ENGL 192
Communication in the Engineering Profession
Comm in Eng (COMPE, ELE, MGTE)

Instructor: Jay Rawding
Class hours and location: Section 05: Tuesday & Thursday; 1:00-2:20, E5 4128
Email: jrawding@uwaterloo.ca
Office hours: M: 4:30-5:30; F:12-1 (PAS 1059), Tu & Th: 2:20-3 (outside E5 4128) & by appointment
Office location: PAS 1059 (PAS = Psychology, Anthropology & Sociology) (Ground Floor).

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 research reports, proposals, public talks, and instruction manuals. Overall, 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 collaboration and peer review in support of iterative communication design processes, including revision;
4. practice 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.
Course Assignments and Requirements

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Participation, including 5 quizzes</td>
<td>10%</td>
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<tr>
<td>Instructional video [team of 3, 2-3 minutes]</td>
<td>15%</td>
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<tr>
<td>Non-technical presentation [5 minutes]</td>
<td>15%</td>
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<tr>
<td>Annotated bibliography</td>
<td>10%</td>
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<tr>
<td>Proposal [4 pages, plus annotated bibliography]</td>
<td>20%</td>
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<tr>
<td>Final Technical Report [4 pages, plus appendix]</td>
<td>20%</td>
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<tr>
<td>Reflections (5)/Reflection portfolio</td>
<td>10%</td>
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If for any reason this syllabus needs to be updated, I will advise the class via e-mail, as well as on LEARN, as well as in class, about any changes made.

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, one of the assignments is a written proposal. That proposal 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. Keeping to a primary topic over the course of the term might help you keep your focus on the fundamentals of this course (i.e. genres, clarity/use of language, research, etc.). Time permitting, I will also allocate some in-class time for “brainstorming” (ex: topics, ideas, potential areas of interest).

Participation
From now until the end of the term, attendance at all classes is mandatory. For the purposes of this course, attendance means: in-class participation, online participation on UW Learn, active engagement with the course textbook and the supplemental readings uploaded to LEARN. Everyone begins the term with a participation grade of 10 out of 10. I allow for a brief ‘settling in’ period at the beginning of the semester to permit sorting out of schedules; however, once I begin to take attendance, you lose participation marks for: classes missed; failure to participate in team exercises; lack of activity on UW Learn; and insufficient constructive comments with respect to peer feedback exercises. Final participation marks operate on a principle of subtraction, so it is entirely possible to receive 0 out of 10 as a final mark.

Quizzes [Sep 19, Sep 26, Oct 3, Oct 31, Nov 12]
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 necessary, until you receive a 10 out of 10. If you do not complete these quizzes, contribution marks will be deducted accordingly.

Instructional Video / Team Project / Write-up (1 pg) [Oct 8]
You will create an instructional video that explains an issue or trend related to engineering. This video should be designed with a non-technical audience in mind. It will be a short video, so you will need a strategy for delivering the content efficiently and succinctly. At the end of class, your team will also submit a 1 page write-up (technical manual, abstract, or memo). An assignment sheet will be distributed at a later date.
Annotated bibliography [Oct 24]
You will put together an annotated bibliography of at least 8 items, including at least 3 academic sources and other formal or informal sources. This task replaces your class time during midterm week. I will be distributing an assignment sheet for this exercise.

Non-technical Presentation [Nov 7]
You will deliver an oral presentation in front of the class. This will be a short presentation (no more than 5 minutes). You will imagine that your target audience has limited or minimal technical expertise. The presentation may also be delivered as a pitch (this is good practice in terms of attempting to get buy-in from your audience). Just remember that your content has to be clearly understood by people who are not experts in your field.

Proposal [Nov 14/15]
You will write and submit a proposal in November in advance of a final technical report.

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 more detailed description of this assignment in the next few weeks, but for now 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.

After you have submitted your proposal in Dropbox, I will send an e-mail back to you with personalized feedback that has been recorded orally in MP3 format. It is possible that I will ask you to revise and resubmit your proposal. I will also be available during office hours if you would like to discuss my feedback.

Final Technical Report [Dec 3]
You will write and submit a technical report at the end of term. 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 have the opportunity to exchange drafts 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 in the second half of the term.

You will submit to the online Dropbox a brief response by noon (12 pm) the day it is due on the schedule. I will read the responses and respond with a comment.

You will be expected to:
- treat the assignment seriously and with consideration
- meet the minimum length (300 words)
- demonstrate skill in writing technical prose (grammar, sentence structure, etc).
Portfolio. At the end of the course, you will compile your 5 reflections into a retrospective portfolio that will be due at the beginning of exam week. I will be sending out an assignment sheet for the reflection portfolio that will have more details.

Late or Missing Assignments
Late assignments will not be accepted. By design, some of the formal assignments for this course will require you to bring a draft to class prior to the final due date, so it is also important to honour the pre-deadlines as much as the final deadlines. In the event that an assignment is not submitted on time, 5% will be deducted per day. If an extension is absolutely required, you must contact me no later than 48 hours prior to the due date.

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 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.

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Reflection #1: please reply to the following by 12 pm, Sept 12:

Discuss some of the reasons you are embarking on the Electrical and Computer Engineering track. Why does ECE appeal to you?
Also, since this course addresses communication in the engineering profession: what are some desired outcomes you have for this course?

Submit your 300 word reflection into Dropbox.
## Course Schedule

<table>
<thead>
<tr>
<th>Tues / Thurs</th>
<th>Subject</th>
<th>Readings (Before Class)</th>
<th>Assignments</th>
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<tbody>
<tr>
<td>1st Class, Sept 5</td>
<td>Introductions and Syllabus</td>
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<tr>
<td>Week 1 Sep 10</td>
<td>Audience, Purpose, Genre Conventions</td>
<td>Ch. 1</td>
<td>Get the textbook</td>
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<tr>
<td>Week 1 Sept 12</td>
<td></td>
<td>Ch. 1 continued; Ch. 2</td>
<td>Reflection # 1 due in Dropbox</td>
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<tr>
<td>Week 2 Sept 17</td>
<td>Dealing w/Change <em>(ECE Wellness)</em></td>
<td><em>(no ENGL 192 class)</em></td>
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<tr>
<td>Week 2 Sept 19</td>
<td>Ethics, Plagiarism, Citation, Copyright, ‘Tech for Good’</td>
<td>Ch 2; LEARN readings: “Tech for Good,” Tufekci, “Ami vs Overwatch” (video)</td>
<td>Quiz # 1 (Ch. 1 &amp; Ch. 2), Team pairings for instructional video</td>
</tr>
<tr>
<td>Week 3 Sept 24</td>
<td>Time Management <em>(ECE Wellness)</em></td>
<td><em>(no ENGL 192 class)</em></td>
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<tr>
<td>Week 3 Sept 26</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>Quiz # 2 (Ch. 3), Visit from Library Staff.</td>
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<tr>
<td>Week 4 Oct 1</td>
<td>General Wellness Talk <em>(ECE Wellness)</em></td>
<td><em>(no ENGL 192 class)</em></td>
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<tr>
<td>Week 4 Oct 3</td>
<td>Research Discussion continued, Writing How-To Documents, Using Multimedia</td>
<td>Ch. 10</td>
<td>Quiz # 3 (Ch. 10), Instructional Video Presentations (text drafts due)</td>
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<tr>
<td>Week 5 Oct 8</td>
<td></td>
<td>Ch. 10 continued</td>
<td>Instructional Video Presentations</td>
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<tr>
<td>Week 5 Oct 10</td>
<td>Midterms</td>
<td><em>(no ENGL 192 class)</em></td>
<td>Work on Annotated Bibliography, Reflection # 2 due In Dropbox</td>
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<tr>
<td>Week 6 Oct 15</td>
<td>READING WEEK</td>
<td><em>(no ENGL 192 class)</em></td>
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<tr>
<td>Week 6 Oct 17</td>
<td>READING WEEK</td>
<td><em>(no ENGL 192 class)</em></td>
<td></td>
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<tr>
<td>Week 7 Oct 22</td>
<td>Midterms</td>
<td><em>(no ENGL 192 class)</em></td>
<td>Work on Annotated Bibliography</td>
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<tr>
<td>Week 7 Oct 24</td>
<td>Writing Technical Prose</td>
<td>Ch. 4; LEARN documents</td>
<td>Annotated Bibliography due by 1pm to LEARN, bring a hard copy of Annotated Bibliography to class</td>
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<tr>
<td>Week 8 Oct 29</td>
<td></td>
<td>Ch. 4 continued</td>
<td>Reflection # 3 due before class to Learn</td>
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<tr>
<td>Week 8 Oct 31</td>
<td>Presenting Technical Info Orally</td>
<td>Ch. 13</td>
<td>Quiz # 4 (Ch. 13)</td>
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<tr>
<td>Week</td>
<td>Date</td>
<td>Ch.</td>
<td>Topic</td>
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<tr>
<td>9</td>
<td>Nov 5</td>
<td>13</td>
<td>Ch. 13 continued</td>
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<td>9</td>
<td>Nov 7</td>
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<tr>
<td>10</td>
<td>Nov 12</td>
<td></td>
<td>Writing Winning Proposals</td>
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<tr>
<td>11</td>
<td>Nov 19</td>
<td></td>
<td>Ch. 9 continued</td>
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<tr>
<td>11</td>
<td>Nov 21</td>
<td></td>
<td>Designing Documents and Page Layout</td>
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<tr>
<td>12</td>
<td>Nov 26</td>
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<td>Using Visuals To Communicate Bar/Pie Charts</td>
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<tr>
<td>12</td>
<td>Nov 28</td>
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<td>Final Report Workshop</td>
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<tr>
<td>13</td>
<td>Dec 3</td>
<td></td>
<td>Wrap-Up. Attendance is mandatory.</td>
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<tr>
<td>Exam</td>
<td>Week</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.

**Note:** If you are not Fees Arranged, you may not have access to UW Learn website until you have spoken with Student Finances. Test that you have full UW Learn access as soon as possible.

**Expectations:** Classes supplement the reading material. You are expected to attend each and every Tuesday and Thursday class. I honour the start and end times of class.
- Come to class on time. If you are late, you will have to catch up. If you are late, enter the classroom as quietly as possible. The same applies if you must leave early for another appointment. Be stealthy in your ninja-like silent backpacking skills.
- Be engaged – actively participate – keep your focus on the class.
- **Talking during designated discussion times is appropriate and encouraged; talking to others at inappropriate times, or interrupting someone who is speaking, is prohibited.** Please do not make me ask you to stop side conversations.
- **Bring the textbook to class.**
- Be alert & engaged when reading our course material. Highlight passages of interest!
- Turn off cellphones, laptops, and electronic devices in class. E-mailing, texting, watching video(s), and checking/surfing/updating social media sites are **not** permitted during class. If the temptation to surf in class is too overwhelming for you, then do not enter the classroom. Our class time is dedicated to the exchange of ideas aloud and the verbal expressions of our thoughts in an engaged manner.
- 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 these pages as important points 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 192:** 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. **Yes, you have access to your uwaterloo e-mail account.** 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 via reply, double-check with me in class (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 story). 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 story. 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 follow up a thread from a story and then share your findings with the rest of the class (most likely via UW Learn).

**University Policies:**

**Emergencies:** In the event of a campus emergency or closure (including inclement weather), deadlines and course requirements will be delayed. The instructor will communicate all such changes via e-mail, and on LEARN (if applicable). Additionally, grading percentages and deadlines are themselves subject to change during the semester if necessitated by changing circumstances. A revised calendar and syllabus will be posted to LEARN if needed. You are responsible for reading all LEARN “News” posts and reading your uwaterloo.ca email so that you will be aware of changes.

**Student Emergencies:** Unavoidable absences should be communicated to me as soon as possible, as well as to your teammates, if you will be missing a class that requires participation in a group.

**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 when they 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](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](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](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.