

# GEOG 1300B – Introduction to the Physical Environment Course Outline: Section 001 Winter 2019

#### 1. Course Information

Classroom Location: UCC-56, Mon, Wed 12:30 - 1:20 pm

Labs: SSC 1004, Mon 2:30-4:30 pm, 7:00-9:00 pm, Tues 4:30-6:30 pm, Wed ?

**Contact Information:** 

Instructor: James Voogt, SSC 2401, javoogt@uwo.ca; 519 661-2111 x85018; Office Hours: Tuesdays 3-4 pm

#### 2. Calendar Description

#### 2.1. Course Description

Physical Geography examines the phenomena and processes of the Earth-atmosphere system that underlie human environment interactions and environmental change. Topics include: the atmosphere and fundamentals of weather and climate, water in the environment, Earth surface processes and biogeography.

2 lecture hours, 2 laboratory hours per week; 0.5 course Antirequisite(s): Geography 1100, Geography 2131A/B Prerequisite(s): None Prerequisite checking is the student's responsibility

#### 2.2. 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

Mastering Geography with Pearson eText for *Geosystems: An Introduction to Physical Geography*, Updated Fourth Canadian Edition, 4<sup>th</sup> Edition; Author: Christopherson et al. ISBN: 9780134854069

Used versions of the course text (including earlier editions) are suitable, however, page numbers for readings will ONLY be provided for the official version of the course text.

Lab materials are provided via OWL; it is the student's responsibility to print out the required materials and bring them to their lab section.

# 4. Course Objectives and Format

At the end of the course you should be able to:

• describe the scope, core themes and concepts in physical geography

- explain the physical principles of important atmospheric, lithospheric (endo- and exogenic), hydrologic and biogeographic processes and their mutual interaction
- describe and explain spatial and temporal variations in the characteristics of the global physical environment
- discuss examples of the direct and indirect effects of human activity on the physical environment
- apply simple techniques to the description and analysis of the physical environment

# 5. Learning Outcomes

Geography 1300b addresses the following learning outcomes, all at an Introductory level:

- Develop knowledge and critical understanding of the fundamental characteristics, processes, temporal changes and landscapes especially in relation to biophysical systems, and awareness of integration with social systems
- Demonstrate awareness of geographical diversity through knowledge of different places and understanding of the processes that shape them spatially and over time
- Describe and explain the scope and nature of Geography as a discipline
- Synthesize and evaluate geographical information from diverse sources, including geo-spatial data
- Relate specialized understanding of the geography of bio-physical systems to knowledge and practices in environmental and natural sciences
- Collect, analyze and interpret geographical and geo-spatial data especially in relation to biophysical systems
- Describe and explain, analyze and interpret geographical phenomena outside the classroom by engagement with people, places and/or environments
- Communicate geographic ideas and understanding effectively to a variety of audiences in writing, orally, and graphically.

# 6. Evaluation

Evaluation Components	Percentage of Course Grade	Assignment Schedule	
Laboratory Assignments	35%	See Table	
Midterm	15%	Mar. 4, 2019	
Photo Portfolio	10%	Apr. 1, 2019	
Participation	5%	Assessed using iClickers in lectures	
Final Exam	35%	Set by Registrar	

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

#### Participation

Participation is an important part of the success of the course and ensuring students learn the course material, so part of the final grade will be based on participation. To facilitate participation, the course will use iClicker technology, with participation assessed through completion of in-class questions. To get full marks for participation, a minimum of 80% of the questions must be answered. This recognizes that illness or other factors that affect attendance can be accommodated.

Participation marks cannot exceed 100%.

#### 6.1. Penalties

*Exams*: In accordance with university policy, missed exams cannot be made up except on written medical grounds and notification prior to exam date.

*Labs*: Late labs have a penalty of 10% per day (including weekend days). Labs submitted more than 1 week late will not be accepted. Exceptions can be made for documented medical and other significant reasons beyond your control (see subsequent sections). If at all possible contact your Teaching Assistant or Course Instructor BEFORE the due date!

#### 6.2. Non-medical Absences

Non-medical absence from the midterm requires prior approval of the instructor or approval by the Dean's office (appropriate documentation will be required by the Faculty Dean's Office for approval if it is not obtained prior to the midterm).

#### 6.3. Medical Absences

Students seeking academic accommodation on medical grounds for any missed tests, exams, participation components and/or assignments **worth 10% or more** of their final grade must apply to the Academic Counselling office of their home Faculty and provide documentation. Academic accommodation cannot be granted by the instructor or department. In Geography 1300b this applies only to the Midterm and Final Exam.

Academic accommodation for marked components worth <10% of the total grade (lab assignments, photo portfolio, participation) is provided by the lab instructor (for lab assignments) or the course instructor (photo portfolio, participation). Where more than 2 lab assignments are affected, students must obtain documentation from the Academic Counselling office of their home Faculty.

<u>Western's Policy Accommodation for Medical Illness</u>. For a downloadable Student Medical Certificate (SMC) please refer to the <u>Academic Handbook</u>.

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.

# 6.4. Make-up Examinations

Makeup examinations for the midterm and final exam 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.

# 7. Use of Electronic Devices

No electronic devices will be allowed during tests and examinations.

# 8. Statement on Use of Personal Response Systems ("Clickers")

Geog 2133b will use iClickers, an audience response device. iClicker is Western's officiallysupported audience response system. It supports both virtual and physical clickers.

To use iClicker, you need to create an account. If you have previously used iClicker at Western you will use the existing account, but need to sign-in to iClicker Reef once per course, using the OWL portal.

To create an account please follow the instructions at <a href="http://www.uwo.ca/its/presswestern/students\_and\_audience/index.html">http://www.uwo.ca/its/presswestern/students\_and\_audience/index.html</a>

Once your account is created, you can participate using iClicker using a 'virtual clicker' by way of a mobile app (Android or iOS mobile device) or web browser. These are free. Or you can purchase a physical clicker from The Book Store.

We will use the iClicker system to encourage participation and active learning. Questions posed using the system will provide you examples of the types of questions to be used on quizzes and the exam. The participation mark will be based on responses to questions using the iClicker system (the participation mark is based on a response, rather than a correct vs incorrect answer). See the section on Participation for how this component is evaluated.

iClickers can only be used by the account owner, clicker misuse (including use by a student other than the owner) is considered a form of <u>Scholastic Offence</u>

iClicker uses an external account. Student responses are anonymized when displayed. Responses associated with the participation mark are treated in a similar manner to all other marked components of the course and are only available to the student, instructor and TAs.

# Guidelines for Students on the use of Personal Response Systems ("Clickers")

Personal Response Systems ("clickers") may be used in some classes. If clickers are to be used in a class, it is the responsibility of the student to ensure that the device is activated and functional. Students must see their instructor if they have any concerns about whether the clicker is malfunctioning.

Students must use only their own clicker. If clicker records are used to compute a portion of the course grade:

• the use of somebody else's clicker in class constitutes a scholastic offence,

• the possession of a clicker belonging to another student will be interpreted as an attempt to commit a <u>scholastic offence</u>.

#### 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>.

Computer-marked multiple-choice tests and/or exams may be subject to submission for similarity review by software that will check for unusual coincidences in answer patterns that may indicate cheating.

# 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.

"Accessibility at Western" provides additional information.

# 11. Medical Issues

The University recognizes that a student's ability to meet his/her academic responsibilities may, on occasion, be impaired by medical illness. The Student Services website provides greater detail about the University's policy on <u>medical accommodation</u>. This site provides links the necessary forms. In the event of illness, you should contact Academic Counselling as soon as possible. The Academic Counsellors will determine, in consultation with the student, whether or not accommodation should be requested. They will subsequently contact the instructors in the relevant courses about the accommodation. Once the instructor has made a decision about whether to grant an accommodation, the student should contact his/her instructors to determine a new due date for tests, assignments, and exams.

Students must see the <u>Academic Counsellor</u> and submit all required documentation in order to be approved for certain accommodation.

# 12. 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.

#### 13. Support Services

<u>Student Support Services</u> <u>Student Development Services</u>

# 14. Important Dates

January 7: Classes resume January 15: Last day to add a second term half course February 18: Family Day – Department Office Closed February 18 to 22: Spring Reading Week (No classes; Department Office open) March 7: Last day to drop a second term half course without penalty April 9: Classes end April 10: Study day April 11-30: Examination Period

# 15. Lecture / Laboratory Timetable

Date	Lecture Topic	Week	Laboratory for this Week
Jan. 7	Introductions & What is Physical Geography?	1	
Jan. 9	Earth System Basics & the Tools of Geographers	1	
Jan. 14	Solar Radiation and Earth-Sun Relations	2	Lab 1: Maps
Jan. 16	Global Radiation Budgets and Energy Balances	2	
Jan. 21	Atmospheric & Oceanic Circulations	3	Lab 2: Radiation Budgets
Jan. 23	Atmospheric Moisture and Clouds	3	
Jan. 28	Stability & Vertical Motion	4	Lab 3: Humidity & Vertical Motion
Jan. 30	Mid-latitude Weather Systems	4	
Feb. 4	Severe Weather	5	Lab 4: Weather Systems
Feb. 6	Global Hydrology	5	
Feb. 11	Soil Water Balance	6	Lab 5: Soil water balance
Feb. 13	Climates & Climate Change	6	
Feb. 18&20	Reading Week!	7	No labs.
Feb. 25	The Lithosphere	8	
Feb. 27	Endogenic Landforms	8	
Mar. 4	Midterm: covers material up to end of Feb 13 & Labs 1-5	9	
Mar. 6	Weathering	9	
Mar. 11	Mass Wasting and Hillslopes	10	Lab 6: Mass Movements
Mar. 13	Stream Systems & Drainage Patterns	10	
Mar. 18	Stream Channels, Floodplains and Floods	11	Lab 7: Rivers & Their Landforms
Mar. 20	Glaciers and Glacial Processes	11	
Mar. 25	Glacial Landforms	12	Lab 8: Soils
Mar. 27	Soil Processes & Geography	12	
Apr. 1	The Biosphere: Ecosystem Processes	13	Photo Assignment Due
Apr. 3	Climate Change	13	
Apr. 8	Geography & the Anthropocene	14	

Labs are due 1 week following their introduction in the lab unless otherwise noted.

#### **TEXT READINGS**

Date	Lecture Topic	Text Chapters
Jan. 7	Introductions & What is Physical Geography?	1
Jan. 9	Earth System Basics & the Tools of Geographers	1
Jan. 14	Solar Radiation and Earth-Sun Relations	2,3
Jan. 16	Global Radiation Budgets and Energy Balances	4,5
Jan. 21	Atmospheric & Oceanic Circulations	6
Jan. 23	Atmospheric Moisture and Clouds	7
Jan. 28	Stability & Vertical Motion	7
Jan. 30	Mid-latitude Weather Systems	8
Feb. 4	Severe Weather	8
Feb. 6	Global Hydrology	9
Feb. 11	Soil Water Balance	9
Feb. 13	Climates & Climate Change	5,10,11
Feb. 18 &20	Reading Week! No classes	
Feb. 25	The Lithosphere	12
Feb. 27	Endogenic Landforms	13
Mar. 4	Midterm: covers material up to end of Feb 13 & Labs 1-5	
Mar. 6	Weathering	14
Mar. 11	Mass Wasting and Hillslopes	14
Mar. 13	Stream Systems & Drainage Patterns	15
Mar. 18	Stream Channels, Floodplains and Floods	15
Mar. 20	Glaciers and Glacial Processes	17
Mar. 25	Glacial Landforms	17
Mar. 27	Soil Processes & Geography	18
Apr. 1	The Biosphere: Ecosystem Processes	19
Apr. 3	Present & Future Climate Change	11
Apr. 8	Geography & the Anthropocene	See OWL

Chapters are for the 4<sup>th</sup> edition of Geosystems (Canadian Edition).

\* Supplementary readings from other sources such as websites, other texts or journal articles are indicated on the lecture slides and are intended to provide more details on specific lecture topics in addition to the text. In some cases lectures may be primarily based on these sources where coverage by the text is limited.

Text readings are designed to complement the lectures. **Exam material is primarily based on lecture and lab materials.** 

Ensure you take adequate class notes to understand the lecture material – do not rely on the templates, they are not lecture notes!