GREEN COURSES 2015/2016

University of Toronto, Department of Geography
Introduction to Physical Geography, GGR 100 H1F Fall 2015
COURSE OUTLINE

Instructor: Dr. Nina Hewitt, nina.hewitt@utoronto.ca; Sidney Smith Hall, Rm 5061
Office hours: Thurs 3-4:30 pm, or by appointment
Lectures: Tuesday and Thursday, 2:00-3:00 pm, MC 102
Labs: Hourly, Mon 11-4; Wed 12-1; 2-4 (in SS 1080); Thurs 11-1 (RL 14081); See ROSI

Course Description
This course provides an introduction to Physical Geography using an Earth systems approach. We examine the atmosphere, lithosphere, hydrosphere, cryosphere and biosphere, emphasizing processes, energy flows, cycles and scale. Specific topics include weather and climate, geomorphic processes and the genesis of landforms, river systems, glaciers, soils, and biomes. Laboratory sessions provide practical experience with the lecture topics.

Course Objectives
- ✓ Develop a scientific understanding of earth's different systems
- ✓ Learn about specific processes that operate in and among these systems
- ✓ Appreciate the role of humans in shaping, and being shaped by, earth's systems
- ✓ Develop and improve skills of basic data manipulation, graphical representation and interpretation

Required Text and Readings:
Christopherson, RW, Birkeland G, Byrne ML, Giles P. 2016. Geosystems, 4th Canadian Edition, Pearson (available in the U of T Bookstore). You may use earlier editions of the text. Copies of the 2nd and 3rd edition are also on reserve in the Earth Sciences Library.

Lectures and Course Website
Lectures will take place in the classroom. Notes and announcements will be posted on the course website on blackboard. Students are responsible for checking Blackboard regularly for course updates, and for checking your UofT email where occasional announcements may be sent. Note that lecture slides will be simple outlines of the lecture and do not substitute for class attendance (see below).

Labs
To further our understanding of earth's systems, you will complete 5 written lab assignments. An introductory lab session will take place the first week of classes, Week of Sept 14th (see schedule below for complete lab dates). Please use ROSI to sign up for lab sections. If you require general assistance with lab scheduling, please contact the professor. **You are expected to attend your assigned lab session** and pay close attention. Full instructions on how to complete each lab will be provided by your TA. Please **use the lab session to ask any questions** you may have. Labs must be handed in to the **TA** during lab (Labs 1 and 4) or the **Professor** (Labs 2, 3 and 5) at the **START** of lecture/lab on the due dates listed on schedule below.

Read Carefully: Late labs (i.e., those not submitted directly to the professor or TA on the due date) **must be handed in to the Drop Box located outside the Geography Main Office in Sidney Smith Hall, 5047** where they will be date stamped and assessed a penalty of 5% per day including weekends, for up to 6 days. Labs more than **6 days late** will **not be accepted** (since they will have been handed back). Note that you can only submit late labs to the Sid Smith Drop Box on weekdays during business hours between 9am and 5pm. To be safe, you should get there before 4:45pm. Extensions will be made only if a UofT medical certificate is provided to the TA or professor (http://www.illnessverification.utoronto.ca), preferably via email. In the event of non-medical extenuating circumstances, students should also notify the TA or professor and provide supporting documentation from their college registrar.

Attendance
It is important that you attend classes. In a first year science course such as this, the content will be novel to you, and will involve a diverse range of topics. To succeed, you will need to be actively engaged, and take good notes. My slides are not intended to be distance-learning tools, nor a substitute for complete lecture notes. It has been

Remember: GGR 100 is a Green Course. Please remember to double-side print your labs, as well as any other course materials you wish to print (lecture slides). For additional information, consult the Sustainability Office's website at: http://sustainability.utoronto.ca/projects/greencourses.htm

demonstrated that students who attend classes have a better understanding, get better grades and enjoy course content better. You are responsible for announcements or scheduling adjustments made while you are absent.

Tests
The midterm test will take place during lecture Tuesday, Oct. 20, 2-3pm in EX 100 (255 McCaul St.). It will consist of multiple choice, fill in the blank and short discussion/explanations. The final exam will follow the same format and will be held during the exam period. The final exam will be somewhat cumulative, but will place emphasis on material covered after the midterm. Information from the textbook that is *not* directly covered in class or labs will *not* be tested on exams. Additional details of tests, including study topics and tips, will be provided on Blackboard.

Do not miss tests. Accommodation will be made only in the case of a *serious* documented emergency. In the event of such an emergency the student must notify the professor by email as soon as possible, preferably before the test (and certainly no later than 1 week after the missed test). The professor will determine whether a makeup test is warranted, pending proper documentation. This includes a U of T medical certificate signed by your physician, available online at: http://www.illnessverification.utoronto.ca). In the event of *serious* non-medical extenuating circumstances, students should also notify the professor in advance and provide supporting documentation from their college registrar's office.

Email Policy
Please make every effort to **ask questions in person** to the **TAs** and the **Instructor** during **office hours, lab or in lecture**. If you need to ask questions over email, we will try to answer them *within 24-48 hours*. In order for us to do this, you must follow these instructions.

- Place GGR100 in the subject header and sign your message with your full name.
- We strongly encourage you to send email using your UTORmail email account to ensure that we receive your message and it is not directed to the spam folder (see www.utorid.utoronto.ca)
- Email is a formal and public method of communication. Do not write anything that you do not want on the permanent, public record.
- We will try our best to reply *within 24-48 hours*. Do not send emails at the last minute!

Accessibility and Academic Honesty
The University of Toronto is committed to accessibility. If you require accommodations or have any accessibility concerns, please visit http://studentlife.utoronto.ca/accessibility or contact disability.services@utronto.ca

Plagiarism is a serious academic offense at the University of Toronto. Please remember the seriousness with which the University of Toronto treats academic dishonesty of any form. It is a serious academic offense to submit work under your own name that has been written by someone else. For some of the lab exercises, you may be invited to work in pairs. However, this assumes that each student contributed equally to the work that is submitted. If submitting work with only your name on it, you must have independently written the lab report. Please ask your TA or me if you have any questions about academic integrity. Also, refer to the University's Code of Behaviour on Academic Matters: www.governingcouncil.utoronto.ca/policies/behaveac.htm, the rules section of the Arts and Science Calendar: http://www.artsandscience.utoronto.ca/ofr/calendar/Rules_&_Regulations.html and the 'How not to plagiarize' website: http://www.writing.utoronto.ca/advice/using-sources/how-not-to-plagiarize

Evaluation

Lab Assignments	40 % (5 Labs, 8 % each)
Term Test	20 % (Tuesday Oct 20 2-3 pm in EX 100)
Final Exam	40 % (Final Exam Period)

Need Math Help? → *Geography Math Help Centre*
Another resource for this course is the department's new Math Help Centre. Geography TAs will be available to help refresh and explain mathematical concepts and techniques that may come up in your GGR courses. This includes working with formulas, graphing data, completing calculations, and so forth. It does not matter how basic your questions are! No appointment is required, just drop by. There will also be table space available in the room, allowing students to get math help as they work through assignments. Details on location and TA times posted here: http://geography.utoronto.ca/undergraduate/math-help/

GGR 100 Schedule of Lectures, Labs and Reading Chapters

*Labs run hourly, Mon 11-4; Wed 12-1; 2-4 (SS 1080); Thurs 11-1 (RL 14081)

Week	Date	Lecture Topic	Reading	Lab Topic*
1	Sept 15 Sept 17	Earth Systems Intro; Lat-, Longitude Solar Radiation	Chaps 1 Chaps 2	Intro Lab: Universal Time Wed, Thurs only. Join any.
2	Sept 22 Sept 24	Earth's Atmosphere Energy Balances	Chaps 3 Chaps 4	Lab 1: Energy Balances, Spreadsheets, cont.
3	Sept 29 Oct 1	Temperature, Pressure and Wind Global Circulation; Water	Chap 5, 6 Chap 6, 7	Lab 2: Weather and Climatology L1 due to TA in lab
4	Oct 6 Oct 8	Water in the Atmosphere Weather: Fronts	Chap 7 Chap 8	No Lab; Work on Lab 2
5	Oct 13 Oct 15	Severe Weather Global Climates	Chap 8 Chap 10	L2 due Tuesday start of lecture No Lab sessions
6	Oct 20 Oct 22	**Midterm in EX 100** (255 McCaul St.) Hydrology and Water Resources	---- Chap 9	No Lab
7	Oct 27 Oct 29	Rocks, Minerals, Weathering & Karst Mass Movements, Slope Processes	Ch 12: 355-62 Ch 14	Lab 3: Landforms
8	Nov 3 Nov 5	Fluvial Processes and Landforms Glacial Processes and Landforms	Chap 15 Chap 17	No Lab sessions
9	Nov 10 Nov 12	Fall Break: No Classes Continental Glaciers and the Quaternary	 Chap 17	No Lab sessions; Check BB for Lab 4: Climate Change (up Wed) L3 due to Prof Thursday
10	Nov 17 Nov 19	Climate Change Snapshot; Soils Intro Soil Classification	Chap 11 Chap 18	No Labs: Work on L4, Climate Change Lab (on blackboard)
11	Nov 24 Nov 26	Ecosystems and Biomes Biogeographic Range Changes	Chap 19, 20 Chap 19	Lab 5: Soils and Biogeography L4 due to TA in Lab
12	Dec 1 Dec 3	Forest and Grassland Biomes Earth Systems into the Future	Chap 20	No Lab: Listen to MP3 file Soils and Biomes
13	Dec 8	Wrap Up and Review		L5 due to Prof Tuesday