion</li> <li>• Additional readings</li> </ul>	Weeks 9-10
	Interview Strategies + Conclusion	<ul style="list-style-type: none"> <li>• Class exercises</li> <li>• Quiz</li> <li>• Class discussion</li> <li>• Additional readings</li> <li>• Career Development project assignment</li> </ul>	Weeks 11-12

### SPECIFIC LEARNING OUTCOMES

Degree Level Expectations	Approx. Weight	Assessment Tools	Outcomes
Depth & Breadth of Knowledge	10%	<ul style="list-style-type: none"> <li>• Critical Reflections</li> <li>• Career Development Project</li> <li>• Team Project</li> </ul>	<ul style="list-style-type: none"> <li>• Use diverse communication methods, and practice related mindsets, to foster collaboration and achieve team goals</li> </ul>

Degree Level Expectations	Approx. Weight	Assessment Tools	Outcomes
		<ul style="list-style-type: none"> <li>• Participation and Community Contribution</li> </ul>	<ul style="list-style-type: none"> <li>• Identify and understand key course theories and themes related to engineering leadership and innovation communications</li> </ul>
Research & Scholarship	5%	<ul style="list-style-type: none"> <li>• Critical Reflections</li> <li>• Participation and Community Contribution</li> </ul>	<ul style="list-style-type: none"> <li>• Review and synthesize literature on best reporting and related communicating practices within engineering leadership and innovation</li> </ul>
Level of Application of Knowledge	15%	<ul style="list-style-type: none"> <li>• Critical Reflections</li> <li>• Career Development Project</li> <li>• Team Project</li> <li>• Participation and Community Contribution</li> <li>• Quiz</li> </ul>	<ul style="list-style-type: none"> <li>• Practice essential career management communication skills and rehearse techniques to enhance employability</li> <li>• Understand and articulate the role of emotional intelligence and critical and creative thinking in engineering communication, and apply related skills in a nuanced fashion</li> <li>• Practice ability to adapt and tailor communication to different individuals' needs, leveraging diverse communication methods and mindsets</li> </ul>
Professional Capacity / Autonomy	10%	<ul style="list-style-type: none"> <li>• Critical Reflections</li> <li>• Career Development Project</li> <li>• Team Project</li> <li>• Participation and Community Contribution</li> </ul>	<ul style="list-style-type: none"> <li>• Demonstrate the capability to work independently and take leadership</li> <li>• Build awareness and practice application of ethical communication strategies for developing a meaningful career</li> </ul>
Level of Communication Skills	50%	<ul style="list-style-type: none"> <li>• Critical Reflections</li> <li>• Career Development Project</li> <li>• Team Project</li> <li>• Participation and Community Contribution</li> <li>• Quiz</li> </ul>	<ul style="list-style-type: none"> <li>• Develop understanding of diverse rhetorical practices, and adapt relevant communication strategies intended to serve and reach specific audiences</li> <li>• Evaluate communication competencies and theories, and articulate evidence that supports a hypothesis and personal position related to said theories</li> </ul>

Degree Level Expectations	Approx. Weight	Assessment Tools	Outcomes
			<ul style="list-style-type: none"> <li>Synthesize information from research literatures on best communication practices for meaningful collaboration</li> </ul>
Awareness of Limits of Knowledge	10%	<ul style="list-style-type: none"> <li>Critical Reflections</li> <li>Career Development Project</li> <li>Team Project</li> <li>Participation and Community Contribution</li> </ul>	<ul style="list-style-type: none"> <li>Identify limits of understanding related to course concepts, and areas of growth within personal communication identity</li> <li>Demonstrate ability to develop communication skills that will support contingency planning in engineering leadership and innovation practice</li> </ul>

## ASSESSMENTS

*Please note further details will be finalized and provided at beginning of term.*

Assessment Type	Material Covered	Tentative Due Date	Weight
Participation in Class Activities	All	Throughout	10%
Community Contribution*	All	Throughout	10%
Critical Reflections (three)	Week 1, Week 3, Weeks 4/5,	Week 2, Week 3, Week 5	15%
Team Project <ul style="list-style-type: none"> <li>includes individual and team components</li> </ul>	Weeks 1-9	Throughout Weeks 6-9	25%
Quiz	Core: Weeks 9-11 Additional: Weeks 1-9	Week 11	10%
Career Development Project	Core: Weeks 9-11 Additional: Throughout	1 Week after Term	30%

### \*Community Contribution

Community Contribution aims to leverage the diverse skills, views, and abilities of the class cohort, to build a positive community of learning that honors the individual, yet encourages collaboration and appreciation for co-designing knowledge. Students can elect to contribute to the course community in a number of ways:

- Asynchronous participation in online forum discussion related to course theories and texts
- Creation of course resources. Examples include:
  - Creating an entry in the “ELI 9600 Dictionary,” a living compendium of definitions related to course content
  - Designing a mindmap that visualises the relationship between different course concepts

- Creating notes outlining synchronous class session discussion and outcomes
- Undertaking student-driven initiatives mutually agreed upon by student and instructor. This could range from organizing a course-related interview or virtual museum visit, writing a synopsis of a film documentary that relates to key course themes, or using one's unique skills and competencies to help build knowledge for the course community.

These contributions will be assessed for quantity *and* quality. Details forthcoming on OWL.

**Activities in which collaboration is permitted:**

- Case preparation – students are expected to work in small teams to analyze cases and to provide contribution to class.
- Class discussion, exercises, and activities – 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 project – students are expected to work in pre-assigned teams, and will collaborate on many of the assessment components, dedicated to creating a workshop lesson for an outreach community.
- Community Contribution – students may complete these individually or in collaboration with other students, but must discuss with instructor, and get pre-approval from instructor.

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

- Quiz
- Critical Reflections
- Career Development project
- Particular individual components of the Team Project (further details will be provided).

**REQUIRED TEXTBOOK**

- Ivey Publishing Course Pack (print copy or digital download copy instructions will be provided in class)
- Other required readings will be posted on OWL and discussed in class.

**OPTIONAL COURSE READINGS**

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

**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](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](mailto: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](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.