

GEOG 3350b – Environmental Change

Course Outline: Section 001 Winter 2022

This course is blended

1. Course Information



Delivery Mode	Day/Time	Location
In-person, synchronous online and asynchronous online	Mondays and Wednesdays 4:30 – 6:30	WALS UCC 66 and Zoom



Course Instructor	Contact Information
Dr. Beth Hundey	Geo 3350b Teams Channel Beth.hundey@uwo.ca

Teaching Assistant(s)	Contact Information
Kevin Ng	Geo 3350b Teams Channel Kng342@uwo.ca

Office hours:

Dr. Hundey: Wednesdays, 6:45 – 7:45 pm, using Microsoft Teams. You can use the Teams channel to send me a message letting me know you'd like to chat. Join as a group or come on your own. You don't need to have a specific question, I'm happy to get to know you anyway. If this timing doesn't work for you, send me a chat message to set up an alternate time.

Kevin Ng: Will post office hours during and as follow up to the lab weeks.

2. Textbook



- All resources will be posted in OWL in place of a textbook
- There is no required textbook for this course
- Depending on when we are back in person, you *may* be asked to buy a large bag of M&Ms. Yes, this is real. It has to be the big bag too, and ideally the flat ones, so definitely not Peanut M&Ms and even peanut butter ones are a bit too roll-y. Generally I'm not a stickler for brands, but they really need to have an M on them otherwise you'll be stuck in an infinite loop. You can buy them ahead of time knowing you're going to be asked to use them in February, but I can't be held responsible if you eat them before we need them.

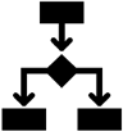
3. Calendar Description

The evidence, causes, and chronology of environmental change, with emphasis on the Holocene in North America.

2 lecture hours, 2 lab hours, 0.5 course

Antirequisite(s): None

Prerequisite(s): One of Geography 2310A/B, Geography 2320A/B or Geography 2330A/B, or at least 3rd year standing in an Environmental Science or Earth Sciences program.



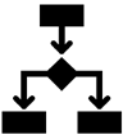
Prerequisite checking is the student's responsibility

Senate Regulations state, "unless you have either the requisites for this course or written special permission from your Dean to enroll in it, you will be removed from this course and it will be deleted from your record. This decision may not be appealed. You will receive no adjustment to your fees in the event that you are dropped from a course for failing to have the necessary prerequisites."

4. Course Outcomes and Format

Upon successful completion of this course, students will be able to:

- Outline a skeleton environmental change research proposal incorporating appropriate methods, records, and techniques, both in groups and independently.
- Communicate environmental change research to specialist (at the level of classmates) and non-specialist audiences in both written and oral formats.
- Critique popular media with a particular focus on climate science.
- Articulate natural and anthropogenic agents of environmental change, and explain similarities and differences between environmental changes today and in the past.
- Explain social aspects of environmental change, including vulnerability of populations, examples of mitigation, adaptation and personal responsibility.
- Independently interpret and explain key climate science figures, graphs, and maps.
- Set academic goals, assessing progress, identifying areas for growth, self-reflect, and communicating effectively with peers.



This course will be a combination of in-person, online synchronous, and asynchronous online engagement.

Asynchronous online course material will be posted to OWL: <http://owl.uwo.ca>. Any changes will be indicated on the OWL site and discussed with the class.

Google Chrome or Mozilla Firefox are the preferred browsers to optimally use OWL; update your browsers frequently. Students interested in evaluating their internet speed, please click [here](#).

If students need assistance, they can seek support on the [OWL Help page](#). Alternatively, they can contact the [Western Technology Services Helpdesk](#). They can be contacted by phone at 519-661-3800 or ext. 83800.

5. Program Learning Outcomes

Students will make progress towards the following program learning outcomes:

- Develop knowledge and critical understanding of the fundamental characteristics, processes, temporal changes and landscapes of social and biophysical systems and their interactions.
- Demonstrate informed awareness of geographical diversity through knowledge of different places and understanding of the processes that shape them spatially and over time.
- Combine breadth of knowledge of Geography with specialized understanding in selected sub-fields.
- Synthesize and evaluate geographical information from diverse sources, including geo-spatial data.
- Collect, analyze and interpret geographical and geo-spatial data in relation to social and biophysical systems
- Describe, explain, analyze and interpret a range of geographical phenomena outside the classroom by engagement with people, places and environments
- Analyze real-world problems and policy applications using geographical concepts, skills and understanding.
- Communicate geographic ideas and understanding effectively to a variety of audiences in writing, orally, and graphically



6. Course Content and Schedule

See the OWL site for indication as to which classes are synchronous (online or in person) and asynchronous.

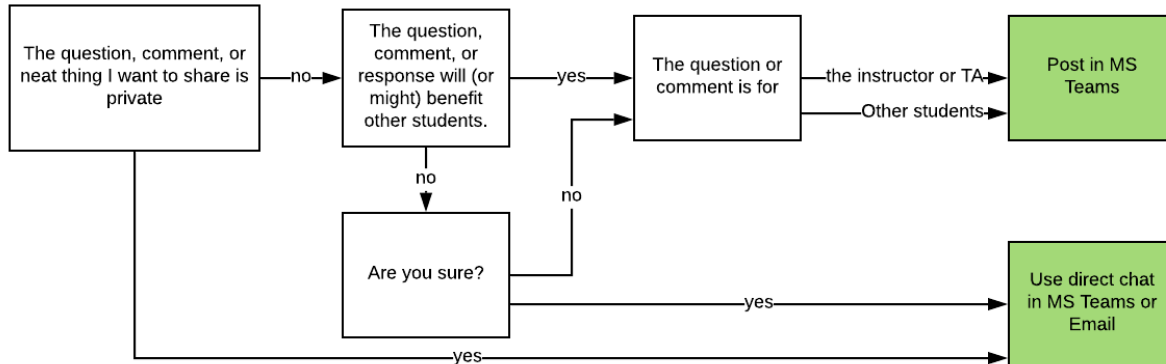


Week	Dates	Topic	Activity/ Deadlines
1	Jan 10, 12	Why Study Environmental Change?	Participation and Professionalism Reflection Activity
2	Jan 17, 19	Earth's Climate Today. A habitable planet. Greenhouse effect.	Lab work period
3	Jan 24, 26	Internal interactions. Instrumental records, challenges, and solutions.	Lab work period
4	Jan 31, Feb 2	Dating methods. Relative dating. Absolute dating.	Archive presentation preparation. Lab Assignment due.
5	Feb 7, Feb 9	Environmental Change methods	Archives presentation preparation.
6	Feb 14, 16	Environmental Change methods	Archive presentations and fact sheets due.
	Feb 21-25	Reading week	
7	Feb 28, Mar 2	Research proposal activity Team teaching IPCC Special Report on 1.5 degrees.	
8	Mar 7, 9	UN Climate Negotiations	
9	Mar 14, 16	Debrief EN-Roads Climate Simulation. Fake News.	Project plan/ annotated bibliographies due
10	Mar 21, 23	Earth's history and climate. The Last Glacial Maximum.	
11	Mar 28, Mar 30	Early humans, civilizations, and climate.	
12	Apr 4, 6	In-class showcases	Passion Projects Due.

7. Communication

Communicating with fellow students and the instructors

We aim to create an equitable learning community, and communication is an important part of that. Use the MS Teams channel to communicate about the course with the instructors and with each other. If you see a question in Teams that you can answer, we encourage you to do so! In this way, we can get to your question more quickly, and your classmates will also have the chance to learn from your question. Aim to check Teams 2 times a week. If your question or comment is private in nature, use direct chat in Teams or email from your centrally administered UWO email account.



Reminders and updates from the Instructor

- Week's activities will be posted by end of day Sunday each week, including a weekly video update.
- Always check the "Prepare for Week X" lesson at the end of each week.
- Reminders will be posted on MS Teams, but any critical or new information will also be included on the OWL site.
- Students will receive a response within 48 hours on weekdays.

9. Online Participation and Engagement



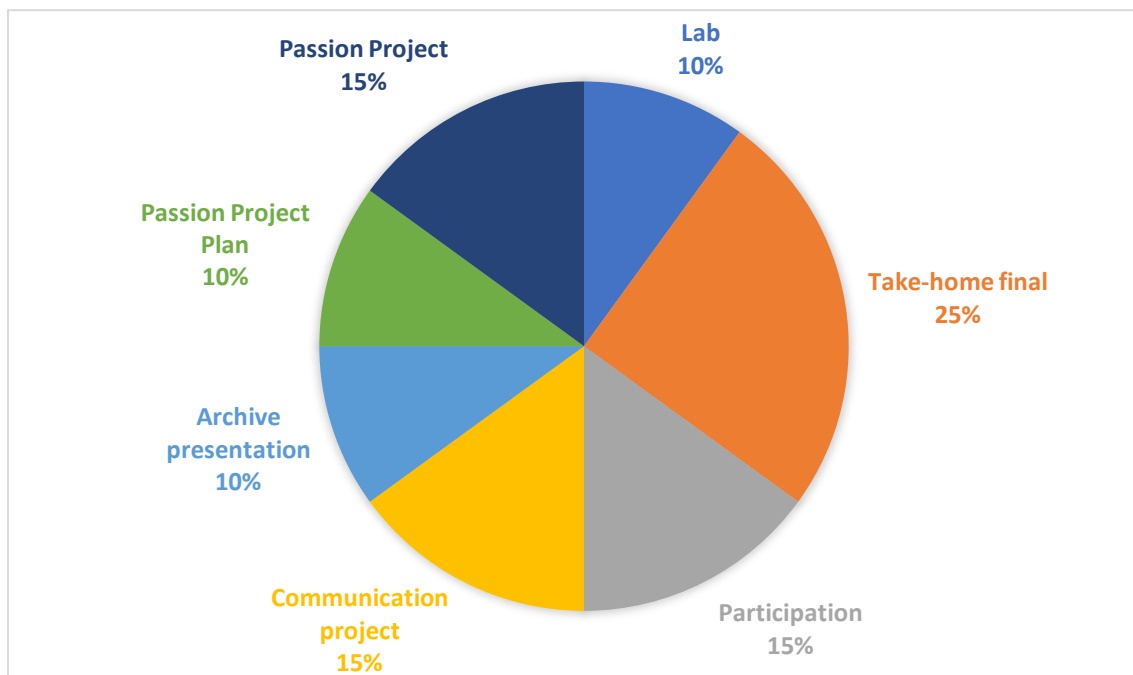
Classroom culture of participation.

This upper-level course requires active participation from students, both for assessment, and to enhance the learning experience of the entire class. Active learning benefits students by supporting higher-level learning and improves retention of material (M.J. Prince, 2004).

Participation will be graded, and there are formal and informal expectations of involvement.

Please come to class prepared to be involved and to be respectful to your classmates and the instructor team. Derogatory or offensive remarks and responses are not acceptable, nor are they effective forms of academic discussion or debate.

10. Evaluation



Evaluation Component	Brief Description	Due date	Percentage of Grade
Lab Assignment	Report with written answers, graphs, and calculations. Two lab work periods will be given.	February 2, 2022	10%
Archives/ Techniques Presentation	In groups, students are required to prepare a presentation and a fact sheet. Students choose from a list of topics or an alternative topic upon approval.	February 16, 2022	10%
Communication project	Students will choose from 3 options for the communication project.	Deadlines vary, up to Mar 23, 2022	15%
Passion projects	Consists of 2 individually graded components: a project plan or annotated bibliography, and the project. The final projects can be a poster, a story map, a video presentation, or another approved topic. All students should be prepared to provide a 3-minute oral summary of their project and can expect to answer questions.	Plans/ Annbib due: March 16, 2021 Showcase: April 4, 6	25%
Professionalism and Participation	Determined as a combination of self- and peer-assessment with adjustment and approval by the	Ongoing	15%

	instructor team. Class attendance is critical for participation grades and attendance will be taken. Each student will have 3 class passes, no questions asked, but these do not apply to presentation days.		
Take-home exam	An assignment to demonstrate the skills and knowledge you have gained throughout the course.	April 25, 2021	25%

- Students are responsible for material covered in lectures and readings and materials from the OWL site. These sessions are engaging, so although slides will often be posted, they will not contain the details of the discussion.
- Written assignments will be submitted to Turnitin
- Rubrics will be used to evaluate assessments and will be posted with the instructions
- After an assessment is returned, students should wait 24 hours to digest feedback before contacting their evaluator; to ensure a timely response, reach out within 7 days

Click [here](#) for a detailed and comprehensive set of policies and regulations concerning examinations and grading. The table below outlines the University-wide grade descriptors.

- Late assessments without illness self-reports will be subject to a late penalty 5 %/day
- Late assessments with illness self-reports should be submitted within 24 hours of submission of the last illness self-report
- An assessment cannot be submitted after it has been returned to the class.

A+	90-100	One could scarcely expect better from a student at this level
A	80-89	Superior work which is clearly above average
B	70-79	Good work, meeting all requirements, and eminently satisfactory
C	60-69	Competent work, meeting requirements
D	50-59	Fair work, minimally acceptable
F	below 50	Fail

Grades will not be adjusted on the basis of need. It is important to monitor your performance in the course. Remember: *You* are responsible for your grades in this course.

11. Accommodation Policies

Students with disabilities work with Accessible Education (formerly SSD) which provides recommendations for accommodation based on medical documentation or psychological and cognitive testing. The accommodation policy can be found here: [Academic Accommodation for Students with Disabilities](#).

Academic Consideration for Student Absence

Students will have up to two (2) opportunities during the regular academic year to use an on-line portal to self-report an absence during the term, provided the following conditions are met: the absence is no more than 48 hours in duration, and the assessment for which consideration is being sought is worth 30% or less of the student's final grade. Students are expected to contact their instructors within 24 hours of the end of the period of the self-reported absence, unless noted on the syllabus. Students are not able to use the self-reporting option in the following circumstances:

- for exams scheduled by the Office of the Registrar (e.g., December and April exams)
- absence of a duration greater than 48 hours,
- assessments worth more than 30% of the student's final grade,
- if a student has already used the self-reporting portal twice during the academic year

If the conditions for a Self-Reported Absence are *not* met, students will need to provide a Student Medical Certificate if the absence is medical, or provide appropriate documentation if there are compassionate grounds for the absence in question. Students are encouraged to contact their Faculty academic counselling office to obtain more information about the relevant documentation.

Students should also note that individual instructors are not permitted to receive documentation directly from a student, whether in support of an application for consideration on medical grounds, or for other reasons. **All documentation required for absences that are not covered by the Self-Reported Absence Policy must be submitted to the Academic Counselling office of a student's Home Faculty.**

For Western University policy on Consideration for Student Absence, see

[Policy on Academic Consideration for Student Absences - Undergraduate Students in First Entry Programs](#)

and for the Student Medical Certificate (SMC), see:

http://www.uwo.ca/univsec/pdf/academic_policies/appeals/medicalform.pdf.

Religious Accommodation

Students should consult the University's list of recognized religious holidays, and should give reasonable notice in writing, prior to the holiday, to the Instructor and an Academic Counsellor if their course requirements will be affected by a religious observance. Additional information is given in the [Western Multicultural Calendar](#).

12. Make-up Examinations

Make-up examinations are very rare in this course because the exam is take-home and multiple days are given to complete it.

Makeups will be granted with approved documentation only. All documentation for missed exams must be provided to the Academic Counselling Office within 48 hours of the scheduled exam, otherwise the instructor will assign a grade of zero.

The format and content of make-ups may differ substantially from the scheduled test or examination.

13. Course delivery with respect to the COVID-19 pandemic

Although the intent is for this course to be delivered in-person, the changing COVID-19 landscape may necessitate some or all of the course to be delivered online, either synchronously (i.e., at the times indicated in the timetable) or asynchronously (e.g., posted on OWL for students to view at their convenience). The grading scheme will not change. Any assessments affected will be conducted online as determined by the course instructor.

When deemed necessary, tests and examinations in this course will be conducted using a remote proctoring service. By taking this course, you are consenting to the use of this software and acknowledge that you will be required to provide personal information (including some biometric data) and the session will be recorded. Completion of this course will require you to have a reliable internet connection and a device that meets the technical requirements for this service. More information about this remote proctoring service, including technical requirements, is available on Western's Remote Proctoring website at: <https://remoteproctoring.uwo.ca>.

14. Information on COVID-19

Masking Guidelines

Students will be expected to wear triple layer, non-medical, paper masks at all times in the classroom as per University policy and public health directives. Students who are unable to wear a mask must seek formal accommodation through Western Accessible Education, and present medical documentation.

Students are not permitted to eat or drink while in class to ensure masks stay in place. Students will be able to eat and drink outside of the classroom during scheduled breaks.

Students unwilling to wear a mask as stipulated by Western policy and public health directives will be referred to the Dean, and such actions will be considered a violation of the student Code of Conduct.

Course Absences due to Daily COVID Screening Questionnaire

Missed assessments (e.g., presentations, essays, quizzes, tests, midterms, etc.) require formal academic considerations (typically self-reported absences and/or academic counselling).

Students should be aware that some learning outcomes cannot be easily made up and may need to be completed in a subsequent year.

Students who demonstrate a pattern of routinely missing coursework due to self-reported COVID symptoms, and therefore do not demonstrate mastery of the learning outcomes of the course, will not receive credit for the course.

15. Academic Offences

Scholastic offences are taken seriously and students are directed to read the appropriate policy, specifically, the definition of what constitutes a Scholastic Offence.

All required papers may be subject to submission for textual similarity review to the commercial plagiarism detection software under license to the University for the detection of plagiarism. All papers submitted for such checking will be included as source documents in the reference database for the purpose of detecting plagiarism of papers subsequently submitted to the system. Use of the service is subject to the licensing agreement, currently between The University of Western Ontario and Turnitin.com (<http://www.turnitin.com>).

16. Western's Commitment to Accessibility

The Department of Geography and Environment strives at all times to provide accessibility to all faculty, staff, students and visitors in a way that respects the dignity and independence of people with disabilities.

Please contact the course instructor if you require material in an alternate format or if you require any other arrangements to make this course more accessible to you. You may also wish to contact Services for Students with Disabilities (SSD) at 519-661-2147 for any specific question regarding an accommodation. Information regarding accommodation of exams is available on the Registrar's website.

More information about "Accessibility at Western" is available.

17. Mental Health

If you or someone you know is experiencing distress, there are several resources here at Western to assist you. Please visit Western's Health and Wellness website for more information on mental health resources.

18. Support Services

Western's Support Services
Student Development Centre

19. Important Dates

January 10: Classes resume

January 18: Last day to add a second term half course

February 21: Family Day – Department Office Closed

February 21-25: Spring Reading Week (No classes; Department Office open)

March 14: Last day to drop a first term half course without penalty

April 8: Classes end

April 9 and 10: Study days

April 10-31: Examination Period