ENGL 191
Communication in the Engineering Profession
Comm in Eng (ENVE, GEOE)

Instructor: Jay Rawding
Email: jrawding@uwaterloo.ca
Course Meetings: Asynchronous
Office Hours: Tue 1:00-2:00 (EST), Thu 10:00-11:00 (EST) & by appointment (via video apps)

Course Description
In this course you will learn about effective written and oral communication competencies in contexts relevant to the engineering profession as well as to your future career. You will have the opportunity to shape these communication skills through exercises and assignments that help you address your target audience and examine the purpose of your communications. You will work individually and collaboratively to craft messages for internal and external audiences, including scientists, government stakeholders, communities, and the public at large. You will learn a variety of genres including technical reports, proposals, and presentations. This course will help you enhance your capacity to conduct research and report research findings, communicate ethically, and implement important change.

Learning Outcomes
Specifically, by the end of the course, you should be able to do the following:
1. design, draft, and persuasively deliver scientific communications to expert and non-expert audiences;
2. justify decisions about the language, content, and genre used when communicating scientific information;
3. practice peer review and collaboration in support of iterative communication design processes, including revision;
4. practice academic research processes to find, assess, document, incorporate, and cite research resources and communicate research findings;
5. describe and appraise the purposes and ethical concerns of science communication.

Required Textbook Reading
Various handouts, accessible via UW Learn.
Example of a Student’s Weekly Schedule (Monday to Sunday)
Monday     Watch the recorded lectures for the current week.
Tuesday    Read next week’s assigned readings (i.e. read book chapters prior to my lectures).
Wednesday  Work on homework activities or work on larger assignment.
Thursday   Watch for mid-week update announcement on LEARN.
Friday     Continue to work on activities or larger assignment.
Saturday   Complete quiz for next week’s readings (if applicable; there are 5).
Sunday     All work is due to LEARN on Sunday by 9 a.m. EST (Eastern Standard Time).

Assignment Overview (mini-assignments + 4 larger assignments)
Week 1 (ends Sunday, Sept 13)
   - Access instructor introductory video and watch in entirety.
   - Complete confirmation mini-assignments (see document “Activity Completions Week One”).
Week 2 (ends Sunday, Sept 20)
   - Read and respond to at least 3 other classmate posts at UW Learn Discussions.
   - Complete Gantt chart module and assignment.
Week 3 (ends Sept 27)
   - Narrowing a topic exercise.
   - Synchronous appointments with instructor.
Week 4 (ends Oct 4)
   - Library workshop and activity w/Kate Mercer (how to find and evaluate academic sources).
   - Post 3 minute video to UW Learn Discussions (#1A).
Week 5 (ends Oct 9)
   - Comment on other class videos (#1B).
Week 6 (Oct 10-Oct 18, READING WEEK)
Week 7 (ends Oct 25)
   - Submit written memo re: video (#1C).
Week 8 (ends Nov 1)
   - Annotated Bibliography rough draft (#2A).
   - Peer review of annotated bibliographies.
Week 9 (ends Nov 8)
   - Annotated Bibliography final draft due (#2B).
Week 10 (ends Nov 15)
   - Project proposal rough draft (#3A).
Week 11 (ends Nov 22)
   - Project proposal due in Dropbox (#3B).
Week 12 (ends Nov 29)
   - Post Reflection in Discussions plus comments.
Week 13 (ends Dec 6)
Week 14 (Dec 7)
   - Final technical report due December 7 (#4).
Course Assignments and Requirements

Participation and homework assignments 30%
[Quizzes, reflections, LEARN discussion posts, modules (Gantt charts, UW library)]

1. Video presentation [3 minutes] 15%
[3 parts: 1-video upload (Week 4); 2-comment on other videos (Week 5) + submit memo (Week 7)]

2. Annotated bibliography 15%

3. Project Proposal 20%

4. Final Technical report 20%

Work is due in UW Learn by 9:00 am EST (Eastern Standard Time) on Sundays.

Assignment Topics
You will develop an engineering-related problem of some kind that you want to address, and (ideally) you will complete your assignments throughout the term with that basic topic in mind. For instance, you will be creating a presentation and later a written proposal. These projects should anticipate the basic content of your final technical report.

You are free to change topics as the course progresses, but keep in mind that this course focuses on your ability to communicate certain ideas and problems to a variety of audiences. If you stick to a primary topic over the course of the term, this approach might help you keep your focus on the fundamentals of this course (i.e. genres, clarity/use of language, research, etc.).

Participation
For the purposes of this online course, attendance means: online participation on UW Learn and active engagement with the course textbook and the supplemental readings uploaded to LEARN. Everyone begins the term with a full participation grade. Participation marks are lost if UW Learn contributions are lacking or if constructive comments with respect to peer feedback exercises are lacking. You also need to complete each quiz before the announced deadline. Final participation marks operate on a principle of subtraction, so it is entirely possible to receive 0 out of 30 as a final participation mark.

Quizzes [Sep 20, Sep 27, Oct 25, Nov 1, Nov 8]
Throughout the term, I will upload five quizzes that cover certain chapters of the textbook. These quizzes will be multiple-choice (10 questions) and they will be posted to LEARN one week before their due date. You may retake the quizzes as often as necessary, until you receive a 10 out of 10. If you do not complete these quizzes, participation marks will be deducted accordingly.

You will create a pitch presentation or instructional video that explores or explains an issue or trend related to engineering. This video can be designed with a non-technical audience in mind. Try to get buy-in from your audience. Your content should be clearly understood by people who are not experts in your field. It will be a short video, so you will need a strategy for delivering the content efficiently and succinctly. After receiving peer feedback on your video, you will submit a memo about this process. An assignment sheet will be uploaded to UW Learn at a later date.

Annotated Bibliography [Nov 1 (draft) / Nov 8 (final version)]
You will research and write an annotated bibliography of at least 8 items, including at least 3 academic sources and other formal or informal sources. I will distribute an assignment sheet for this
exercise. Please note the 1st draft of your annotated bibliography is due Nov 1 and then you will have additional time to polish the document before submitting to Dropbox.

Proposal

[Nov 15 (draft) / Nov 22 (final version)]

You will write and submit a proposal that simulates the engineering proposal genre. A well-written proposal notifies your reader that there is a problem in need of a solution and indicates that you are providing a preliminary framework as to how – precisely how – you plan to tackle that problem. Your proposal will need to conform to the appropriate conventions of genre (see Chapter 8 of Graves & Graves). Your proposal will be in memo format/style. I will send a detailed description of this assignment. Keep the following categories in mind as you consider possible topics for your proposal: Introduction; Problem Statement/Background; Methods & Procedures; Qualifications & Resources; Budget (if applicable); Work Schedule; Conclusion; Appendix.

Final Technical Report

[Dec 7 (Monday)]

You will write and submit a technical report. The target audience for this report will be technical stakeholders including fellow engineering professionals. The report will include a summary concerning a problem, and it will explain why the problem merits attention. You will support the report with credible, reliable sources. You will also include potential recommendations on how this problem might be addressed, and present arguments on the merits of your potential solutions.

In advance of the submission of your report, you will exchange a draft of your work with your peers. The final report itself, however, is necessarily an individual submission. In other words, you will be personally researching your subject, presenting your unique arguments, and writing your own report. More details concerning the parameters of the report will be provided later in the term.

Late or Missing Assignments

For Fall 2020 term, I will be able to accommodate late student assignments as long as they are submitted within a 24-hour window. Assignments that arrive more than 24 hours late require the student to consult with me. Within reason, I sometimes consider extensions but only if they are requested 48 hours before the designated deadline.

Please note that some of the formal assignments for this course are uniquely designed and will require you to bring a draft to class prior to the final due date. So it is important to honour the pre-deadlines as much as the final deadlines.

Regardless of your overall average mark in the class, you must turn in all assignments to pass the class. In other words: even if you have received high marks on all previous assignments as we head into the final week of class, you still have to hand in the final report assignment (even though it is only worth 20% of the overall grade).

Academic Honesty

All work in this course must be original work of the student or students submitting the assignments. Additionally, all use of sources must be documented correctly using IEEE citation format. See the UWaterloo Academic Integrity webpage and the Arts Academic Integrity webpage for more information on policies, procedures, and student responsibilities, including consequences for deliberate or accidental plagiarism.
# Course Schedule

<table>
<thead>
<tr>
<th>Week</th>
<th>Subject</th>
<th>Readings</th>
<th>Assignments</th>
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<tbody>
<tr>
<td>Week 1, Sept 8</td>
<td>Introduction and Syllabus</td>
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<td>Due Sept 13: get the textbook; read Chapter 1; response video due in Dropbox; post intro to class LEARN Discussions</td>
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<td>Week 2 Sep 14</td>
<td>Audience, Purpose, Genre Conventions</td>
<td>Ch. 1</td>
<td>Due Sept 20: Quiz # 1 (Ch. 1 &amp; Ch. 2); complete Gantt chart module and exercise</td>
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<td>Week 3 Sept 21</td>
<td>Ethics; Plagiarism, Citation, Copyright, ‘Tech for Good’</td>
<td>Ch. 2; LEARN readings: “Tech for Good,” Tufekci, “Ami vs Overwatch” (video); 3MT videos</td>
<td>Due Sept 27: Quiz # 2 (Ch. 3); Exercise: Narrowing your topic</td>
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<td>Week 4 Sept 28</td>
<td>Researching Technical Subjects / Using Library Resources / IEEE / databases</td>
<td>Ch. 3 (pp. 88-94), LEARN readings: IEEE citation style guide</td>
<td>Due Oct. 4: complete LEARN module from Library Staff; upload video presentation to LEARN Discussions (#1A)</td>
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<td>Week 5 Oct 5</td>
<td>Researching continued, Writing Technical Prose; Presenting Technical Info Orally</td>
<td>Ch. 4 and 13</td>
<td>Comment on other student videos before end of week (#1B)</td>
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<td>Week 6 Oct 12</td>
<td><strong>READING WEEK</strong> (no ENGL 191 class)</td>
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<td>Week 7 Oct 19</td>
<td>Ch. 4 and 13 continued</td>
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<td>Due Oct. 25: Quiz # 3 (Ch. 4 &amp; 13); video presentation reflection memo (#1C)</td>
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<td>Week 8 Oct 26</td>
<td>Ch. 4 and 13 continued; LEARN documents</td>
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<td>Due Nov. 1: Quiz # 4 (Ch. 8); Annotated Bibliography (draft) (#2A) + peer review</td>
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<td>Week 9 Nov 2</td>
<td>Writing Winning Proposals</td>
<td>Ch. 8</td>
<td>Due Nov. 8: Quiz # 5 (Ch. 10); Annotated Bibliography final draft (#2B)</td>
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<td>Week 10 Nov 9</td>
<td>Writing How-To Documents, Using Multimedia</td>
<td>Ch. 10</td>
<td>Due Nov. 15: Project Proposal (draft) (#3A)</td>
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<td>Week 11 Nov 16</td>
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<td></td>
<td>Due Nov. 15: Project proposal (final) (#3B)</td>
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<td>Week 12 Nov 23</td>
<td>Designing Documents and Page Layout</td>
<td>Ch. 5; LEARN documents</td>
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<td>Week 13 Nov 30</td>
<td>Using Visuals To Communicate Bar/Pie</td>
<td>Ch. 6</td>
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<td>Week 14 Dec 7</td>
<td>Wrap-up lecture</td>
<td></td>
<td>Due Dec. 7 (Monday): Final Technical Report (#4)</td>
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This course:
- requires you to keep on top of all reading. Trust that your thoughts & ideas do matter.
- is reading/writing intensive. Grammatically correct, polished writing in English is a prerequisite.
- depends on your enthusiastic participation & completion of all assignments.

Expectations: My weekly videos/Powerpoints supplement the reading material. You must watch all videos/Powerpoints AND read all assigned chapters.
- Be engaged – actively participate – keep your focus on the class.
- Be alert & engaged when reading our course material. Highlight passages of interest!
- While reading chapters and watching weekly videos/Powerpoints, avoid navigating away from the course content, just as you would if we were physically in the classroom.
- Refer back to this syllabus throughout the term for information. “I wasn’t aware” or “I forgot” should not come into play. There is a great deal of practical content included in this syllabus. Keep coming back to the syllabus as an important point of reference.
- Use my office hours… even when assignments are not due!

Correspondence: E-mails to me should be used for brief queries. As a courtesy to me, any and all respectful e-mails you send should have a subject field that begins with: ENGL 191: so I can filter and file them properly. Please send e-mails to me from your uwaterloo e-mail account. I should not have to decide if it is safe to open something sent from a questionable e-mail address. I respond to e-mails in a timely fashion, but I cannot promise a fixed hourly/day turnaround. If you haven’t heard back from me after 36 hours, send a second email or try to contact me in the Ask the Prof section of LEARN (i.e. I may not have gotten your e-mail).

Some suggestions for participating in active, close readings:
- Unplug when reading. In other words, read the material without intermittently bouncing back to an LCD screen (that is, unless you’re perhaps typing up some notes about that text). You’ll find the work and your concentration will benefit immensely.
- Reread passages that are confusing or that do not seem to make sense.
- Practice some sort of process of “Ok stop.” This is when you stop yourself from rushing quickly through a text. Look up words you do not recognize. A vital way to get a handle on a text is to make sure you are comfortable with its vocabulary!
- Keep a pencil at the standby. Let your book get messy. This isn’t a Bible or a sacred text. You can underline words, sentences, or paragraphs. Draw pictures if you want. Do whatever it takes to bridge that divide between text as ‘out there’ and you.
- If relevant, feel free to independently create a thread in UW Learn and share your questions/ideas with the rest of the class.

University Policies:
Student Emergencies: Unavoidable absences should be communicated to me as soon as possible.

Instructor Emergencies: Please note that your instructor may also encounter health or family emergencies, and will always communicate any changes or issues to you as soon as possible. Refer to LEARN announcements that appear at log-in prompt.

Academic Integrity: In order to maintain a culture of academic integrity, members of the University of Waterloo are expected to promote honesty, trust, fairness, respect and responsibility. Please refer to the Office of Academic Integrity for more information.
**Discipline:** A student is expected to know what constitutes academic integrity, to avoid committing academic offences, and to take responsibility for his/her actions. Check the Office of Academic Integrity for more information. A student who is unsure whether an action constitutes an offence, or who needs help in learning how to avoid offences (e.g., plagiarism, cheating) or about “rules” for group work/collaboration should seek guidance from the course professor, academic advisor, or the Undergraduate Associate Dean. For typical penalties, check Guidelines for the Assessments of Penalties. For information on categories of offenses and types of penalties, students should refer to Policy 71 – Student Discipline, http://www.adm.uwaterloo.ca/infosec/Policies/policy71.htm.

**Grievance:** A student who believes that a decision affecting some aspect of his/her university life has been unfair or unreasonable may have grounds for initiating a grievance. Read Policy 70 - Student Petitions and Grievances, Section 4, http://www.adm.uwaterloo.ca/infosec/Policies/policy70.htm. When in doubt, please be certain to contact the department’s administrative assistant who will provide further assistance.

**Appeals:** A student may appeal the finding and/or penalty in a decision made under Policy 70 - Student Petitions and Grievances (other than regarding a petition) or Policy 71 - Student Discipline if a ground for an appeal can be established. Read Policy 72 - Student Appeals, http://www.adm.uwaterloo.ca/infosec/Policies/policy72.htm.

**Note for students with disabilities:** AccessAbility Services, located in Needles Hall, Room 1401, collaborates with all academic departments to arrange appropriate accommodations for students with disabilities without compromising the academic integrity of the curriculum. If you require academic accommodations to lessen the impact of your disability, please register with AccessAbility Services at the beginning of each academic term.

**Turnitin.com:** Text matching software (Turnitin®) may be used to screen assignments in this course. Turnitin® is used to verify that all materials and sources in assignments are documented. Students' submissions are stored on a U.S. server, therefore students will be given an alternative, if they are concerned about their privacy and/or security. Students will be given due notice, in the first week of the term and/or at the time assignment details are provided, about arrangements and alternatives for the use of Turnitin in this course. It is the responsibility of the student to notify the instructor if they, in the first week of term or at the time assignment details are provided, wish to submit an alternate assignment.

**Writing and Communication Centre:** The Writing and Communication Centre works with students as they develop their ideas, draft their work, and revise their work. Writing and communication specialists offer one-on-one support on all aspects of this course, and you can make multiple appointments during the term, or drop in at the libraries for quick questions and feedback. Specialists can even help with presentations. Please see their website to schedule appointments, and note that you can schedule group appointments for our team-based projects, presentations, and papers.

**Writing Centre Workshops:** These are highly recommended and it’s simple to register electronically.

**The Student Success Office:** The Student Success Office provides academic and personal development services, resources for international students, and study abroad and exchange support. You can find more information on their webpage.