

Human Dimensions of Environmental Change

HGEO 452 B1 / 552 B1 Winter Term 2023-24
Wednesdays 1-3:50pm, ESB 1-31

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The University of Alberta respectfully acknowledges that we are situated on Treaty 6 territory, traditional lands of First Nations and Métis people.

COURSE INFORMATION

Course Description: 3 units. Examination of the human dimensions of climate heating. Topics include climate heating politics, public perceptions and impacts, vulnerability and resilience, mitigation and adaptation. Classes concurrent with HGEO 552.

Course Prerequisites: It is your responsibility as a student to ensure that you have the appropriate prerequisites for the course. Any 300-level EAS or HGP or HGEO course or consent of instructor. Not available to students with credit in EAS 493. [Faculty of Arts]

Course Objectives and Expected Learning Outcomes: This course explores the human dimensions of climate heating, including climate heating science and politics, public perceptions and impacts, vulnerability and resilience, and adaptation. Throughout the course, students will engage in discussions and exercises, and complete projects on vulnerability to climate heating and adaptation by local governments. By the end of the course students will be able to:

- Differentiate between abstractions, probabilities, tangible and intangible impacts of environmental change;
- Describe the material, social and political-economic drivers of anthropogenic climate heating;
- Summarise original sources, literature that analyses the dynamics of societies, cultures, and scales of environmental change;
- Evaluate the vulnerability of populations to climate heating, environmental risks and dynamics and describe impacts that vulnerable populations are facing;
- Analyze policy making process in various orders of governments relevant to climate heating and environmental change;
- Communicate and evaluate knowledge and information from peers;

- Demonstrate academic literature review skills, discussion and negotiation experience, small project management, spatial data visualization and science communication presentation skills.

Course Format: This is a workshop and discussion-oriented course which depends on classroom participation and attendance for success.

LEARNING RESOURCES

Required Textbooks: Readings are **online** for this course. Readings will be assigned on a weekly basis. Some readings will centre around the UN IPCC reports:

- *6th Assessment Synthesis Report* (March 2023) <https://www.ipcc.ch/report/sixth-assessment-report-cycle/> and its draft components: three *Working Group* contributions released August 2021, February and April 2022, and three *Special Reports* released in 2018 and 2019.

Optional, Recommended for HGEO552. Available in the bookstore. Some are briefly reviewed on spaceandculture.com

- Bringham and Zwicky *Learning to Die: Wisdom in the Age of Climate Change* Gaspereau
- Frankopan, P. (2023). *The Earth Transformed: An Untold History*. Knopf.
- Proulx, A. (2023). *Fen, Bog and Swamp: A Short History of Peatland Destruction and Its Role in the Climate Crisis*. Scribner.

Course Fees: none

Optional Learning Resources

- The [Academic Success Centre](#) provides professional academic support to help students strengthen their academic skills and achieve their academic goals. Individual advising, appointments, and group workshops are available year round in the areas of Accessibility, Communication, Learning, and Writing Resources. Modest fees apply for some services.
- Writing Services offers free one-on-one writing support to students, faculty, and staff through the [Academic Success Centre](#). Students can request consultation for a writing project at any stage of development. Instructors can request class visits and presentations.
- [The First Peoples' House](#) provides an environment of empowerment for First Nations, Métis, and Inuit learners to achieve personal and academic growth.

Important Dates:

First Day of Class: Jan 8 2024
 Add/Delete Date: Jan 19 2024
 50% Withdrawal Date: Feb 7 2024
 Withdrawal Date: April 5 2024
 Last Day of Class: Apr. 12 2024
 Final Exam Date: n/a
 Date of Deferred Final Exam: n/a

LECTURE SCHEDULE (will be revised to reflect progress)

Class	Wed 1pm	Topic
1	Jan 10	Intro: IPCC, a warming world, Anthropocene, environmental justice
2	Jan 17	The Anthropocene, anthropogenic and cyclic climate change
3	Jan 24	Problem Frames, Spatial frames and spatialisation
4	Jan 31	Uneven Anthropocenes, "Collapsology," <i>After Ice</i> and whose Anthropocenes? Indigenous responses. Permafrost Lab TBC <i>Hand-in 1st Notes</i>
5	Feb 7	Biodiversity, extinctions, migrations, entanglements
6	Feb 14	IPCC and experience: Arctic Ice and Coastal habitats, Food security and Drought, Climate refugees
	Feb 21	<i>Reading Week</i>
7	Feb 28	Water after ice: Glaciers (Presentations)
8	Mar 6	Carbon sinks: Ice, energy, forest, peatlands. Ice Core Lab TBC (Pres.) <i>2nd Notes</i>
9	Mar 13	Energy and climate change: Hydroelectricity: James Bay (Pres.) <i>Outlines</i>
10	Mar 20	Infrastructure and Geoengineering Haida Guay: Salmon (Pres.)
11	Mar 27	Environmental and Spatial Justice Workshop 26-27 Mar
12	Apr 3	IPCC assessment (Pres.) <i>3rd Notes</i>
13	Apr 10	Peer editing of papers <i>Papers due, hand in revisions online by Apr 12</i>

GRADE EVALUATION 452 / 552 STUDENTS

Assignment	Hand-in	%
<u>Reading Notes</u> of 1 course reading with example ea. week. Do not summarize. 3 hand-in dates. 250-400 words each week with a focus on your individual paper topics. 552 students are expected to meet with the instructor and submit min. 400 word notes on 1 or more course readings/week. Notebook, blog, wiki or word doc with diagrams, maps and your own photographs.		
	31 Jan	12
	Weeks 1-3 (3 notes)	
	6 Mar	16
<u>Marking scheme:</u> 1 handed in, 2 grasps essentials,	Weeks 4-7 (4 notes)	
3 good, 4 original insight backed up with evidence	Weeks 8-11 (4 notes)	
<u>Brief Presentation based on individual paper outline</u> awarded for oral presentation +3 and participation +3	Pass/Fail. Marks During March	6
<u>Individual Paper outline</u> (title) and 1/2 page outline + 1/2 page sources.	Mar 13	10
<u>Marking scheme:</u> basic handin +3, acceptable sources +4, notes and drafts +3		
<u>Papers due & peer editing workshop</u> on complex anthropogenic environmental impacts/relations 2500 words plus diagrams. 1+ pages references. Hand-in in class . 552 Students 15 pages (4000-5000 words). <u>Marking scheme:</u> sources +2, 1500 word draft +8, participation +5	April 10	15
<u>Revisions and hand-in</u> Final Hand-in of revisions via eclass or email.	April 12	25
Total		100

Grading: Course grades obtained by undergraduate students will be converted from numerical to letter grades as follows:

- A+ Original, exceptional and outstanding in all respects ≥ 90
 - A Distinctly outstanding work 85-90
 - A- Careful, thorough and insightful work 80-84
 - B+ Excellent, insightful work in most respects 77-79
 - B Very Good solid work 74-76
 - B- Good work in most respects 70-73
 - C+ Good work in some respects 67-69
 - C Satisfactory work 64-66
 - C- Satisfactory but significant flaws 60-63
 - D+ Substantial incomprehension of course material 57-59
 - D Minimal Pass 50-56
 - F Inadequate ≤ 50
- (HGEO552: C and below is a failure for graduate students)

Evaluation: All assignments in this course will be given a numerical score. A cumulative course mark will be calculated from those scores based on the conversion above. A final letter grade will be assigned based on your cumulative mark and my analysis of the class's cumulative mark distribution. Where possible, natural breaks in the cumulative mark distribution will be used in assigning grades, but no pre-determined distribution of grades will be imposed on the class. Your grade will reflect a combination of your absolute achievement and relative standing in the class. Grades are unofficial until approved by the Department and/or Faculty offering the course.

POLICIES FOR LATE AND MISSED WORK

Attendance: Regular participation is essential for optimal performance in any course. For an excused absence where the cause is religious belief, a student must contact the instructor within two weeks of the start of Fall or Winter classes to request accommodation for the term (including the final exam, where relevant). Instructors may request adequate documentation to substantiate the student request.

Late Policies: A student who cannot complete a term assignment on time due to incapacitating illness, severe domestic affliction or other compelling reasons must apply to the course instructor within two days of the absence (or as soon as possible with due regard for the circumstances) for an extension of time to complete an assignment.

Receiving alternate arrangements for the completion of term work is a privilege and not a right. There is no guarantee that late work will be accepted or that an absence will be excused. Misrepresentation of facts to gain an unfair academic advantage over other students is a serious breach of the Code of Student Behaviour.

REMOTE DELIVERY CONSIDERATIONS

Recordings of Synchronous Activities:

- This course is scheduled as in-person. Please note that this course will be recorded. Recordings of this course will be used for the purposes of asynchronous learning, especially in the case of pandemic lockdowns etc., and will be disclosed to other students enrolled in this section of the class.
- Please direct any questions about this collection to the instructor of this course.

STUDENT RESPONSIBILITIES

Academic Integrity: The University of Alberta is committed to the highest standards of academic integrity and honesty. Students are expected to be familiar with these standards regarding academic honesty and to uphold the policies of the University in this respect. Students are particularly urged to familiarize themselves with the provisions of the Code of Student Behaviour (on the [University Governance](#) website) and avoid any behaviour which could potentially result in suspicions of cheating, plagiarism, misrepresentation of facts, and/or participation in an offence. Academic dishonesty is a serious offence and can result in suspension or expulsion from the University.

Instructors are required to report suspected violations of the COSB. See the [Academic Discipline Process](#).

Seek prior approval from the instructor for AI use in specific assignments. In general they are not producing better than C grade results. In the class, I will identify which if any and which AI tools can be used.

All students should consult [the Academic Integrity website](#). If you have any questions, ask your instructor. Students who want to strengthen their academic skills and learn more on topics such as note-taking, time management, and academic integrity are encouraged to explore [The Academic Success Centre](#).

Recording of Lectures: Audio or video recording, digital or otherwise, of lectures, labs, seminars or any other teaching environment by students is allowed only with the prior written consent of the instructor or as a part of an approved accommodation plan. Student or instructor content, digital or otherwise, created and/or used within the context of the course is to be used solely for personal study, and is not to be used or distributed for any other purpose without prior written consent from the content author(s).

Students Eligible for Accessibility-Related Accommodations: Eligible students have both rights and responsibilities with regard to accessibility-related accommodations. Consequently, scheduling exam accommodations in accordance with [Accessibility Resources](#) deadlines and procedures is essential. Please note adherence to procedures and deadlines is required for U of A to provide accommodations. Contact [Accessibility Resources](#) for further information.

LEARNING AND WORKING ENVIRONMENT

The Faculty of Arts is committed to ensuring that all students, faculty and staff are able to work and study in an environment that is safe and free from discrimination and harassment. It does not tolerate behaviour that undermines that environment.

If you are experiencing harassment, discrimination, fraud, theft or any other issue and would like confidential advice and information, please contact any of these campus services:

- Office of Safe Disclosure & Human Rights: A safe, neutral and confidential space to disclose concerns about how the University of Alberta policies, procedures or ethical standards are being applied. They provide strategic advice and referral on matters such as discrimination, harassment, duty to accommodate and wrong-doings. Disclosures can be made in person or online using the Online Reporting Tool
- University of Alberta Protective Services: Peace officers dedicated to ensuring the safety and security of U of A campuses and community. Staff or students can contact UAPS to make a report if they feel unsafe, threatened, or targeted on campus or by another member of the university community. For non-emergency dispatch, call 780-492-5050. For lost and found, call 780-492-2943. In an emergency, call 911.
- Sexual Violence Supports: - It is the policy of the University of Alberta that sexual violence committed by any member of the University community is prohibited and constitutes misconduct. The University takes seriously its responsibility to reduce sexual and gender-based violence through a culture of consent, gender inclusivity, anti-oppression and support, and to respond to misconduct or conditions that allow, facilitate, or give rise to sexual and gender-based violence.

STUDENT RESOURCES

The University Calendar is one of the principal sources of U of A policy information for students. It includes admission requirements and deadlines, academic regulations, programs of study, academic standards, degree requirements, and University policies for both undergraduate and graduate students.

The Student Service Centre provides students with information and access to services to support academic, financial, mental, and physical well-being.

First Peoples' House provides an environment of empowerment for First Nations, Métis, and Inuit learners to achieve personal and academic growth.

The Academic Success Centre provides professional academic support to help students maximize their academic success and achieve their academic goals. They offer appointments,

advising, group workshops, online courses, and specialized programming year-round to students in all university programs, and at all levels of achievement and study.

Writing Services offers free one-on-one writing support to students, faculty, and staff. Students can request a consultation for a writing project at any stage of development. Instructors can request class visits and presentations.

Under the Discrimination, Harassment and Duty to Accommodate policy, the Office of the Dean of Students coordinates academic accommodations for prospective and current students with documented disabilities affecting mobility, vision, hearing, learning, and physical or mental health. The provision of academic accommodations helps to remove structural barriers that these students encounter in academic environments in order to facilitate equivalent learning opportunities for these students. Academic Accommodations promotes an accessible, inclusive, and universally-designed environment at the University of Alberta.

Health and Wellness Support for Students outlines the mental and physical health resources which are offered on-campus and in the community.

The Office of the Student Ombuds is a confidential service which strives to ensure that university processes related to students operate as fairly as possible. They offer information, advice, and support to students, faculty, and staff as they deal with academic, discipline, interpersonal, and financial issues related to student programs.

Need Help Now webpage offers contact information for a variety of supports if you are in immediate need of mental health and wellness support. You can also call the 24-hour Distress Line: 780-482-4357 (HELP).

Disclaimer: Any typographical errors in this syllabus are subject to change and will be announced in class and posted on eClass. The date of the final examination is set by the Registrar and takes precedence over the final examination date reported in this syllabus.

Policy about course outlines can be found in Course Requirements, Evaluation Procedures and Grading in the University Calendar.

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