

GEOG 3350B – Environmental Change Section 001 Winter 2020

1. Course Information

Classroom Location:

Contact Information:

Mon, 4:30-6:30 pm, Wed, 4:30-6:30 pm, UCC 66 *location changes posted on schedule (highlighted in yellow) and announced in class.

| Instructor team: | Dr. Beth Hundey | TA: Corey Dawson | | | |
|-------------------|--|------------------|--|--|--|
| Primary method of | Piazza | | | | |
| contact: | Piazza is catered to getting you help fast and efficiently from classmates and the instructor team. Rather than emailing your questions to our teaching team, we encourage you to post your questions on Piazza. Public messages can be answered by anyone in the class including the instructors. Private messages will be seen by the instructor team. Sign up at piazza.com/uwo.ca/spring2020/geo3350. Access the piazza page at piazza.com/uwo.ca/spring2020/geo3350/home. | | | | |
| Office | D.B. Weldon Library Room 121 | SSC 1432 | | | |
| Office Hours | By appointment | | | | |
| Phone | 519-661-2111 x 81218 | | | | |
| Email | beth.hundey@uwo.ca | | | | |

2. Calendar Description

Course Description

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

Course weight: 0.5

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

Prerequisite checking is the student's responsibility

Senate Regulations

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 (strongly recommended)

William F. Ruddiman (2014), Earth's Climate, Past and Future, 3rd or 2nd Edition. Freeman, New York. ISBN-10: 1-4292-5525-0; ISBN-13: 978-1-4292-5525-7

Links to additional readings will be available on the course OWL site.

4. Course Format

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. Lectures will be interspersed with brainstorming, activities, work periods and discussion.

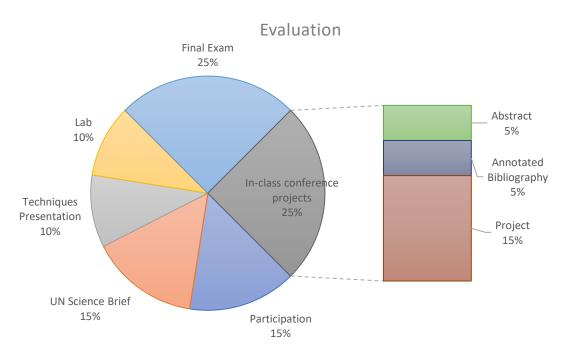
Please come to class prepared to be involved and to be respectful to your classmates and the instructor team. Derogatory or offensive remarks and responses are not acceptable, nor are they effective forms of academic debate.

5. Learning Outcomes

After successfully completing Geography 3350A, students will be able to:

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

6. Evaluation



Assignment Summaries

Further details will be provided as each assignment is introduced in class.

| Evaluation | Brief Description | Percentage | Due | |
|---|---|------------|----------|--|
| Component | | of Grade | Date | |
| Lab Assignment | Report with written answers, graphs, and calculations. | 10% | Jan 27 | |
| | Two lab work periods will be given. Archives/ In groups, students are required to prepare a 1 | | | |
| Archives/ | chives/ In groups, students are required to prepare a | | Feb 5 | |
| Techniques | presentation and a fact sheet. Students choose from a | | | |
| Presentation | list of topics or an alternative topic upon approval. | | | |
| UN Science Brief | Brief UN Climate Negotiators from a partner class with | 15% | Feb 26 | |
| | an Executive Summary about their specific country. | | | |
| In-class Consists of 3 individually graded components: an | | 25% | Mar 11 | |
| conference | annotated bibliography, an abstract, and the project. | | Mar 23 | |
| projects | The final projects can be a poster, a story map, a video | | Mar 30 | |
| | presentation, or another approved topic. All students | | to Apr 6 | |
| | should be prepared to provide a 3-minute oral summary | | | |
| | of their project and can expect to answer questions. | | | |
| Participation | Determined as a combination of self- and peer- | 15% | Feb 24 | |
| | assessment with adjustment and approval by the | | Apr 6 | |
| | instructor team. Class attendance is critical for | | | |
| | participation grades and attendance will be taken. | | | |
| Take-home | An assignment to demonstrate the skills and knowledge | 25% | April 16 | |
| exam and | you have gained throughout the course, followed by a | | | |
| interview | short conversation with instructor/ TA team. | | | |

Students are responsible for material covered in the lectures as well as assigned sections in the text.

Grade Breakdown and Explanation

| 90-100 | Excellent. You have surpassed my expectations (very rare) |
|--------|---|
| 80-89 | Very good. You have fulfilled my expectations |
| 70-79 | Good. Expectations are mostly fulfilled with weak areas. |
| 60-69 | Satisfactory. There are problems such as confusing writing or expectations are not fulfilled. |
| 50-59 | Less than satisfactory. There are major problems. |
| < 50 | Unsatisfactory. Task not fulfilled. |

Students are responsible for material covered in the lectures as well as the assigned chapters/sections in the text. Students are expected to attend class.

For Western's NEW <u>Policy on Accommodation for Illnesses</u> please refer to the Academic Calendar' section on <u>Academic Rights and Responsibilities</u>.

Requesting Academic Consideration

Students who experience an extenuating circumstance (illness, injury, or other extenuating circumstance) sufficiently significant to temporarily render them unable to meet academic requirements may submit a request for academic consideration through the following routes:

- (i) Submitting a <u>Self-Reported Absence form</u> provided that the conditions for submission are met;
- (ii) For <u>medical absences</u>, submitting a <u>Student Medical Certificate</u> (SMC) signed by a licensed medical or mental health practitioner in order to be eligible for Academic Consideration; or
- (iii) For <u>non-medical absences</u>, submitting appropriate documentation (e.g., obituary, police report, accident report, court order, etc.) to Academic Counselling in their Faculty of registration in order to be eligible for academic consideration. Students are encouraged to contact their Academic Counselling unit to clarify what documentation is appropriate.

Students seeking academic consideration:

- are advised to consider carefully the implications of postponing tests or midterm exams or delaying handing in work;
- are encouraged to make appropriate decisions based on their specific circumstances, recognizing that minor ailments or upsets are not normally an appropriate basis for a selfreported absence;
- must communicate with their instructors no later than 24 hours after the end of the period covered by either the self-reported absence or SMC, or immediately upon their return following a documented absence.

Academic consideration is not normally intended for the following circumstances:

• Students who require academic accommodation based on an ongoing physical or mental illness (recurring or chronic) or an existing disability. Students with an ongoing physical illness or mental disorder (recurring or chronic) or an existing disability are responsible, in consultation

with their doctors or other health professionals, to determine if they are capable of pursuing their studies and, if so, with what accommodations. Students are expected to seek and arrange reasonable accommodations with Student Accessibility Services (SAS) as soon as possible in accordance with the <u>Policy on Academic Accommodation for Students with Disability</u>. Students with pre-existing accessibility plans arranged through SAS may not need to provide additional documentation when seeking academic consideration where such request for consideration relates to their disability and where their accessibility plans allow for coursework deferral or deadline extensions.

Students who experience high levels of stress related to academic performance (including completing assignments, taking part in presentations, or writing tests or examinations).
Students with academic or exam stress should access supports through <u>Student Health and Wellness</u> and <u>Learning Skills Services</u> in order to deal with this stress in a proactive and constructive manner.

Grades <u>will not be adjusted</u> 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.

7. Make-up Examinations

Makeups will be granted with approved documentation only. All documentation for missed exams must be provided the Academic Counselling Office and Instructor within 48 hours of the scheduled exam. For missed exams, you must take your documentation to Academic Counselling within 48 hours of the 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.

8. Use of Electronic Devices

No electronic devices will be allowed during tests and examinations.

9. Academic Offences

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

10.Western's Commitment to Accessibility

The Department of Geography 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 <u>"Accessibility at Western"</u> is available.

11.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 <u>Health and Wellness website</u> for more information on mental health resources.

12. Support Services

Western's Support Services Student Development Centre



| | Date | Topics | Readings Ed 3 | Action Items | Asse | ssments | | | | |
|-----|--------------|---|----------------------|--|------------|--------------------------|---------|------------------|---------------|--|
| 1 | Mon Jan 6 | Why study enviro change? | Ch1: 1-1 to 1-3 | Read syllabus | | | | | | |
| | Wed Jan 8 | Internal interactions | Ch1: 1-4 to 1-9; Ch2 | Reflection activity 1 | | | | | | |
| 2 | Mon Jan 13 | Climate forcing mechanisms | Ch1: 1-5,1-6; Ch8. | | La | | | | | |
| | Wed Jan 15 | Lab work period SSC 1059 | | Read and attempt lab questions | σ | | | | | |
| | Mon Jan 20 | Instrumental records & dating | 1-3; 3-1 to 3-4; 3-6 | Professionalism and participation 1: | Assignment | | | | | |
| | | methods | to 3-7; 5-2 | goal setting | ign | | | | | |
| | Wed Jan 22 | Lab work period SSC 1059 | | Use TA/ peer collaboration wisely | mei | P | | | | |
| 4 | Mon Jan 27 | Enviro change methods I | 3-2 to 3-4 | Lab due; topics for Archives Pres'n | nt | Archives Presentation | | | | |
| | Wed Jan 29 | Archive presentations prep day | | Group work – in class | | Arc | | | | |
| 5 | Mon Feb 3 | Enviro change methods II | 17-2 to 17-3, 63-66 | | | Archives | | | | |
| | Wed Feb 5 | Archives presentation day | | Presentation day | | on es | | | | |
| 6 N | Mon Feb 10 | Recent warming: scientific basis | Ch18 | | | | | | P | |
| | | & historical context | | | | | S | | arti | |
| | Wed Feb 12 | IPCC – Physical Science basis | Ch19, IPCC SR 1.5 | Group work – in class | | | Science | | cipa | |
| | | Feb 17/ 19 |), Reading Week! | | | | lCe | | Participation | |
| 7 | Mon Feb 24 | Research proposal activity | | Group work, self-evaluation 1 | | | Brief | | Ĕ | |
| | Wed Feb 26 | Climate negotiation simulations | Ch20, Briefs | Group work – Science Brief due | | | ef | | | |
| 8 | Mon Mar 2 | Climate negotiation simulations | | Group work | | | | | | |
| | Wed Mar 4 | Climate simulation debrief | | | | | | | | |
| 9 | Mon Mar 9 | UN Climate negotiations: R. Dimitrov | | | | | | | | |
| | Wed Mar 11 | Earth's history and climate | Ch4,Ch5,Ch6,Ch7 | Annot'd bib' due, prepare to discuss | | | | | | |
| 10 | Mon Mar 16 | Last glacial maximum (LGM) | Ch13 | Activity – Please bring a computer | | | | | | |
| | Wed Mar 18 | Climate since the LGM | Ch14 | | | | | | | |
| 11 | Mon Mar 23 | Early civilizations and climate I | Ch16 | Abstract due | | | | Re | | |
| | Wed Mar 25 | Early civilizations and climate II | Ch17 | In class: Civilization collapse jigsaw | | | | isea | Par | |
| 12 | Mon Mar 30 | In class conference I | | Presentation Day | | | | Irch | tici | |
| | Wed Apr 1 | In class conference II | | Presentation Day | | | | pr | Participation | |
| 13 | Mon Apr 6 | In class conference III and review | | Presentation Day Self-evaluation 2 |] | | | Research project | ion II | |
| 14 | Thurs Apr 16 | | | Take home exam due | | | | | | |