UNIVERSITY of GUELPH

ENVS*2230 Communications in Environmental Science

Winter 2023
Section(s): 0101

School of Environmental Sciences
Credit Weight: 0.50
Version 1.00 - January 10, 2023

_____

1 Course Details

1.1 Calendar Description

This course provides students with direct training in the academic skills used in researching and communicating environmental science. Within the context of current problems in environmental science, students will develop skills in library research, statistical interpretation, oral and poster presentation and written communication to diverse audiences. Students will research and report on scientific issues within environmental issues being reported in the media.

Pre-Requisites: 1 of ENVM*1000, ENVM*1200, ENVS*1030
Restrictions: Registration in BBRM, BSC(Env) or BSC(Agr) programs.

1.2 Course Description

This course provides students with direct training in the academic skills used in researching and communicating environmental science. Within the context of current problems in environmental science, students will develop skills in library research, statistical interpretation, oral and poster presentation and written communication to diverse audiences. Students will research and report on scientific issues within environmental issues being reported in the media.

1.3 Timetable

Lectures:

Wednesdays, 12:30pm - 1:20pm in MCKN 226

Seminars:

Thursdays, 2:30pm - 5:20pm in MCKN 227

1.4 Final Exam

There is no final exam

_____

2 Instructional Support

2.1 Instructional Support Team

Instructor:	Simone (she/her) Haerri
Email:	shaerri@uoguelph.ca
Office Hours:	Office hours via appointment only. But I am very open to answer questions before and after class.

2.2 Communicating with your Instructor

E-mail is theI be the best way to get in touch with me. I generally answer E-mails once a day. So expect a response within 24 - 48 hours. If your E-mail is time-sensitive, then I will answer as quickly as possible.

Communication options:

E-mail: 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.

Discussion Forum: Use the 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.

Video Call: If you have a complex question you would like to discuss with your instructor, you may book a video meeting via Zoom. Video meetings depend on the availability and are booked on a first come first-served basis.

_____

3 Learning Resources

3.1 Required Resources

CourseLink (Website) (Website)
https://courselink.uoguelph.ca
The instructor uses CourseLink for posting lecture slides, class announcements, class readings (if applicable), grades and other required and recommended materials that are relevant to this course.

Please check CourseLink at least once a day.

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.

http://www.uoguelph.ca/web/privacy/ https://www.d2l.com/legal/privacy/ https://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 - 8:30 pm Saturday: 10:00 am - 4:00 pm Sunday: 12:00 pm - 6:00 pm

Zoom (Software)
This course will use Zoom for:

- Office hours (by appointment)

Check your system requirements to ensure you will be able to participate.

https://opened.uoguelph.ca/student-resources/system-and-software-requirements

_____

4 Learning Outcomes

4.1 Course Learning Outcomes

By the end of this course, you should be able to:
1. Practice using online research tools to find relevant scientific literature and correctly incorporate articles as citations into your writing.
2. Design an experiment, analyze and interpret data to write a scientific research paper using the IMRAD structure by applying best academic writing practices regarding clarity, conciseness, paragraph structure and connection.
3. Design presentation slides and a scientific poster using software (i.e Powerpoint, Keynote, Prezi) by incorporating best design principles to enhance and support your main points.
4. Deliver an oral presentation and present a scientific poster that applies best practices for extemporaneous (without many notes) presentations.
5. Write a Research Snapshot ("Plain language summary") of a peer-reviewed article by applying the inverted pyramid structure and by framing the results for your lay audience.
6. Communicate effectively current environmental issues to a lay audience using various media and social media tools by applying principles of science communication.

_____

5 Teaching and Learning Activities

For most weeks, the lecture will include mostly delivery of relevant information, whereas the seminar consists of small group work to complete the workshop worksheets to practice the skills learned during lectures.

5.1 Lecture

Week 1

   Topics: Introduction to the course and communication basics.

Week 2

   Topics: Scientific process, literature search & how to correctly use references

Week 3

Topics:	Tips and tricks on how to improve your oral presentation skills

Week 4

Topics:	How to do a poster and student presentations

Week 5

Topics:	How to structure and write a scientific paper

Week 6

Topics:	Basic introduction into data analysis and how to write a result section

Week 7

Topics:	Experimental design and Poster presentations

Week 8

Topics:	Scientific writing principles

Week 9

Topics:	Principles of science communication

Week 10

Topics:	Research snapshot and social media

Week 11

Topics:	Using social media for science communication

Week 12

Topics:	Wrap-up and science communication exhibit

_____

6 Assessments

6.1 Marking Schemes & Distributions

During the first week of exams (after you received all your grades), you can request to switch 7.5% of the weight of one of your assignment to another assignment. You cannot choose an assignment that you did not complete.

Name	Scheme A (%)
Scientific presentation	10
Scientific poster	15
Scientific paper - First submission	15
Science communication presentation	15
Research Snapshot	10
Science communication media piece	15
Scientific paper - Second submission	10
Weekly worksheets	10
Total	100

6.2 Assessment Details

Scientific presentation (10%)
Date: Wed, Feb 1
Learning Outcome: 1, 3, 4
Choose a primary peer-reviewed scientific paper about a current environmental issue. Prepare a slideshow and present to your peers. Presentations take place during the seminar of week 4.

Scientific poster (15%)
Date: Wed, Mar 1
Learning Outcome: 1, 3, 4
In groups of two, choose a primary peer-reviewed scientific paper about a current environmental issue. Prepare a poster and present to your peers. Presentations take place during the seminar of week 7.

Scientific paper - First submission (15%)
Date: Wed, Mar 15
Learning Outcome: 1, 2
Write a scientific paper using the IMRAD structure using the provided data set as the basis. Apply clear and concise scientific writing, incorporate relevant literature and design an experimental method that fits your data.

Science communication presentation (15%)
Date: Wed, Mar 22
Learning Outcome: 3, 4, 6
Choose a peer-reviewed primary scientific paper on a current environmental issue. You will

be assigned a specific lay audience. Prepare a presentation delivering the main results of your paper to your assigned audience using principles of science communication. Presentations will be given during the seminar of week 10.

Research Snapshot (10%)
Date: Wed, Mar 29
Learning Outcome: 1, 5
Choose a peer-reviewed scientific article published within the last two years and that has a faculty member of the School of Environmental Sciences as one of the authors. Write a plain-language summary (research snapshot) about that article. Best research snapshots might be featured on the School of Environmental Sciences website.

Science communication media piece (15%)
Date: Wed, Apr 5
Learning Outcome: 6
Choose an environmental science topic. Choose a media tool to present the problem to a chosen lay audience by applying the principles of science communication. The pieces will be shared with your peers during the last seminar.

Can be done alone or in groups of two.

Scientific paper - Second submission (10%)
Date: Wed, Apr 12
Learning Outcome: 2
Final submission of your research paper by incorporating the feedback given by your instructor on your first submission. This submission is not mandatory, but highly encouraged.

Weekly worksheets (10%)
Date: Ongoing
Learning Outcome: 1, 2, 3, 4, 5, 6
Most seminars will consist of small groups working on a worksheet. The worksheet will be submitted and assigned a maximum of 10 marks. 5 marks for the worksheet itself, and 5 marks for participation.

The two lowest marks will be ignored.

---

7 Course Statements

7.1 Grading Policies

Assignments are to be submitted online via D2L before midnight on the due date. Assignments handed-in late, for which an extension has not been granted ahead of time, will lose 10% of the total marks for every day (or part thereof) that it is late (i.e an 80 will become a 70 if your submission is late by one day). If you require an extension on an assignment, you must have a valid reason and contact Dr. Härri **in advance** of the due date.

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.

7.2 Plagiarism software - Turnitin

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 first submission of the research paper 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.

All other assignments will be screened, but you will only have access to your Turnitin score if you contact the instructor <u>at least two days before the due date.</u>

7.3 Dropbox Submissions

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/

7.4 Etiquette Expectations

Remote learning course websites may include both synchronous and asynchronous interactions and have the same protections, expectations, guidelines, and regulations used in face-to-face settings. Here you will find a list of guidelines and expectations for the remote learning environment.

To get the most out of your remote delivery class, consider the following:

1. Be respectful of your instructors, TAs and peers in the online synchronous and asynchronous class environment.
2. Avoid the use of offensive language and inappropriate jokes to keep the environment positive for all.
3. Refrain from making inflammatory, disrespectful, or discriminatory comments about your instructors, TA or peers within the remote learning environment, external sites, or social media.
4. Take advantage of the mute button in synchronous classes and only unmute yourself when necessary.
5. During synchronous lectures, keep discussions in the chat and related to the course material.
6. Let your professor know if they didn't explain something fully by leaving a comment about it in the chat. If you are confused, chances are so are other students in the class.
7. Indicate if the professor is going too fast or too slow by modifying your status or using the reaction tools often available in the tools your instructors use.
8. Be mindful of both yours and other's personal information; if you are recording materials presented synchronously, ensure all participants are aware.
9. Posts to the discussion board should be on-topic and not promoting profit-driven products and services.
10. Proofread your work before submitting it; this includes any discussion board posts and assignments to Dropbox.
11. Use citations or references in your work to indicate when you are referencing another person's work.
12. Submit work that is your own and do not copy from fellow students or purchase written papers online.
13. Be honest about the completion of quizzes and assessments. If you run into technical difficulties on a quiz or when submitting an assignment, reach out to

CourseLink Support for assistance.

14. If you disagree with a grade you received, find time to have a conversation with your instructor or TA about it. Do not incite other students to argue with the instructor over assessments or grades related expectations.
15. Use clear and concise language.
16. Course materials provided within CourseLink should not be posted elsewhere without the permission of the instructor.
17. Do not post or sell course materials and notes to course notes websites.
18. Do not share your username and password with another student.

Behaviours that are not tolerated, but not limited to, include:

- Threatening or harassing a student or instructor online.
- Having someone else complete your quiz or other assessments, or you complete a quiz or other assessment for (or with) another student.
- Attempting to compromise the security or functionality of the CourseLink learning environment.

It is expected that you behave honourably, appropriately, and with academic integrity (regardless of the course being held remotely).

8 University Statements

8.1 Email Communication

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

8.2 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. The grounds for Academic Consideration are detailed in the Undergraduate and Graduate Calendars.

Undergraduate Calendar - Academic Consideration and Appeals
https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-ac.shtml

Graduate Calendar - Grounds for Academic Consideration
https://www.uoguelph.ca/registrar/calendars/graduate/current/genreg/index.shtml

Associate Diploma Calendar - Academic Consideration, Appeals and Petitions
https://www.uoguelph.ca/registrar/calendars/diploma/current/index.shtml

8.3 Drop Date

Students will have until the last day of classes to drop courses without academic penalty. The deadline to drop two-semester courses will be the last day of classes in the second semester. This applies to all students (undergraduate, graduate and diploma) except for Doctor of Veterinary Medicine and Associate Diploma in Veterinary Technology (conventional and alternative delivery) students. The regulations and procedures for course registration are available in their respective Academic Calendars.

Undergraduate Calendar - Dropping Courses
https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-drop.shtml

Graduate Calendar - Registration Changes
https://www.uoguelph.ca/registrar/calendars/graduate/current/genreg/genreg-reg-regchg.shtml

Associate Diploma Calendar - Dropping Courses
https://www.uoguelph.ca/registrar/calendars/diploma/current/c08/c08-drop.shtml

8.4 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.

8.5 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.

Accommodations are available for both permanent and temporary disabilities. It should be noted that common illnesses such as a cold or the flu do not constitute a disability.

Use of the SAS Exam Centre requires students to make a booking at least 14 days in advance, and no later than November 1 (fall), March 1 (winter) or July 1 (summer). Similarly, new or changed accommodations for online quizzes, tests and exams must be approved at least a week ahead of time.

For Guelph students, information can be found on the SAS website
https://www.uoguelph.ca/sas

For Ridgetown students, information can be found on the Ridgetown SAS website
https://www.ridgetownc.com/services/accessibilityservices.cfm

8.6 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 encourages academic integrity. 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.

Undergraduate Calendar - Academic Misconduct
https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-amisconduct.shtml

Graduate Calendar - Academic Misconduct
https://www.uoguelph.ca/registrar/calendars/graduate/current/genreg/index.shtml

8.7 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.

8.8 Resources

The Academic Calendars are the source of information about the University of Guelph's procedures, policies, and regulations that apply to undergraduate, graduate, and diploma programs.

Academic Calendars
https://www.uoguelph.ca/academics/calendars

8.9 Disclaimer

Please note that the ongoing COVID-19 pandemic may necessitate a revision of the format of course offerings, changes in classroom protocols, and academic schedules. Any such changes will be announced via CourseLink and/or class email.

This includes on-campus scheduling during the semester, mid-terms and final examination schedules. All University-wide decisions will be posted on the COVID-19 website

(https://news.uoguelph.ca/2019-novel-coronavirus-information/) and circulated by email.

8.10 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).

8.11 Covid-19 Safety Protocols

For information on current safety protocols, follow these links:

- https://news.uoguelph.ca/return-to-campuses/how-u-of-g-is-preparing-for-your-safe-return/
- https://news.uoguelph.ca/return-to-campuses/spaces/#ClassroomSpaces

Please note, these guidelines may be updated as required in response to evolving University, Public Health or government directives.

_____