

## GEOG3350 – Climate Change: Past and Future Course Outline: Section 001 Winter 2025

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

### 1. Course Information



Classes Start	Spring Reading Week	Classes End	Study day(s)	Exam Period
January 6	February 17-23	April 4	April 5 & 6	April 7-30

January 14, 2025: Last day to add a second-term half course

February 17, 2025: Family Day

March 31, 2025: Last day to drop a second term half course without penalty



Course Instructor	Contact Information	Office Hours
Reforce Okwei	rokwei@uwo.ca	Tuesdays: 6:00—7:00 pm

Teaching Assistant(s)	Contact Information	Office Hours
Aviva Fournie	afourn6@uwo.ca	TBD



#### Office hours

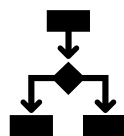
Reforce: My office hours will be held either in-person at SSC2316 or via Zoom using the link (<https://westernuniversity.zoom.us/j/96582046413>). You will need your western details to chat with me on Zoom.

- If my office hours don't work best for you, email me and let discuss alternatives.
- I will also stay behind for 15 minutes after each class to chat with students who may have any question about the class or the course in general.

Aviva (TA): Will post office hours during and following the lab weeks.

### 2. Calendar Description

Learn about the lessons Earth's past climate holds for future climate change. Students in this course are introduced to methods of paleoclimatology, past environmental changes and their impacts on early societies, and future climate change including models, international agreements, climate and graphical literacy in the media, and strategies for reaching climate goals.



2 lecture hours, 2 lab hours 0.5 course

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. Textbook

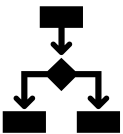


- There is no required textbook.
- All resources will be posted in Brightspace.

### 4. 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 on Brightspace).

Students are expected to attend all classes unless due to medical reasons and emergencies. In instances that a student will be absent from class, email the instructor.

Missed assignments due to medical reasons and emergencies (with permission) should be completed within 42 hours.

All course material will be posted to <https://westernu.brightspace.com/d2l/home>. Any changes will be indicated on Brightspace and discussed with the class.

Current versions of all popular browsers (e.g., Safari, Chrome, Edge, Firefox) are supported with OWL Brightspace; what is most important is that you update your browser frequently to ensure it is current. All JavaScript and cookies should be enabled.

If students need assistance, they can seek support on the [OWL Brightspace 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. Learning Outcomes

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

- 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 Brightspace site content pages and calendar for which classes are synchronous (online or in person) and asynchronous.

Week	Dates	Topic	Readings
1	January 6, 8	Why study environmental change?	Participation and Reflection Activity
2	January 13, 15	Earth's Climate Today. A habitable planet. Greenhouse effect	Quiz
3	January 20, 22	Internal interactions. Instrumental records, challenges, solutions	Lab work period
4	January 27, 29	Dating methods. Relative dating. Absolute dating.	Lab work period Archive presentation preparation Quiz
5	February 3, 5	Environmental Change Methods	Lab assignment due Archive presentation preparation.
6	February 10, 12	Environmental Change Methods II	Archive presentation preparation and fact sheets due.
	February 17-21	Spring Reading Week	N/A
7	February 24, 26	Research proposal activity	Quiz

Week	Dates	Topic	Readings
		Team teaching IPCC Special Report on 1.5 degrees	
8	March 3, 5	UN Climate Negotiations	N/A
9	March 10, 12	Debrief Climate Simulation Earth's history and climate.	Quiz Project plan/ annotated bibliographies due.
10	March 17, 19	Fake News The Last Glacial Maximum.	N/A
11	March 24, 26	Early humans, civilizations, and climate	Quiz
12	March 31, April 2	In-class and on-line showcases	Passion Projects Due
13*	April 7	Course review	Preparing for final exams
* Final exam review session will be held on Monday April 7, 4:30—6:30 pm in SSC 1004. Attendance will be optional			

## 7. Communication

Equitable and effective communication is an integral part of this course. I operate an open-door policy with students in the course. Therefore, do not hesitate to email me or drop in at my office hours if you have any questions or require additional information on anything concerning this course. This course will use the OWL Brightspace for discussions. You should post general course-related questions to the OWL Brightspace discussion Forum that everyone can monitor it. If you see a question you can answer, we encourage you to do so! This way, we can get to your question more quickly, and your classmates will also have a chance to learn from your question.

- Students should check the OWL site every 24 – 48 hours
- A weekly update will be provided on the OWL announcements
- Students should email their instructor(s) and teaching assistant(s) using OWL Brightspace
- For any other communication, the centrally administered **e-mail account** provided to students will be considered the individual's official university e-mail address. It is the responsibility of the account holder to ensure that e-mail received from the University at his/her official university address is attended to in a timely manner. You can read about the privacy and security of the UWO email accounts [here](#).
- Emails will be monitored daily; students will receive a response in 24 – 48 hours
- To get a reply to your emails quickly, kindly use your university email and use the course code and name as the subject.
- This course will use Microsoft Teams for discussions
- Students should post all course-related content on the discussion forum so that everyone can access answers to questions

☒ The discussion forums will be monitored daily by instructors or teaching assistants

### 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. 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 3
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 12
Communication project	Students will choose from 3 options for the communication project.	15%	Mar 19
Quizzes	Students will complete a quiz on owl on Mondays. Quiz is open 24 hours; you have one hour in the 24-hour period to write the quiz (until 11:55 pm). A student's quiz grade will be based on their top 4 quiz marks (drop lowest).	10%	Jan 15, Jan 29, Feb 24, Mar 10, Mar 24  This course has 5 quizzes with only 4/5 quizzes counted towards your final grade.
Passion projects	Consists of 3 individually graded components: a project plan included annotated bibliography, the project, and the showcase. All students should be prepared to provide a 3-minute oral summary of their project and can expect to answer questions.	15%	Project plan due: Mar 12  Showcase: March 31, April 2
Attendance, participation, and reflection.	Determined by self-assessment with adjustment and approval by the instructor team. Class attendance is critical for participation grades and	15% (5% each)	Ongoing



	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%	Due Date TBD

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 chapters/sections in the text 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.
- Aside from the quizzes, all assignments have a 48-hour extension period. Student who requires more than 48 hours after submission deadline will need accommodations.

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

**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](#).

### General Information about missed work

University policy on academic considerations are described [here](#). This policy requires that all requests for academic considerations must be accompanied by a self-attestation. Further information about academic considerations, and information about submitting this self-attestation with your academic consideration request may be found here.

Please note that any academic considerations granted in this course will be determined by the instructor, in consultation with the academic advisors in your Faculty of Registration, in accordance with information presented in this course outline.

### **Flexibility statements**

Please note that because the submission deadline for assignments in this course already includes flexibility in the form of 48-hour extension, the instructor reserves the right to deny academic consideration for assignments which are submitted following the end of the period of flexibility unless with accommodations.

### **Absence from Course Commitments**

Students must familiarize themselves with the [Policy on Academic Consideration – Undergraduate Students in First Entry Programs](#)

Students missing course work for medical, compassionate or extenuating circumstances can request academic consideration by completing a request at the central academic consideration portal. Students are permitted one academic consideration request per course per term without supporting documentation. Note that supporting documentation is **always** required for academic consideration requests for examinations scheduled by the office of the registrar (e.g. December and April exams) and for practical laboratory and performance tests typically schedule during the last week of the term. Students should also note that the instructor may designate one assessment per course per term that requires supporting documentation. This designated assessment is described elsewhere in this document. Please note that any academic considerations granted in this course will be determined by the instructor of this course, in consultation with the academic advisors in your Faculty of Registration, in accordance with information presented in this course outline. Supporting documentation for academic considerations for absences due to illness should use the [Student Medical Certificate](#) or, where that is not possible, equivalent documentation by a health care practitioner.

### **Accommodation for Religious Holidays**

Students should review the policy for [Accommodation for Religious Holidays](#). Where a student will be unable to write examinations and term tests due to a conflicting religious holiday, they should inform their instructors as soon as possible but not later than two weeks prior to writing the examination/term test. In the case of conflict with a midterm test, students should inform their instructor as soon as possible but not later than one week prior to the midterm.

## **10. Make-up Examinations**

A Special Examination is any examination other than the regular examination, and it may be offered only with the permission of the Dean of the Faculty in which the student is registered, in consultation with the instructor and Department Chair. Permission to write a Special Examination may be given based on compassionate or medical grounds with appropriate supporting documents.

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. 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>).

#### **14. 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.

#### **15. 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.

#### **16. 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](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](mailto:support@uwo.ca).

#### **17. Important Dates**

Monday January 6: Classes resume

Tuesday January 14: Last day to add a second term half course

Monday February 17: Family Day – Department Office Closed

February 17-23: Spring Reading Week (No classes; Department Office open)

Friday March 7: Last day to drop a second term half course

Friday April 4: Classes end

April 5 and 6: Study days  
April 7-30: Examination Period