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 12:30 PM - 1:20 PM in ALEX Room 117

Seminars: Thursdays 2:30 PM - 5:20 PM in MCKN Room 226

Important: Lectures and seminars are held via Zoom until at least January 24 (as per UofG regulation). Be aware that this could be prolonged due to the uncertain nature of the Omicron wave.
If/when in-person classes resume, you have a choice to either attend in-person or via Zoom. Lectures and seminars will also be recorded and made available to you. There are no mandatory in-person components for this course.

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
Telephone: +1-519-824-4120 x56681
Office: Mostly working from home
Office Hours: Virtual office hours via Zoom by appointment only.

2.2 Communicating with your instructor

I will be working from home for the foreseeable future. E-mail will 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.

After class: I am always happy to address questions after class. However, given the current Covid-19 situation, I will ask you to meet with me outside if possible. I am also available after class on Zoom.

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.
Covid-19 Note:

We are finding ourselves once again in a difficult semester with lots of uncertainties and potential last-minute pivoting back and forth between in-person and virtual classes. Your physical and mental well-being is more important than your schoolwork. If you find yourself unable to participate to the best of your abilities, reach out to me, and we can discuss the best way for you to navigate and succeed in this course. Take care of yourself and each other.

3 Learning Resources

3.1 Required Resources

CourseLink (Website)
https://courselink.uoguelph.ca
The instructor uses CourseLink for posting recorded lectures, class announcements, class readings (if applicable), grades and other required and recommended materials that is 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/


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
Walk-in Hours

Monday to Friday: 8:30 a.m. to 4:30 p.m.

Phone/Email Hours

Monday to Friday: 8:30 a.m. to 8:30 p.m.
Saturday: 10:00 a.m. to 4:00 p.m.
Sunday: 12:00 p.m. to 6:00 p.m.

Zoom (Software)
https://zoom.us
This course will use Zoom for:

- All lectures and seminars
- 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 Zoom access

You will be able to access Zoom from within the CourseLink page under Content and then Zoom. You don’t need a Zoom account to participate. But please check your system requirements (see above).

Zoom guidelines

All Zoom lectures will be recorded and later shared on Courselink. Breakout room sessions will not be recorded.

I encourage everyone to participate with audio and video. If you have wifi connectivity issues and/or privacy concerns, the use of video is not required. Within Zoom, there is also the option to rename yourself to your initials. There is also an option to call into a Zoom meeting with your phone if you have no internet.

Please reach out early in the semester to indicate your concerns with technology, privacy, and internet connectivity so we can work out a plan.
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 using software (i.e Powerpoint, Keynote, Prezi) by incorporating best design principles to enhance and support your main points.

4. Present and/or record a presentation 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

The schedule below includes the lectures and the seminars and is subject to change.

5.1 Lecture

Week 1

Topics: Introduction to the course and communication basics.

Week 2

Topics: Literature search, referencing, paraphrasing and summarizing.

Week 3

Topics: Basics of Science Communication

Week 4
**Topics:** Advanced Science Communication principles and social media

**Week 5**

**Topics:** What is a research snapshot and presentation of media assignment

**Week 6**

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

**Week 7**

**Topics:** Intro to communication to a scientific audience and student presentations to an (imaginary) lay audience

**Week 8**

**Topics:** Basics of experimental design

**Week 9**

**Topics:** Scientific writing skills and introducing different parts of a research paper

**Week 10**

**Topics:** Data visualization and how to interpret and write a result section of a scientific paper

**Week 11**

**Topics:** Create a graphical abstract for a scientific paper

**Week 12**

**Topics:** Student presentations
6 Assessments

This course is teaching you the basic skills of communication in environmental science. Lectures and seminars will introduce you to the main principles, and the assessments are for you to practice and test the skills discussed during the lectures and seminars.

6.1 Marking Schemes & Distributions

Before the due date of the revised scientific paper (April 15), students can request to have 5% of the weight shifted from one assignment to another. To do this, students will have to write a short justification that includes what the student learned from the assignment they are shifting the weight away from (exceptions are the weekly worksheets and the data scenario, both cannot gain extra percentages, but can have weight shifted away from).

<table>
<thead>
<tr>
<th>Name</th>
<th>Scheme A (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Science Communication Piece</td>
<td>20</td>
</tr>
<tr>
<td>Research Snapshot</td>
<td>10</td>
</tr>
<tr>
<td>Oral Presentation - Lay audience</td>
<td>15</td>
</tr>
<tr>
<td>Data Scenario</td>
<td>5</td>
</tr>
<tr>
<td>Research Paper</td>
<td>15</td>
</tr>
<tr>
<td>Oral Presentation</td>
<td>15</td>
</tr>
<tr>
<td>Research Paper - Revised</td>
<td>10</td>
</tr>
<tr>
<td>Weekly Worksheets</td>
<td>10</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
</tr>
</tbody>
</table>

6.2 Assessment Details

Science communication piece (20%)
  Date: Wed, Feb 9
  Learning Outcome: 6
  This assignment can be done individually or in groups of two. You will present your piece to the class February 10.

Research Snapshot (10%)
  Date: Fri, Feb 18
  Learning Outcome: 1, 5, 6

Oral presentation to a lay audience (15%)
  Date: Wed, Mar 2
  Learning Outcome: 1, 3, 4, 6
  Presentations take place during the seminar of March 3, 2022.

Data scenario (5%)
  Date: Fri, Mar 11
Learning Outcome: 2

Research paper (15%)
Date: Fri, Apr 1
Learning Outcome: 1, 2

Oral presentation to scientific audience (15%)
Date: Wed, Apr 6
Learning Outcome: 2, 3, 4

Research Paper - Revised (10%)
Date: Fri, Apr 15
Learning Outcome: 1, 2

Weekly Worksheets (10%)
Date: Ongoing. Due every Sunday night.
Learning Outcome: 1, 2, 3, 6
Each week, lectures and seminars includes little activities. At the end of each week (Sundays before midnight), you get to submit those activities. Each week counts 1%.

Only ten out of the twelve weeks are required for 100%.

6.3 Additional Notes
Assignments are to be submitted online via CourseLink 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. If you require an extension on an assignment, you must have a valid reason and contact Dr. Härri in advance of the due date.

7 Course Statements

7.1 Lecture delivery
Lectures and seminars will be virtual, via Zoom, until at least January 24, 2022. Make sure to check your uoguelph E-mails and this CouresLink site to updates on that plan.

When classes are allowed to go back in-person, lectures and seminars will follow a hybrid format (subject to change depending on Covid-19 protocols). This means that you can choose to attend a lecture in person, or attend virtually via Zoom (consult the University of Guelph rules in regards to who is allowed to attend in-person lectures).

Remote delivery will be held via Zoom. Zoom is accessible from within the CourseLink course homepage. When you participate in the lecture via Zoom, you can choose to connect via audio only, or you can enable your video. Zoom also has an option to call-in if you have poor wifi.

For privacy concerns, you can rename yourself within Zoom to your initials and you can keep
your video off.

Lectures and seminars will be recorded and made available to all of your peers.

7.2 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. If you require an extension on an assignment, you must have a valid reason and contact Dr. Härri in advance of the due date.

7.3 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 at least two days before the due date.

7.4 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 recommend 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/

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-
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.