

ENVS*6502 - Seminar in Environmental Science

Winter 2026 Course Outline

Section: 01

Credits: 0.50

Land Acknowledgement: Guelph

The University of Guelph resides on the ancestral lands of the Attawandaron people and the treaty lands and territory of the Mississaugas of the Credit. We recognize the significance of the Dish with One Spoon Covenant to this land and offer respect to our Anishinaabe, Haudenosaunee and Métis neighbours. Today, this gathering place is home to many First Nations, Inuit, and Métis peoples and acknowledging them reminds us of our important connection to this land where we work and learn.

Calendar Description

This course will provide an interactive and critical forum for students to participate in an advanced discussion and debate on current environmental issues, and to learn about the practical skill set(s) required by various employment sectors in solving these issues.

Restriction(s): Restricted to Master of Environmental Science students.

Department(s): School of Environmental Sciences

Lecture Schedule

Fri 11:30am-2:20pm in MINS*037 (1/5 to 4/21)

Instructor Information

Marc Habash

Email: mhabash@uoguelph.ca

Simone Haerri

Email: shaerri@uoguelph.ca

Additional Support

Communicating with Your Instructors

During the course, your instructors will interact with you on various course matters on the ENVS*6502 Counselink website using the following ways of communication:

- **Announcements:** The instructor will use Announcements on the Course Home page to provide you with course reminders and updates. Please check this section frequently for course updates from your instructor.
- **Ask Your Instructor Discussion Thread:** Use this Counselink discussion forum to ask questions of your instructor about content or course-related issues with which you are unfamiliar. If you encounter difficulties, the instructor is here to help you. Please post general course-related questions to the discussion forum so that all students have an opportunity to review the response. To access this discussion forum, select Discussions from the Tools dropdown menu. If the instructor does not respond to your question within 24 hours, do send an email to the instructor indicating a question is pending in Discussions.
- **Email:** If you have a conflict that prevents you from completing course requirements or have a question concerning a personal matter, you can send your instructor a private message by email. The instructor will attempt to respond to your email within 24 hours.
- **In-person meeting or Video Call:** If you have a complex question you would like to discuss with your instructor, you may book an in-person meeting or video meeting on Zoom (or alternate platform being used by your instructor). In-person or video meetings depend on availability and are booked on a first come first served basis.

Textbooks

Group	Title	Author	ISBN
Recommended	How to Lead a Discussion of Scientific Journal Articles	Baum, J.K.	
Recommended	Practical discussion techniques for instructors	Rasmussen, R.V.	
Recommended	Eloquent Science: A Practical Guide to Becoming a Better Writer, Speaker, & Atmospheric Scientist	Schultz, D. M.	
Recommended	Chapter 8: The writing process: How do I begin?	McLean, S.	

Learning Resources

Required Resources

Course Website

CourseLink (powered by D2L's Brightspace) is the course website and will act as your classroom. It is recommended that you log in to your course website every day to check for announcements, access course materials, and review the weekly schedule and assignment requirements.

URL: <https://courselink.uoguelph.ca/shared/login/login.html>

Course Resources

The textbooks listed above provide background materials on oral and written communication skills for communicating science topics. There are other resources outlining understanding the components of a scientific article. They are all available on the course website on Courselink.

Campus Resources

If you are concerned about any aspect of your academic program: Make an appointment with a Program Counsellor (<https://www.uoguelph.ca/uaic/programcounsellors/>) in your degree program. If you are struggling to succeed academically: There are numerous academic resources offered by the Learning Commons (<https://www.lib.uoguelph.ca/using-library/spaces/learning-commons/>) including, Supported Learning Groups for a variety of courses, workshops related to time management, taking multiple choice exams, and general study skills.

Cost of Textbooks and Learning Resources

Textbook / Learning Resource	Required / Recommended	Cost
How to lead a discussion of a scientific journal	Recommended	No cost
Practical discussion techniques for instructors	Recommended	No cost
Eloquent science: A practical guide to becoming a better writer, speaker, & atmospheric scientist	Recommended	No cost
Chapter 8: The writing process: How do I begin	Recommended	No cost

Students are advised that prices are often determined by the publisher or bookstore and may be subject to change.

Course Level Learning Outcomes

By the end of this course, you should be able to:

1. Use online resources to effectively consult the scientific literature in environmental sciences
2. Analyze issues in environmental science and key concepts therein through a targeted review of the scientific literature
3. Differentiate a broad range of perspectives on environmental issues through readings, class activities and discussions
4. Deliver effective oral and written reports communicating the essential elements of environmental science

Open Text Field

Teaching and Learning Activities

Method of Learning

The primary goal of this student-centred course is to train students to think critically and independently about the complex nature of modern-day environmental issues and to provide them with an opportunity to effectively communicate this understanding to their peers and (by extension) the general public.

The course is offered as a seminar to allow for development and refinement of oral and written communication skills in topics of environmental science. The duration of the course will be dedicated to discussions of diverse topics in environmental sciences, chosen and led by students. The use and assessment of the scientific literature will form the foundation of these discussions. Students will communicate in different formats including conference presentation and debate format.

Schedule of Topics and Assignments

Day	Date:	Topic	Activities	Due
Fri	1/9	Course introduction		
Fri	1/16	Part 1: IDP discussion - Kim Bolton Part 2: Analysis of a scientific paper - Marc Habash Part 3: Presentation advice - Simone Haerri		Due Jan. 19: Submit scientific paper for Conference Presentation to instructors
Fri	1/23	Part 1: Activity - Complexity of environmental problems, perspectives of different stakeholders		
Fri	1/30	Part 1: Class time to work on 1-pager for conference section		Due Jan. 30: Submit Critique of a Scientific Article
Fri	2/6	Conference Presentations - Theme 1		Due Feb. 5: All groups submit final version of Conference 1-pager
Fri	2/13	Conference Presentations - Theme 2		Due Feb. 13: Conference critique – for presentations on Feb. 6 (due for students not presenting on Feb. 6)
Fri	2/20	Winter Break		
Fri	2/27	Conference Presentations - Theme 3		Due Feb. 27: Conference critique – for presentations on Feb. 13 (due for students not presenting on Feb. 13)
Fri	3/6	Conference Presentations - Theme 4		Due Mar. 6: Conference critique – for presentations on Feb. 27 (due for students not presenting on Feb. 27)
Fri	3/13	Part 1: General overview of debate assignment and instruction on preparing for debate Part 2: Class activity to practice a debate		Due Mar. 13: Conference critique – for presentations on Mar. 6 (due for students not presenting on Mar. 6)
Fri	3/20	Debates Part 1		
Fri	3/27	Debates Part 2		Due Mar. 27: Debate Reflection – for Debates on Mar. 20 (due for students not debating on Mar. 20)
Fri	4/3	Holiday		
Fri	4/10	On April 6: Debates Part 3		Due Apr. 6: Debate Reflection – for Debates on Mar. 27 (due for students not debating on Mar. 27) Due Apr. 13: Debate Reflection – for Debates on Apr. 6 (due for students not debating on Apr. 6)

Assessment Breakdown

Description	Weighting (%)	Due Date
Critical analysis of a Scientific Paper	15%	January 30
Conference Presentation	45%	Conference Theme 1-pager (Feb 5): 10% Oral presentation (Feb 6, 13, 27, March 6): 20% Conference presentation critiques (Feb 13, 27, Mar 6, 13): 15% (3 x 5%)
Debates	40%	Debate presentation (Mar 20, 27, Apr 6): 20% Debate Reflection (Mar. 27, Apr 6, 13): 15% (2 x 7.5%) Debate Peer Review (Apr 8): 5%

Last Day to Drop Course

The final day to drop Winter 2026 courses without academic penalty is the last day of classes: April 06

After this date, a mark will be recorded, whether course work is completed or not (a zero is assigned for missed tests/assignments). This mark will show on the student's transcript and will be calculated into their average.

Course Grading Policies

Submission of Assignments

Assignments should be submitted electronically via the online Dropbox tool. When submitting your assignments using the Dropbox tool, do not leave the page until your assignment has successfully uploaded. To verify that your submission was complete, you can view the submission history immediately after the upload to see which files uploaded successfully.

The system will also email you a receipt. Save this email receipt as proof of submission.

Be sure to keep a back-up copy of all of your assignments in the event that they are lost in transition. In order to avoid any last-minute computer problems, your instructor strongly recommends you save your assignments to a cloud-based file storage (e.g., OneDrive), or send to your email account, so that should something happen to your computer, the assignment could still be submitted on time or re-submitted.

It is your responsibility to submit your assignments on time as specified on the Schedule. Be sure to check the technical requirements and make sure you have the proper computer, that you have a supported browser, and that you have reliable Internet access. Remember that technical difficulty is not an excuse not to turn in your assignment on time. Don't wait until the last minute as you may get behind in your work.

If, for some reason, you have a technical difficulty when submitting your assignment electronically, please contact your instructor or CourseLink Support (<http://spaces.uoguelph.ca/ed/contact-us/>).

Late Assignment

If an assignment is submitted late to the Dropbox tool, the full allocated mark will be reduced by 10% per day after the deadline for the submission of the assignment to a limit of three (3) days at which time access to the Dropbox folder will be closed.

Extensions will be considered for medical reasons or other extenuating circumstances. If you require an extension, discuss this with the instructor as soon as possible and well before the due date. Barring exceptional circumstances, extensions will not be granted once the due date has passed. These rules are not designed to be arbitrary, nor are they inflexible. They are designed to keep you organized, to ensure that all students have the same amount of time to work on assignments, and to help to return marked materials to you in the shortest possible time.

Course Policy on Group Work

The following assignments will be prepared and submitted as groups:

- Conference Theme - 1-pager
- Debates

Group members will be assigned the same grade for the 1-pager. For the Debates, students will be assessed individually. Students should notify the instructor as soon as possible if any issues with distribution of effort do occur, so they can be resolved prior to the submission/presentations of the

assignment. If the issues persist, the instructor may request each group member submit a distribution of effort (DOE) and associated work to support the DOE. The DOEs may be used by the instructor to adjust the grade of individual group members where the DOE between group members is not balanced. For the Debates, there will be a peer review worth 5% that must be completed by all group members. If there are any discrepancies with the Peer reviews, the instructor may request each group member submit a distribution of effort (DOE) and provide examples to support of the work they completed.

Course Standard Statements

Course Policies

Appropriate and Fair Use of AI Tools

Please read the University of Guelph's statement on the use of AI, including ChatGPT and similar tools, and academic integrity (<https://news.uoguelph.ca/2023/03/university-of-guelph-statement-on-artificial-intelligence-systems-chatgpt-academic-integrity/>). For this course, generative AI tools may be used in accordance with UofG's academic integrity policies. Misuse of AI, including using it to generate entire assignments or misrepresenting its contributions as your own, will be considered a violation of academic integrity policies. Please see the document "Allowable Generative AI Functions for Article Critique, all Conference Presentation assignment and all Debate assignments" posted on the Courselink Site for ENVS*6502 for specific details and formatting of the AI declaration.

Generative AI tools may be used in this course to assist with generating ideas, creating draft outlines, and improving the clarity of your writing, provided that this use adheres to academic integrity standards. These tools should serve as supplementary aids, not as replacements for your own critical thinking, analysis, and creativity. Your submitted work must clearly reflect that the core ideas are your own. If you choose to use AI tools for any work in this course, including assignments and lecture summaries, you must acknowledge their use by providing a brief description of how the tools were used and citing them in the style indicated for the assignment.

A word of caution: You are responsible for verifying the accuracy of any content generated by AI tools. These tools can produce inaccurate, false, misleading, or biased information. It is your responsibility to critically evaluate any generated content. Additionally, be cautious when providing personal or sensitive data to any generative AI tool.

(The preparation of the "Appropriate and Fair Use of AI Tools" section for this outline was drafted using ChatGPT and then critically analysed and edited by Simone Haerri to ensure that the written paragraph reflected their own work. At the end, ChatGPT was used to improve the clarity of the writing followed by one final editing check by Simone.)

OpenAI. (2024). ChatGPT (August 26 version) [Large language model]. <https://chat.openai.com/chat> (<https://chat.openai.com/chat/>)

Assessment Information and Use of Turnitin

Information for all assignments will be made available to students in class and on Courselink.

In this course, your instructor will be using Turnitin, integrated with the CourseLink Dropbox tool, to detect possible plagiarism, unauthorized collaboration or copying as part of the ongoing efforts to maintain academic integrity at the University of Guelph.

All submitted assignments will be included as source documents in the Turnitin.com reference database solely for the purpose of detecting plagiarism of such papers. Use of the Turnitin.com service is subject to the Usage Policy posted on the Turnitin.com site.

A major benefit of using Turnitin is that students will be able to educate and empower themselves in preventing academic misconduct. In this course, you may screen your own assignments through Turnitin as many times as you wish before the due date. You will be able to see and print reports that show you exactly where you have properly and improperly referenced the outside sources and materials in your assignment.

Grades and Feedback

Unofficial assessment marks will be available in the Grades tool of the course website.

Your instructors will attempt to have grades posted online within 2 weeks of the submission deadline, if the assignment was submitted on time. Once your assignments are marked you can view your grades on the course website by selecting Grades from the Tools dropdown menu on the navbar. Your course will remain open to you for seven days following the last day of the final exam period. At least 20% of your final grade will be graded by the 40th day of class.

University of Guelph students can access their final grade by logging into WebAdvisor (<https://webadvisor.uoguelph.ca>) using your U of G central ID.

Course Technology Requirements

System and Software Requirements (Software)

This course will use a variety of technologies including:

- CourseLink (main classroom)
- Zoom

To help ensure you have the best learning experience possible, please review the list of system and software requirements: <https://opened.uoguelph.ca/student-resources/system-and-software-requirements>

CourseLink System Requirements

You are responsible for ensuring that your computer system meets the necessary system requirements. Use the browser check tool to ensure your browser settings are compatible and up to date. (Results will be displayed in a new browser window).

URLs: <http://spaces.uoguelph.ca/ed/system-requirements/>; <https://courselink.uoguelph.ca/d2l/systemCheck>

CourseLink

This course is being offered using CourseLink (powered by D2L's Brightspace), the University of Guelph's online learning management system (LMS). By using this service, you agree to comply with the University of Guelph's Access and Privacy Guidelines. Please visit the D2L website to review the Brightspace privacy statement and Brightspace Learning Environment web accessibility standards.

URLs: <http://www.uoguelph.ca/web/privacy/> <https://www.d2l.com/legal/privacy/> (<http://www.d2l.com/legal/privacy/>) <https://www.d2l.com/accessibility/standards/> (<http://www.d2l.com/accessibility/standards/>)

Technical Support

If you need any assistance with the software tools or the CourseLink website, contact CourseLink Support:

Email: courselink@uoguelph.ca

Tel: 519-824-4120 ext. 56939

Toll-Free (CAN/USA): 1-866-275-1478

Support Hours (Eastern Time):

Monday thru Friday: 8:30 am–8:30 pm

Saturday: 10:00 am–4:00 pm

Sunday: 12:00 pm–6:00 pm

Zoom

Zoom is a collaboration service that provides shared conversation spaces to help teams coordinate and communicate information. If necessary, this course will use Zoom for one on one meetings with your Instructor and for class lecture and seminar sessions, when remote access is required. It is recommended that you use the desktop version of Zoom. As a student you are responsible for learning how to use Zoom and its features.

For Zoom Support visit the Open Ed Student Portal on the UofG website for more information.

URL: <https://opened.uoguelph.ca/instructor-resources/web-conferencing-options#Zoom>

Technical Skills

As part of your learning experience, you are expected to use a variety of technologies for assignments, lectures, teamwork, and meetings. In order to be successful in this course you will need to have the following technical skills:

- Manage files and folders on your computer (e.g., save, name, copy, backup, rename, delete, and check properties);
- Use office applications (e.g., Word, PowerPoint, Excel, or similar) to create documents;
- Be comfortable uploading and downloading saved files;
- Communicate using email (e.g., create, receive, reply, print, send, download, and open attachments);
- Navigate the CourseLink learning environment and use the essential tools, such as Dropbox, Discussions, and Grades (the instructions for this are given in your course);
- Access, navigate, and search the Internet using a web browser (e.g., Firefox, Internet Explorer); and
- Perform online research using various search engines (e.g., Google) and library databases.

Contact your course instructor if you need support with any of the above.

Library Access (Other)

As a student, you have access to the University of Guelph's library collection, including both physical and electronic materials. For information on checking out or couriering physical library items, accessing electronic journals and returning items to the library, visit the library's website. If you

are studying off campus and would like to access the library's electronic resources, use the Off Campus Login and login using your SingleSignOn credentials or using your last name and library barcode.

URLs: <https://www.lib.uoguelph.ca/> (<http://www.lib.uoguelph.ca/>); <https://www.lib.uoguelph.ca/campus-login> (<http://www.lib.uoguelph.ca/campus-login>)

Standard Statements for Graduate Courses

Academic Integrity

The University of Guelph is committed to upholding the highest standards of academic integrity and it is the responsibility of all members of the University community – faculty, staff, and students – to be aware of what constitutes academic misconduct and to do as much as possible to prevent academic offences from occurring. University of Guelph students have the responsibility of abiding by the University's policy on academic misconduct regardless of their location of study; faculty, staff and students have the responsibility of supporting an environment that discourages misconduct. Students need to remain aware that instructors have access to and the right to use electronic and other means of detection.

Please note: Whether or not a student intended to commit academic misconduct is not relevant for a finding of guilt. Hurried or careless submission of assignments does not excuse students from responsibility for verifying the academic integrity of their work before submitting it. Students who are in any doubt as to whether an action on their part could be construed as an academic offence should consult with a faculty member or faculty advisor.

The Academic Misconduct Policy (<https://calendar.uoguelph.ca/graduate-calendar/general-regulations/academic-misconduct/>) is outlined in the Graduate Calendar.

Accessibility

The University promotes the full participation of students who experience disabilities in their academic programs. To that end, the provision of academic accommodation is a shared responsibility between the University and the student.

When accommodations are needed, the student is required to first register with Student Accessibility Services (SAS). Documentation to substantiate the existence of a disability is required; however, interim accommodations may be possible while that process is underway.

Use of the SAS Exam Centre requires students to make a booking at least 10 business days in advance, and no later than the first business day in November, March or July as appropriate for the semester. Similarly, new or changed accommodations for online quizzes, tests and exams must be approved at least a week ahead of time. For students at the Guelph campus, information can be found on the SAS website. (<https://www.uoguelph.ca/sas/>)

Accommodation of Religious Obligations

If you are unable to meet an in-course requirement due to religious obligations, please email the course instructor within two weeks of the start of the semester to make alternate arrangements.

See the Academic calendar for information on regulations and procedures for Academic Accommodation of Religious Obligations (<https://calendar.uoguelph.ca/graduate-calendar/general-regulations/academic-accommodation-religious-obligations/>)

Copies of Out-of-class Assignments

Keep paper and/or other reliable back-up copies of all out-of-class assignments: you may be asked to resubmit work at any time.

Drop Date

Courses that are one semester long must be dropped by the end of the last day of classes; two-semester courses must be dropped by the last day of classes in the second semester. The regulations and procedures for Dropping Courses (<https://calendar.uoguelph.ca/graduate-calendar/general-regulations/registration/>) dropping courses are available in the Graduate Calendar (<https://calendar.uoguelph.ca/graduate-calendar/general-regulations/registration/>)

Email Communication

As per university regulations, all students are required to check their uoguelph.ca e-mail account regularly: e-mail is the official route of communication between the University and its students.

Health and Wellbeing

The University of Guelph provides a wide range of health and wellbeing services at the Vaccarino Centre for Student Wellness (<https://wellness.uoguelph.ca/>). If you are concerned about your mental health and not sure where to start, connect with a Student Wellness Navigator (<https://wellness.uoguelph.ca/navigators/>) who can help develop a plan to manage and support your mental health or check out our mental wellbeing

resources. (<https://wellness.uoguelph.ca/shine-this-year/>) The Student Wellness team are here to help and welcome the opportunity to connect with you.

Illness

Medical notes will not normally be required for singular instances of academic consideration, although students may be required to provide supporting documentation for multiple missed assessments or when involving a large part of a course (e.g., final exam or major assignment).

Recording of Materials

Presentations that are made in relation to course work—including lectures—cannot be recorded or copied without the permission of the presenter, whether the instructor, a student, or guest lecturer. Material recorded with permission is restricted to use for that course unless further permission is granted.

Resources

The Academic Calendars (<http://www.uoguelph.ca/registrar/calendars/?index>) are the source of information about the University of Guelph's procedures, policies and regulations which apply to undergraduate, graduate and diploma programs.

When You Cannot Meet a Course Requirement

When you find yourself unable to meet an in-course requirement because of illness or compassionate reasons, please advise the course instructor (or designated person, such as a teaching assistant) in writing, with your name, id#, and e-mail contact. See the Graduate Calendar for information on regulations and procedures for Academic Consideration (<https://calendar.uoguelph.ca/graduate-calendar/general-regulations/grounds-academic-consideration/>).