

Geography 2131B: The Natural Environment Course Outline: Winter, 2020

Course Description

This course will introduce students to our planetary natural environment using an integrative approach which combines physical and social science perspectives. The first part of the course presents the general concepts and principles of climatology, hydrology, geomorphology, soils, and terrestrial ecosystems using examples from North America. The course will also introduce students to the human dimensions of environmental change with emphasis on climate change and environmental governance using case studies from developed and developing countries.

Course Information

0.5 credit course

Lecture Room: **SH-3345**Days: Monday & Wednesday
Hours: 10:30 AM – 11:30 AM

Tutorial Room: SSC-2020

Day: Friday (see schedule below) Hours: 10:30 AM – 11:30 AM

Anti-requisite – GEOG1300B (Physical Geography)

Contact information

Role	Name	Email	Office	Office hours
Instructor	Mr. Moses Kansanga	mkansang@uwo.ca	SSC 2221	Wed 12:00 PM -1:30 PM
TA	Lara Middleton	lmiddle7@uwo.ca	ТВС	TBD
TA	Kristin Painter	kpainte3@uwo.ca	ТВС	TBD

Learning Outcomes

By the end of the course, students should be able to:

- Explain the physical principles and structure of the natural environment, particularly the atmospheric, geomorphic, hydrologic, pedologic, ecologic, and biogeographic processes.
- Discuss and evaluate human impacts on the above-mentioned processes and physical structures
- Explain the politics of environmental governance and environmental policy making.

Format

This course involves lectures, tutorials, readings and written assignments. Lectures will be interactive, involving discussions and other in-class activities. Students are expected to read the assigned readings and participate in class and tutorials. A partial version of lecture slides will be uploaded in OWL before every class, with blanks for students to fill.



Course Readings

- I. de Blij et al. (2009), Physical Geography: The Global Environment, 2nd Canadian Edition, Oxford University Press Canada. (Some topics are not covered by this text. Readings these topics will be posted on OWL).
- 2. Nelson, G. C. (2005). Drivers of ecosystem change: summary chapter. *Ecosystems*.
- 3. Finnveden, G. (2000). On the limitations of life cycle assessment and environmental systems analysis tools in general. The International Journal of Life Cycle Assessment, 5(4), 229.
- 4. Watson, R. T. (2005). Turning science into policy: challenges and experiences from the science—policy interface. *Philosophical Transactions of the Royal Society B: Biological Sciences*, 360(1454), 471-477.
- 5. Wesselink, A., Buchanan, K. S., Georgiadou, Y., & Turnhout, E. (2013). Technical knowledge, discursive spaces and politics at the science—policy interface. *Environmental Science & Policy*, 30, 1-9.

Articles for Summary Assignments

Article Summary #1 -Oosthoek, S. (2015). Game of Thrones. Canadian Geographic, 135(6): 36-42.

Article Summary #2 – Mouallem, O. (2015). This water came from manure. *Canadian Geographic*, 135(2): 40-45.

This text and articles are required readings for the course. All students are strongly encouraged to obtain copies. These resources provide important supplementary information for contextualizing the lecture material.

Methods of Evaluation

Assignments 20% - assignments (10% each)

Midterm exam part I I5% - exam will cover all lecture and seminar material

covered/assigned to date.

Midterm exam part 2 | 15% - exam will cover all lecture and seminar material

covered/assigned to date.

Final Exam 40% - exam will cover all lecture and seminar material covered

in the course

Participation 10% - Class and tutorial attendance, participation in discussions

and short article summaries at the end of every tutorial.

Assignments

There will be two assignments in this course. These assignments will be based on documentary videos on the geographies of global environmental change. Assignments should be handed in electronically through the course OWL page and a hardcopy handed to the TA prior to the beginning of the tutorial. Any assignment submitted in OWL after 10:30 AM on the due date will be considered late (see *late policy*). Each assignment is worth 10%.

Participation

Participation is an important part of this course. Participation will be evaluated on the basis of in-class contributions and short article summaries at the end of every tutorial session. Students will be required to produce and submit summaries of pre-selected articles (listed above) that will be discussed in the



tutorial. All students are expected to read these articles before attending the tutorial. These articles investigate the impacts of humans on environmental processes and physical structures as well as the reciprocating effects of environmental change on humans. Summaries must include descriptions of the problem, the main ideas presented, and any potential solutions mentioned in the article. Summaries are to be less than 250 words and will be graded on content, clarity, and writing style. Students may work in groups. Answers will be graded for completion, not correctness – but they must be relevant to receive points! For lectures and tutorials, any absences should be discussed with the Instructor and Teaching Assistant, respectively ahead of time.

Examinations

There will be two midterm exams and one final examination. The midterm exams (I hour each) will be held during scheduled tutorials in late February and early March. The final examination (2 hours) will be scheduled during the examination period at the end of the winter term. The midterm and final examinations cover material from lectures, seminars, and the assigned readings. Final exam will include multiple choice, fill-in-the-blank, and short-answer questions. If you fail to write exams on the scheduled date and time, you will be given zero, unless you qualify for a makeup exam (see note on makeup examinations below).

Lecture and tutorial schedule and readings (may be changed with notice)

This course will be using OWL to deliver lectures, seminar articles, and grades. Lecture notes will be posted at least I day prior to a lecture session. It is your responsibility to print out these lectures and bring them to class. Seminars for this course consist of documentary movies and discussions on topics covered in class.

Week	Topics	Text Readings
Jan. 8 & 13	The Planet Earth and Space	Units 2 & 4
Jan. 15 & 20	The Atmosphere: Composition, Temperature and Wind	Units 5, 7 & 8
Jan. 22 & 27	Hydrosphere: Water everywhere	Units 10-12
Jan. 29 & Feb 3	Global Climates and Climate Change	Units 16-19
Feb. 5, 10 & 12	A Planet of Rocks, Volcanoes and Earth Quakes	Units 20, 22 & 26
Feb. 15 - 23 No Lectures - Reading Week		
Feb. 24 & Feb 26	Landscape Evolution and Weathering	Units 28-30
Mar. 2 & 4	Surface water, Streams and Erosion	Units 32 & 34
Mar. 9 & 11	Glacial Process and Landforms, and arid environments	Units 36, 37 & 40
Mar. 16 & 18	The Biosphere	Units 44, 46 & 47



Week	Topics	Text Readings
Mar. 23 & 25	Drivers of global environmental change	Nelson, G. C. (2005) & #Video: the Amazon
Mar. 30 & Apr I	Environmental governance: from science to policy	Finnveden, G. (2000), Watson, R. T. (2005) & Wesselink et al. (2013)

Tutorial schedule

Week	Topics	
Jan. 10	Introduction: "How to write an article summary"	
Jan. 24	Video and discussion: Inuit Knowledge and Climate Change Introduce assignment I	
	introduce assignment i	
Feb. 7	Class Discussion on Article #1 (article summary in at end of class)	
	Assignment # I due.	
Feb. 21	Class Discussion on Article #2 (article summary in at end of class)	
Feb. 28	Mid term exam part I	
Mar 6	Midterm exam part 2	
Mar. 20	Video: Fleeing climate change - the real environmental disaster	
	Assignment #2	
Apr 3	Course Summary (assignment 2 due)	

Additional Information

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 (upset stomach) or upsets (argument with a friend) are not normally an appropriate basis for a self-reported 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 Policy on Academic Accommodation for Students with Disability. 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 Student Health and Wellness and Learning Skills Services 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.

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.

Use of Electronic Devices

Using electronic devices in class for non-academic purposes distracts you and everyone around you. Do not surf, text, tweet, chat, shop, etc. during class. Video recording in class is not permitted. Please ask the instructor if you wish to audio record lecture material.

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).

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 "Accessibility at Western" is available.

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.

Support Services

Western's Support Services
Student Development Centre

Important Dates Winter 2020

January 6: Classes resume

January 10: Last day to add a second term half course February 17: Family Day – Department Office Closed

February 18-23: Spring Reading Week (No classes; Department Office open)

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

April 3: Classes end
April 4 and 5: Study days

April 6-26: Examination Period