Instructor
Instructor: Jennifer Clary-Lemon
Office Hours: T, Th 1:00-3:00p, and by appointment through Zoom. Please schedule at calendly.com/jclarylemon/office-hours, or email me for an appointment time.
Email: jclarylemon@uwaterloo.ca

Note: I respond to emails from M-F and try to take a break on the weekend. If you email me on the weekend, please be prepared to wait until Monday for a response. Please see the “What does a week look like in an online class” document for more information about communication and feedback.

In this class, held at the University of Waterloo, we acknowledge that we are connected to the traditional territory of the Attawandaron (also known as Neutral), Anishinaabe and Haudenosaunee peoples. The University of Waterloo is situated on the Haldimand Tract, the land promised to the Six Nations that includes ten kilometres on each side of the Grand River.

Course Description
Normally, we would be meeting face to face to talk about communicating in the Life Sciences. This is a very abnormal year, so I want to recognize that we are all showing up to class in ways that may be other than optimal and facing limitations: access to reliable internet, time zone issues, access to quiet space to read and work, and various emotional and health barriers to our best selves. Many of you are not quite experiencing the first year that you had hoped to! Please know that I am happy to work with you if and as you might face these or other difficulties. The best way for me to get to know you is by Zoom call.

In this course you will learn about effective written, oral, and visual communication in the life sciences. You will have the opportunity to shape these communication skills through iterative design processes that emphasize attention to your audience, the purpose of your communications, and student agency. You will work individually and collaboratively to understand and craft messages for internal and external audiences, including scientists, government stakeholders, affected communities, or broader publics. You will learn about a variety of genres while enhancing your capacity to conduct research and report research findings, communicate ethically, and thereby effect important change.

Course Goals and Learning Outcomes
Upon completion of this course, students should be able to:

• design, draft, and persuasively deliver scientific communications to expert and non-expert audiences;
• justify decisions about the language, content, and genre used when communicating scientific information;
• practice collaboration and peer review in support of iterative communication design processes, including revision;
• practice research processes to find, assess, document, incorporate, and cite research resources and communicate research findings;
• describe and appraise the purposes and ethical concerns of science communication.

Required Text and software
• Online readings. See course LEARN site.
• A Zoom account. Sign up for free at https://zoom.us

Course Requirements and Assessment
Information on course requirements and assessments.

<table>
<thead>
<tr>
<th>Assessment</th>
<th>Date of Evaluation</th>
<th>Weighting</th>
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</thead>
<tbody>
<tr>
<td>Summary</td>
<td>October 9</td>
<td>5%</td>
</tr>
<tr>
<td>Science and Ethics</td>
<td>November 8</td>
<td>20%</td>
</tr>
<tr>
<td>Public Understanding of Science Assignment</td>
<td>December 7</td>
<td>25%</td>
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<tr>
<td>Public Understanding of Science Zoom 3MT</td>
<td>December 4</td>
<td>20%</td>
</tr>
<tr>
<td>Presentation</td>
<td>various</td>
<td>20%</td>
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<tr>
<td>Peer reviews (3)</td>
<td>various</td>
<td>10%</td>
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Total 100%

Summary (5%)
You will write a 250-word summary of an article that we read in class in order to familiarize yourself with the conventions of this important academic skill.

Science and Ethics: RetractionWatch (20%)
For this assignment, you will rhetorically analyze one of the top 10 most highly cited retracted papers on retractionwatch.com. Your analysis will focus on an examination of the science itself (logos), scientific ethos, and the reception by the scientific (and other) community over time (pathos). In 4 pages, you will examine the context for the retraction by emphasizing scientific ethics, speculating on why you think this paper continues to be cited despite its retraction.

Public Understanding of Science Assignment (25%)
This assignment is based on exploring Public Understandings of Science (PUS), which often present science communication as a one-way model from scientist to citizen, and Critical Understandings of Science in Public (CUSP), which notes science’s uncertainties, practices, biases, and ethics. You will locate an original version of a scientific report and at least two popular press articles (1 blog post or podcast is also acceptable) that take up its findings of a contemporary scientific phenomenon. You will
place the three pieces in context, taking a critical view by analyzing their use of accurate raw science content, the framing of that content, and who benefits and suffers from the science as presented.

**Public Understanding of Science Zoom Presentation (20%)**
You will develop a visual and presentation for a 3-minute-thesis (3MT) style presentation using Zoom videoconferencing software. You will present three minutes on your main findings of your Public Understandings of Science Assignment.

**Weekly Activities and Discussion Board Posts (20%)**
We will often complete individual and collaborative activities in class that engage with our course readings. These might be discussion board posts, creation of short videos, quick responses to course readings, turning in drafts, or other activities that hone the skills of close reading, invention, summarizing, and paraphrasing.

**Peer Review (10%)**
Because the main component of this course is writing, a large part of it is devoted to respecting and keeping track of writing processes: drafts, notes, ideas, feedback. When we workshop writing in class, you act as a willing and prepared reviewer of other writers’ work. This means that on peer review days, you meet draft posting deadlines and show up ready to act as a thoughtful reader and commenter of your peers’ work.

**Weekly Activities, Peer Review, and Grading**
Writing-to-learn activities that we complete in class are process oriented, which means you learn from the activity rather than from me assigning a letter grade based on a finished product. As such, if a post or response is **thoughtful** and **complete**, you will receive a 10/10.

A **“thoughtful”** post is one that answers the prompt clearly and concisely, making specific reference to what is being asked and providing a full account of answering to it. A thoughtful post is specific, making references to passages in the course text, examples from everyday life or relevant experience, or other popular or cultural references (i.e., news, blogs, social media). If you are using sources to support your response, they will be cited in APA style. Thoughtful posts observe writing conventions: capitalization, punctuation, spelling, grammar.

A **“thoughtful”** response to a peer is one that shows connection to the writer that one is responding to. This connection is made by not only acknowledging the writer’s point, but adding to it in a meaningful way that extends and expands the view of what has been posted. Thoughtful responses observe writing conventions: capitalization, punctuation, spelling, grammar.

**“Complete”** posts and responses meet the minimum word requirement as asked, do so in a way that purposeful (i.e., are showing critical thinking rather than filling space to meet a requirement), and are posted on time.
Careless and/or incomplete posts and responses may be late, off-topic, ignore what is being asked, simply agree or disagree in response to another writer, write responses that have little to do with the course, or not fulfill the minimum word requirement. Careless posts and responses disregard writing conventions. The highest a careless/incomplete post or response will receive is 5/10. Late posts and responses will receive 0/10.

For activities that involve more sophisticated learning-to-write activities when there is more attention paid to format and polishing the product, you will receive a percentage grade out of 10 points. Peer Reviews will similarly be out of 10 points, with full credit being given for not only participating in peer review, but using the feedback gathered during peer review to revise your draft towards a polished final product. For final papers, you will receive a numeric grade out of 100.

Late Work
Late assignments will not be accepted without an extension. Permission to turn in a late assignment without penalty will be given rarely and only based on a videoconference with me, and never on the day the assignment is due. If you are having trouble completing an assignment, please speak with me.

Attendance Policy
It is essential that you attend each class. By “attend” it is meant that you post regularly and on time, having read the course material for the week and being ready to engage with it.

Basic Needs
Any student who has difficulty affording groceries or accessing sufficient food to eat every day, or who lacks a safe and stable place to live, and believes this may affect their performance in the course, is urged to contact the Dean of students in their faculty for support. Furthermore, please notify the professor if you are comfortable in doing so.

Institutional-required statements for undergraduate course outlines approved by Senate Undergraduate Council, April 14, 2009

Cross-listed course
Please note that a cross-listed course will count in all respective averages no matter under which rubric it has been taken. For example, a PHIL/PSCI cross-list will count in a Philosophy major average, even if the course was taken under the Political Science rubric.

Academic Integrity

*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.

*Discipline*: A student is expected to know what constitutes academic integrity, to avoid committing academic offences, and to take responsibility for his/her actions. 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. When misconduct has been found
to have occurred, disciplinary penalties will be imposed under Policy 71 – Student Discipline. For information on categories of offenses and types of penalties, students should refer to Policy 71 - Student Discipline.

**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.

**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.

Other sources of information for students

Academic integrity (Arts) Academic Integrity Office (uWaterloo)

Accommodation for Students with Disabilities

**Note for students with disabilities:** The AccessAbility Services office, located in Needles Hall Room 1132, 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 the AS office at the beginning of each academic term.