1 Course Details

1.1 Calendar Description

This course examines the impacts of climate change on living organisms, biological communities and ecosystems. The course focuses on what is known, and what is not known, about the ways in which the suite of changing climate variables influence biological systems.

Pre-Requisites: BIOL*2060
Equates: ENVB*3010

1.2 Course Description

This course examines the impacts of climate change on living organisms, biological communities and ecosystems. The course focuses on what is known, and what is not known, about the ways in which the suite of changing climate variables influence biological systems.

1.3 Timetable

ENVS*3010 will be held as a mix of asynchronous (recorded) lectures and synchronous lectures.

The synchronous lectures will take place Thursdays 11:30 am - 12:50 pm via the Zoom tool accessible via CourseLink.

The synchronous lectures will be recorded and made available to those unavailable to join.

For the asynchronous lecture schedule, check Courselink.

1.4 Final Exam

The final exam will be a take-home final exam.

Date released: Friday, December 4, 2020 via E-mail
**Date due:** Wednesday, December 16, 2020 before 11:59 pm ET.

Take-home final exam to be submitted via the Dropbox tool in CourseLink

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## 2 Instructional Support

### 2.1 Instructional Support Team

**Instructor:** Simone Haerri Dr. (she/her/hers)  
Email: shaerri@uoguelph.ca  
Telephone: +1-519-824-4120 x58132  
Office: Working from home

**Office Hours:** Virtual office hours via Zoom are held on Tuesdays 11:30 - 12:30; or by appointment.

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### 2.2 Teaching Assistants

**Teaching Assistant:** Aaron Fairweather (they/them/their)  
Email: fairweaa@uoguelph.ca

**Teaching Assistant:** Rebecca Osborne (she/her/hers)  
Email: osborner@uoguelph.ca

**Teaching Assistant:** Abigail Wiesner (she/her/hers)  
Email: awiesner@uoguelph.ca

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### 2.3 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.

**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 availability and are booked on a first come first served basis.

**Covid-19 Note:**

We are living in difficult times. This semester will be different. 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.

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3 Learning Resources

3.1 Additional Resources

**CourseLink (Website)**

[https://courselink.uoguelph.ca](https://courselink.uoguelph.ca)

The instructor uses CourseLink for posting pre-recorded lectures, recording of synchronous 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.

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:

- Synchronous lectures: Thursdays from 11:30 am - 12:50 pm
- Office hours: Tuesdays from 11:30 am - 12:30 pm

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.

By default, you will join the class with your microphone and video turned off. Please wait for instructions before you turn on your audio and/or video.

I encourage everyone to participate with audio and video when applicable. 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. Interpret the current climate change in a historical context and define natural and human causes of climate variability
2. Examine the general trends in future climate and interpret the variability in future climate predictions through running different computer models
3. Explain expected changes in the net primary production of ecosystems through the analysis of different effects of climate change on plant physiology and decomposition
4. Hypothesize how different species and entire communities react to the changing climate by formulating a scientific question that will be applied to the design and presentation of a poster
5. Design experimental methods necessary to study how individuals, populations, communities, and entire ecosystems will respond to the changing climate and discuss their limitations

5 Teaching and Learning Activities

5.1 Lecture

Week 1

Topics: Natural climate variability

Week 2

Topics: Anthropogenic effects on climate

Week 3

Topics: Climate of the future

Week 4

Topics: Plant physiology and climate change

Week 5

Topics: Phenology and insects

Week 6

Topics: Population responses
6 Assessments

6.1 Marking Schemes & Distributions

<table>
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<tr>
<th>Name</th>
<th>Scheme A (%)</th>
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<tr>
<td>Future Projection</td>
<td>15</td>
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<tr>
<td>Poster Presentations</td>
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<tr>
<td>Method piece</td>
<td>20</td>
</tr>
<tr>
<td>Final exam</td>
<td>30</td>
</tr>
<tr>
<td>Weekly Participation</td>
<td>15</td>
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<td>BONUS Lecture summaries</td>
<td>5</td>
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<td>Total</td>
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6.2 Assessment Details

**Future Projection (15%)**
- **Due:** Fri, Oct 9, 11:59 PM
- **Learning Outcome:** 1, 2
Poster (20%)
Due: Fri, Nov 13, 11:59 PM  
Learning Outcome: 2, 3, 4  
The poster can be done either alone or in groups of two.

Method piece (20%)
Date: Fri, Dec 4, 11:59 PM  
Learning Outcome: 3, 4, 5  

Weekly participation (15%)
Learning Outcome: 1, 2, 3, 5  
Each week, there will be a variety of small little activities ranging from quiz questions embedded in the asynchronous and synchronous lectures to literature searches. You will have until Sunday of each week to complete and submit your activities.

Those activities will be marked as pass or fail and your weekly grade will be the number of passes compared to the total numbers of activity.

You will fail an activity if you don't complete it, submit something irrelevant or it is incomplete. Each week will count 1.5% towards your final weekly participation. The best ten (out of twelve) weeks will count towards your participation grade.

Take-home Final Exam (30%)
Due: Wed, Dec 16, 11:59 PM, Submit to Dropbox (CourseLink)
Learning Outcome: 1, 2, 3, 5  
The final exam will be cumulative and include all the content covered during the course of the semester. Individual topics may be removed from the final exam content at the instructor’s discretion but will be communicated in class towards the end of the semester.

The final exam will be sent out via E-mail on Friday, December 4, 2020.

Lecture summaries (BONUS) (5%)
You can obtain 0.5 bonus marks for handing in a well-written and complete summary of all content covered within a week (asynchronous and synchronous lectures) that can be shared with the rest of the class. The summary has to be sent as a word document to shaerri@uoguelph.ca. The instructor will either accept or reject your summary. The summary has to be well written, contain fully formulated sentences and paragraphs, connect ideas and concepts, show a clear understanding of the material and include all relevant content covered during a specific class. This bonus cannot exceed 5 marks (10 summaries) and is only applied if your course grade without this bonus exceeds 50%.
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 marks (out of 100) per day late (or part thereof). For example, if you receive an 85% on your assignment but you submitted one day late, you will receive a 75% instead. Assignments submitted one week (or later) after the due date will not be accepted. 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.

There will be NO requirements to hand in doctor's notes this semester.

7.2 Synchronous lectures

Synchronous lectures will be held via Zoom accessible from within the CourseLink course homepage. When you participate in the synchronous lecture 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.

Synchronous lectures will be recorded and made available to all of your peers.

7.3 Course Policy on Group Work

This course encourages group work and collaborative problem solving. For the poster, you are given the choice of completing it either alone or in a group of two. The future projections and the method piece should be written entirely by the student alone, should reflect the opinion of the student alone and should be the original work of the student. For group assignments, the completed assignment should contain only work which has been produced by members of the group in question.

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/

7.5 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.

You will not be allowed to access your own Turnitin results. However, if you are concerned about your ability to properly paraphrase and avoid plagiarism, send an email to the instructor at least two days before the due date of an assignment, and you will get access to your Turnitin results after submitting your assignment early (and being allowed to resubmit after the necessary changes).

7.6 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-
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 book their exams at least 7 days in advance and not later than the 40th Class Day.

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.
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 and academic schedules. Any such changes will be announced via CourseLink and/or class email. 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

The University will not normally require verification of illness (doctor’s notes) for fall 2020 or winter 2021 semester courses. However, requests for Academic Consideration may still require medical documentation as appropriate.