

GEOG3350b - Environmental Change

Course Outline: Section 001 Winter 2023

This course includes in-person lessons and online asynchronous materials.

1. Course Information



Delivery Mode	Day/Time	Location
In person and asynchronous online	Mon and Weds 4:30 – 6:30	WALS UCC 66 and on OWL

Classes Start	Spring Reading Week	Classes End	Study day(s)	Exam Period
January 9	February 18-26	April 10	April 11 & 12	April 13-30

January 17, 2023: Last day to add a second-term half course

February 20, 2023: Family Day

March 7, 2023: Last day to drop a first term half course without penalty



Course Instructor	Contact Information
Dr. Beth Hundey (Please call me Beth or Dr. Hundey)	GEO 3350b Teams Channel beth.hundey@uwo.ca

Teaching Assistant(s)	Contact Information
Kamaldeen Mohammed	GEO 3350b Teams Channel Kmoam27@uwo.ca

Office Hours:

Dr. Hundey: Wednesdays: 6:45 – 7:45 pm, Microsoft Teams or In-Person. Come with your questions or just to chat. Join as a group or come on your own. If this timing doesn't work for you, send a MS Teams message to set up an alternate time.

- To chat In-Person, let me know you'd like to discuss something after class – in most cases we will be able to chat in our classroom as we are the last class of the day.
- To chat on-line, use Teams channel to send me a message letting me know.

Kamaldeen Mohammed: Will post office hours during and following the lab weeks.

2. Calendar Description

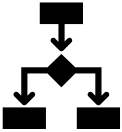
The evidence, causes, and chronology of environmental change, with emphasis on the Holocene in North America.

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.”

3. Program Learning Outcomes

Students will make progress towards the following Geography 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



4. Textbook



- All resources will be posted in OWL in place of a textbook
- There is no required textbook for this course
- Some students will be asked to buy a large bag of M&Ms. Yes, this is real. It has to be a big bag too, and ideally the flat ones (so not the caramel or peanut ones, even the 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.

5. Course Objectives and Format

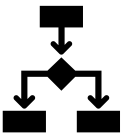
Upon successful completion of this course, students will be able to:

- 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 and online asynchronous engagement. On occasion synchronous online approaches may be used (students will be notified via announcements).

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.



All 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.

6. Course Content and Schedule

See the OWL site content pages and calendar for which classes are synchronous (online or in person) and asynchronous.

Week	Dates	Topic	Activity/ Deadlines
1	January 9,11	Why study environmental change?	Participation and Professionalism Reflection Activity
2	Jan 16,18	Earth's Climate Today. A habitable planet. Greenhouse effect	Lab work period
3	Jan 23,25	Internal interactions. Instrumental records, challenges, solutions	Lab work period
4	Jan 30, Feb 1	Dating methods. Relative dating. Absolute dating.	Archive presentation preparation. Lab Assignment due.
5	Feb 6,8	Environmental Change Methods	Archive presentations and fact sheets due
6	Feb 13,15	Environmental Change Methods II	Archive presentations and fact sheets due
	Feb 20,25	Reading Week	N/A
7	Feb 27,Mar 1	Research proposal activity Team teaching IPCC Special Report on 1.5 degrees	
8	Mar 6,8	UN Climate Negotiations	
9	Mar 13,15	Debrief Climate Simulation Earth's history and climate.	Project plan/ annotated bibliographies due.
10	Mar 20,22	Fake News The Last Glacial Maximum.	
11	Mar 27,29	Early humans, civilizations, and climate	
12	Apr 3,5	In-class and on-line showcases	Passion Projects Due
13	Apr 10	Review	

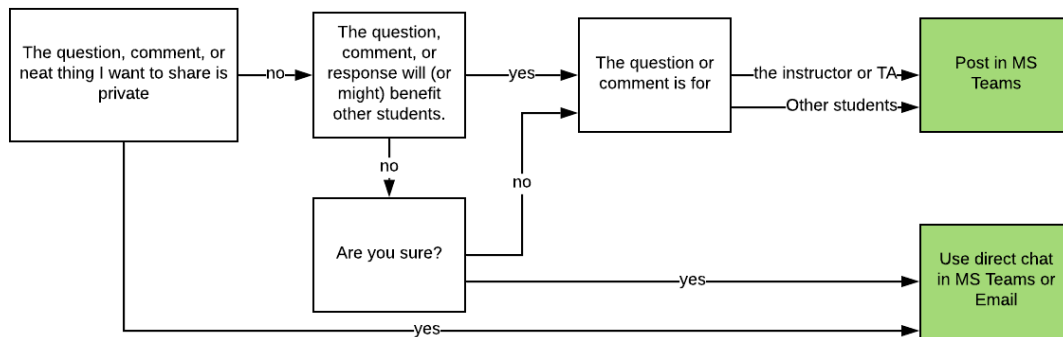


7. Communication



☒ 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 a chance to learn from your question. Aim to check MS Teams 2 times a week. If your question or comment is private in nature, use direct chat in MS Teams or email from your centrally administered UWO email account.



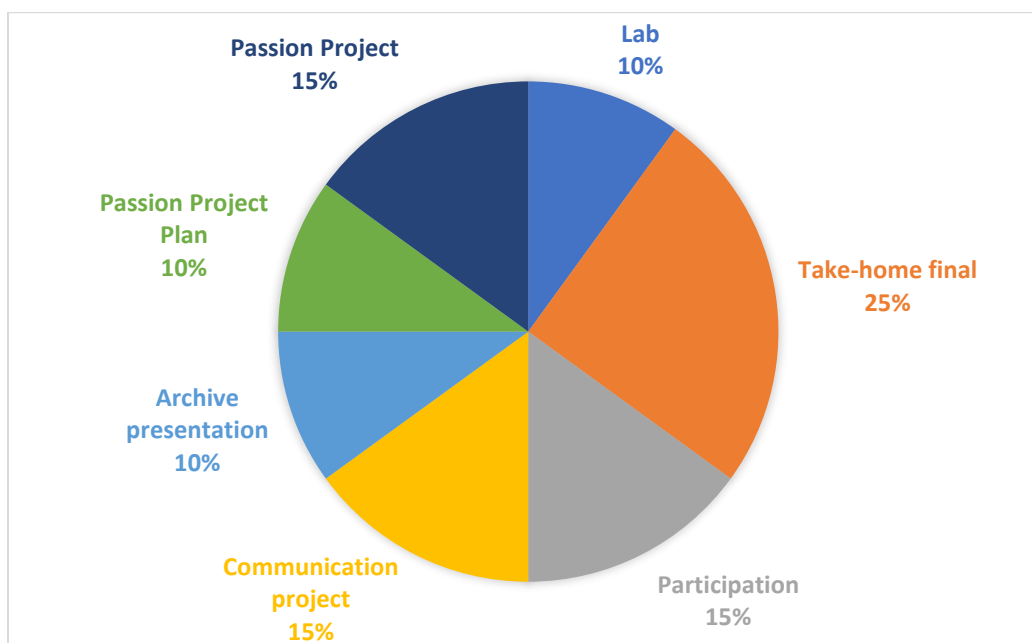
☒ Reminders and updates from the Instructor

- 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.

☒ Participation, engagement, and 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.

8. Evaluation



Below is the evaluation breakdown for the course. Any deviations will be communicated.



Assessment	Format	Percent of grade	Due Date
Lab Assignment	Report with written answers, graphs, and calculations. Two lab work periods will be given.	10%	Feb 1, 2023
Archives/ Techniques Presentation	In groups, students are required to prepare a presentation and a fact sheet. Students choose from a list of topics.	10%	Feb 15, 2023
Communication project	Students will choose from 3 options for the communication project.	15%	Deadlines vary, up to Mar 22, 2023
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 medium. All students should be prepared to provide a 3-minute oral summary of their project and can expect to answer questions	25%	Plans / Annbib due: Mar 15, 2023 Showcase: Apr 3, 5, 2023
Professionalism and participation	Determined by self-assessment with adjustment and approval by the instructor team. Class	15%	Ongoing

	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.	25%	April 24, 2023

The evaluation methods described in the course outline are essential requirements for the course.

Students are responsible for material covered in the lectures as well as the assigned readings and materials from the OWL site.

- All assignments are due at 11:55 pm EST unless otherwise specified
- Written assignments will be submitted to Turnitin (statement in policies below)
- 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.

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

Information about late or missed evaluations:

[A clear indication of how non-medical absences from midterms, tutorials, laboratory experiments, or late essays or assignments, will be dealt with must be provided.]

[Instructors must state how they will be dealing with accommodation for medical illness of work worth less than 10% of the total course grade, and whether or not medical documentation for such accommodation will be required. If documentation is required for either medical or non-medical academic accommodation, then such documentation must be submitted by the student directly to the appropriate Faculty Dean's office and not to the instructor. It will be the Dean's office that will determine if accommodation is warranted.]

- Late assessments without illness self-reports will be subject to a late penalty ___ %/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; [an alternate assessment will be assigned] OR [the weight will be transferred to the final grade]

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.

9. 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 in need of extension for course work for work less than 10% must contact the instructor – however, medical documentation is not to be sent to the instructor.

The University recognizes that a student's ability to meet their academic responsibilities may, on occasion, be impaired by medical illness. Illness may be acute (short term), or it may be chronic (long term), or chronic with acute episodes. The University further recognizes that medical situations are deeply personal and respects the need for privacy and confidentiality in these matters. However, in order to ensure fairness and consistency for all students, academic accommodation for work representing 10% or more of the student's overall grade in the course shall be granted only in those cases where there is documentation indicating that the student was seriously affected by illness and could not reasonably be expected to meet their academic responsibilities.

[Policy on Academic Consideration for Medical Illness - Undergraduate Students](#)

[Student Medical Certificate \(SMC\)](#)

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](#).

10. Make-up Examinations

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

Make-up exams 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.

11. Use of Electronic Devices

Electronic devices are allowed for tests.

12. How to Be Successful in this Class:

Students enrolled in this class should understand the level of autonomy and self-discipline required to be successful.

1. Invest in a planner or application to keep track of your courses. Populate all your deadlines at the start of the term and schedule time at the start of each week to get organized and manage your time.
2. Make it a daily habit to log onto OWL to ensure you have seen everything posted to help you succeed in this class.
3. Follow weekly checklists created on OWL or create your own to help you stay on track.
4. Take notes as you go through the lesson material. Keeping handwritten notes or even notes on a regular Word document will help you learn more effectively.
5. Connect with others. Try forming a study group and try meeting on a weekly basis for study and peer support.
6. Do not be afraid to ask questions. If you are struggling with a topic, check the online discussion boards or contact your instructor(s) and or teaching assistant(s).
7. Reward yourself for successes. It seems easier to motivate ourselves knowing that there is something waiting for us at the end of the task.



13. Continuity of Education Plan (in-person class pivoting to online learning)

In the event of a COVID-19 resurgence during the course that necessitates the university to direct courses move away from face-to-face interaction, all remaining course content will be delivered entirely 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 remaining assessments will also be conducted online as determined by the course instructor.

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 academic counselling). Methods for dealing with missed work and course content are at the discretion of the instructor(s). Students should be aware that some learning outcomes cannot be easily made up and may need to be completed in a subsequent year. Your instructor will provide you with further information as to how this applies within this course.

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

Western is committed to reducing incidents of gender-based and sexual violence and providing compassionate support to anyone who has gone through these traumatic events. If you have experienced sexual or gender-based violence (either recently or in the past), you will find

information about support services for survivors, including emergency contacts at https://www.uwo.ca/health/student_support/survivor_support/get-help.html.

To connect with a case manager or set up an appointment, please contact support@uwo.ca.

19. Important Dates

Monday January 9: Classes resume

Tuesday January 17: Last day to add a second term half course

Monday February 20: Family Day – Department Office Closed

February 18 to February 26: Spring Reading Week (No classes; Department Office open)

Tuesday March 7: Last day to drop a second term half course without penalty

Friday April 7: Good Friday – Department Office Closed

Monday April 10: Classes end

April 11 and 12: Study days

April 13-30: Examination Period