SYLLABUS

Geography 103 - Earth's Physical Systems
Spring 2016

Course Description & Objectives:

In this course, we will explore basic scientitic knowledge of Earth's physical environments (or "geosystems") as well as the processes that create and shape them. For example, we will learn about environments associated with ocean coasts, river networks, and mountain glaciers. By the end of the course, you will be able to answer the following questions: (1) What are the *characteristics* and global *distribution* of these environments? (2) How do they *form* and *change* over time? (3) How are they *linked* to one another? (4) How do *humans impact* these environments and how do they *influence humans*? (5) How do we *use science and technology to understand* environmental processes and *solve environmental problems*?

In addition, you will have a chance to develop and hone important transferable skills, including the ability to: (1) *integrate* newly learned information into a well-organized, broader *knowledge framework*; (2) make i*nferences* based on critical *evaluation*, *analysis*, and *interpretion* of evidence; (3) *monitor* your progress and independently *manage* your learning; and (4) *communicate* effectively using well-supported arguments.

Instructor:

Piotr Cienciala
Email: piotrc@illinois.edu
Office Hours: Mon, 10-11.45 AM (or by appointment)
252 Computer Applications Bldg, 605 E Springfield Ave.

Teaching Assistant:

Courtney Reents
Email: reents2@illinois.edu
see *Lab Section Syllabus*
see *Lab Section Syllabus*

Textbook:

R.W. Christopherson & G.H. Birkeland, *Geosystems*, 9th edition, Pearson Education (version customized for this course available in Bookstore – contains only selected chapters)

Course Website

Illinois Compass 2g: https://compass2g.illinois.edu

Course Structure:

2 lectures and a two-hour lab per week

Course Evaluation:

Two examinations will be given*: midterm* and *final exam*. These exams will consist of multiple

choice questions and short answer questions on material covered in class and textbook readings. We will hold a review lecture before each of the exams (please see Course Outline on page 4).

Midterm Exam will be held on **March 9th** during the regular class hours.

Final Exam will be held during the regular examination period (specific date TBD). *Please do not make any travel or employment arrangements until the final examination schedule is finalized and released.*

Lab section grade will be based on best 12 out of the total of 13 weekly exercises. This mean you can miss one exercise and that will not affect your grade. However, I recommend that you complete and submit all exercises – this will help you boost your grade. Note that lab exercises constitute a substantial percentage of the final grade (see below). This is designed to give everyone an equal chance to get a stellar grade, even if you are not the best test-taker. You can find more details about the lab section in a dedicated Lab Section Syllabus.

Participation grade will be based on class activities and discussions conducted using a classroom response system.

Final grades will be calculated as follows:

Mid-term Exam	30%	
Final Exam	35%	
Lab Exercises	30%	(12 exercises x 2.5%)
Participation	5%	

Missed Exams & Late Assignments:

All exams must be taken at the scheduled times. Makeup exam will be offered only in cases of documented illness, family emergency, or other extenuating circumstances (please see: http://studentcode.illinois.edu/article3_part2_3-202.html). Similar rules apply to submitting your lab exercises by due date. An excuse will be considered valid only if you: 1) contact me *before* the exam or as soon as possible thereafter (for lab exercises contact Teaching Assistant); and 2) contact the Student Assistance Center at (217) 333-0050 to request an absence letter (http://www.odos.illinois.edu/studentassistance). Note that the letters are issued for *documented* absences and the final decision on whether the absence is excused and makeup work is permitted remains at the discretion of me, as a course instructor: http://odos.illinois.edu/studentAssistance/absence/revised_code.asp). Adequate supporting evidence for the absence will be required (note from family, doctor, etc.). Otherwise, you will receive a grade of zero for the exam.

Makeup exam will be also available if you have an exam conflict or more than two consecutive examinations. "*A student taking a final examination at 8:00 a.m. and another at 1:30 p.m. on the same day cannot be required to take an examination that same evening. However, the student could be required to take an examination beginning at 8:00 a.m. the next day. Similarly, a student having a final examination at 7:00 p.m. one day and another at 8:00 a.m. the next day cannot be required to take an examination at 1:30 p.m. that second day. Any student having*

more than two consecutive final examinations is entitled to rescheduling as follows if he or she takes the following action no later than the last day of classes" (source: http://studentcode.illinois.edu/article3_part2_3-201.html). Please read the referenced website to learn about the procedure to follow to reschedule.

Communication with Instructor:

I prefer to answer your questions in person, either during my office hours, or immediately before or after the lecture. During the office hours you are welcome to drop in. However, except for urgent cases, priority will be given to those who made prior appointment (via email).

I will make every effort to respond to your e-mails within 48 hours (excluding weekends). If you do not get a response during that time, I most likely did not get your e-mail. Using your university email account helps to ensure that the e-mail filters do not intercept your message. Also please ensure you put the course number (i.e. GEOG103) in the subject line. This helps to ensure that I get your message.

Academic Integrity:

"*Academic integrity means honesty and responsibility in scholarship. Students and faculty alike must obey rules of honest scholarship, which means that all academic work should result from an individual's own efforts. Intellectual contributions from others must be consistently and responsibly acknowledged. Academic work completed in any other way is fraudulent*" (source: University Library, University of Illinois at Urbana-Champaign, http://www.library.illinois.edu/learn/research/academicintegrity.html).

The Student Code is the key reference you should use to learn about how to maintain Academic Integrity and about the Academic Integrity Infraction Process: http://studentcode.illinois.edu/article1_part4_1-401.html. Additional resources to help you understand your responsibilities and rights regarding this matter are available elsewhere on University of Illinois at Urbana-Champaign website. For example, I recommend a quick reference guide provided by the Office of the Provost: http://www.provost.illinois.edu/academicintegrity/students.html

Academic Acommodations:

"*An accommodation is a modification or adjustment to instructional methods and/or a course, program, service, activity or facility that enables a qualified student with a disability to have an equal opportunity*" (source: the Division of Disability Resources and Educational Services, University of Illinois at Urbana-Champaign, http://disability.illinois.edu/academic-support/accommodations).

If you require Academic Accommodation(s) you are encouraged to contact the Division of Disability Resources and Educational Services (DRES) to discuss this matter. After evaluating your request, DRES may provide you with an individualized Letter of Academic Accommodations. Please read more about this process at DRES website: http://disability.illinois.edu/academic-support/accommodations/academic-accommodations

Course Outline

Note that chapter and page numbers below are from the CUSTOM TEXTBOOK EDITION (Please let me know if you use a standard Geosystems 9th Edition textbook)

COURSE OUTLINE		
Date	**Topic**	**Chapter, Pages**
Jan. 20	Course Overview: Physical Geography and Earth Environments	N/A
Jan. 25	Science of Physical Geography: Fundamental Concepts & Modern Tools	1, pp. 3-18, 28-34
Jan. 27	Earth's Structure, Energy Sources & Climate	5, pp. 146-152; 3, pp. 76-100
Feb. 1	Hydrological Cycle & Climate Change	2, pp. 40-45; 3, pp. 100-103; 4, pp. 108-122, 126-141
Feb. 3	Plate Tectonics & Isostasy	5, pp. 152-153, 162-180
Feb. 8	Mountain Building, Earthquakes, Folding & Faulting	6, pp. 180-205
Feb. 10	Volcanism and Volcanic Landforms	6, pp. 206-213
Feb. 15	Earth Materials, the Rock Cycle, & the Geological Cycle	5, pp. 154-162, 172-175
Feb. 17	Denudation & Weathering: Physical and Chemical	7, pp.218-220, 224-236
Feb. 22	Soils: Processes and Properties	11, pp. 360-369
Feb. 24	Soils: Classification and Management	11, pp. 369-380
Feb. 29	Watersheds: Mass Movement	7, pp. 221-224, 236-243
Mar. 2	Watersheds: Hydrology	2, pp. 46-52, 55-61; 8, pp. 255-258
Mar. 7	*Review*	10, pp. 320-323
Mar. 9	MIDTERM EXAM	
Mar. 14	Watersheds: Drainage Networks	11, pp. 248-255
Mar. 16	River Environments: Channel Processes	8, pp. 258-261, 265-268
Mar. 21	SPRING BREAK	
Mar. 23	SPRING BREAK	
Mar. 28	River Environments: Depositional and Erosional Landforms	8, pp. 261, 264-274
Mar. 30	Watershed and Stream Management/Restoration	2, pp. 53-59, 61-70; 8, 262-263, 276-278
Apr. 4	Glacial Environments: Properties of Glaciers	10, pp. 326-337
Apr. 6	Glacial Environments: Erosional and Depositional Landforms	10, pp. 337-343
Apr. 11	Glacial Environments: Glacial and Periglacial Landscapes	10, pp. 343-354
Apr. 13	Aeolian Environments: Processes and Forms	9, pp. 311-320
Apr. 18	Coastal Environments: Coastal Processes: Waves and Tides	9, 284-300
Apr. 20	Coastal Environments: Coastal Landforms	12, 300-310
Apr. 25	Living Organism Environment: Ecosystem Processes	12, pp. 392-407; 4, pp. 122-125
Apr. 27	Living Organism Environment: Ecological Communities, Disturbances and Biodiversity	12, pp. 407-422
May 2	Living Organism Environment: Major Earth Biomes	13
May 4	*Review*	
TBD	FINAL EXAM	