

## **GEOGRAPHY 100: Physical Geography**

**University of Idaho**

Fall 2009

Lecture: JEB 104 MWF 9:30–10:20

*Instructor:* Dr. John Abatzoglou

[jabatzoglou@idaho.edu](mailto:jabatzoglou@idaho.edu)

885-6239

Office Hours: McClure 409, W 11-1, or via appointment

*Teaching Assistant:* Mr. Brandon Rowley,

[Brandon.rowley@vandals.uidaho.edu](mailto:Brandon.rowley@vandals.uidaho.edu)

Office Hours: McClure 215, MW 1-2

### *Course Description:*

Physical geography is the interdisciplinary study of the physical properties of processes that shape the dynamic Earth. Whether we know it or not, we regularly experience and make decisions based on the fundamentals of physical geography. This course will provide you with the scientific basis to understand the why's and how's of the natural environment, from day-to-day observations to some of the major environmental issues facing mankind in the coming century. This course will prompt you to begin asking questions about your surroundings, to make observations, and put those observations into context according to the scientific method to answer your questions. The study of physical geography cannot be undertaken solely in the classroom, and I will ask you to begin paying attention to your environment outside of the classroom as well.

Physical geography is a diverse subject that involves a sequence of interconnected topics. I will be presenting these topics into four groups. First we will reintroduce ourselves to the planet we call home and explore Earth-sun relationships in the context of energy. The second portion of the class examines weather and climate processes. In the third section of the course we will discuss the many processes that mold the landscape of the planet. We will conclude the course with a section devoted to further investigating the science behind a set of critical issues that our planet faces in the 21<sup>st</sup> century. While this is a science class, throughout the semester we will discuss how human systems interact with physical systems. Geography 100 will provide you with the scientific background to make your own informed thoughts and decisions on these issues.

### *Course Goals and Student Learning Objectives*

The primary goal of this course is for students to have a newfound appreciation for the complexity of the physical earth system, and a more scientifically based view of critical issues facing our planet. Upon successful completion of Geography 100, students should be able to contextualize key processes of the natural environment into daily observations and future decision making.

## ***Reading and Textbook***

### **Required**

*Visualizing Physical Geography*, by Alan H. Strahler. Wiley  
*National Geographic College Atlas of the World*, Wiley

### **Additional references**

*Intergovernmental Panel on Climate Change Fourth Assessment Report (IPCC) Synthesis Report*, 2007, [http://www.ipcc.ch/pdf/assessment-report/ar4/syr/ar4\\_syr.pdf](http://www.ipcc.ch/pdf/assessment-report/ar4/syr/ar4_syr.pdf)

Supplemental readings and news articles will be posted to the course webpage

### ***Course Web Page (Blackboard)***

Most of the materials for this class will be disseminated through the course website at <http://blackboard.uidaho.edu>. All students that are registered for Geography 100 will have access to this website.

## ***Assessment***

Exams	75%	Assignments	10%
Quizzes	15%		

***Exams:*** There will be four exams (three midterms and a final). I will allow students to drop their lowest test score. For this reason there will be NO MAKE-UP EXAMS ALLOWED. If you miss an exam for any reason, that exam will count as your lowest score and be dropped. Exams will be composed of a combination of multiple choice and short answer questions. I will provide a review guide one week prior to each exam for ease in studying. Students will need to bring a scantron for exam.

***Quizzes:*** Six in-class pop-quizzes will be dispersed throughout the semester to gauge students' ability to comprehend basic material. A good thing to remember is that you can plan on having a quiz about one week before each of the exams. In appreciation of the difficulties students may have in attending every lecture, *students will be allowed to drop (or miss) one quiz.*

***Assignments:*** Practical problems of both the descriptive and quantitative variety will be given to reinforce concepts in lectures and readings. Assignments will include both in-class and take home components and will include problems and written responses. In-class assignments must be turned in by the end of class, while homework must be turned in before the beginning of the lecture of the date due.

***Makeup Policy:*** As per the policy on exams, there is a strict no makeup rule for exams or quizzes. Late homework assignments will not be accepted. Assignments will not be accepted via email unless otherwise authorized.

***About the lab for this course (GEOG 100L)***

- ***Do you need to take the lab?*** It is not officially a co-requisite for this course, however, if you are in GEOG 100 to fulfill your core science requirements, you should be aware that the UI core science requirement can only be fulfilled in two ways:
  - a) Two eligible natural science courses PLUS the associated labs (i.e., two 4 credit combinations, for a total of 8 credits) OR
  - b) One eligible course and its lab (4 credits) + one of the new CORE 200 Integrated Science courses (3 credits) (Note: total of 7 credits for option b).

This means that if you are in this course to fulfill core science requirements, as with any science class other than the CORE 200 series, you'll need to take the lab to fulfill the requirement.

- ***Lab sections are taught by graduate TAs and are set up as entirely separate 1-credit courses. Grades are earned and assigned by the TAs, separately from the lecture course.***

## Preliminary Schedule

The schedule of lectures and labs is included in this syllabus. I will expect you to have read the appropriate chapters in the textbook and the lab materials ahead of time. The objective of the lectures is to supplement what you read in the textbook, not replace it. Updated Schedule will be posted on course webpage with at least 7 days lead time. \*Chapter readings each chapter will be updated with page #'s\*

Week	Lecture Topics	Reading	Special Events & Due Dates
<b>Part I: Energy and the Atmosphere</b>			
1	Fundamentals of Physical Geography Getting to know your planet	Chapter 1	Purchase Text Online survey
2	Earth's Energy Balance	Chapter 2	
3	Temperatures Around the Globe Greenhouse Effect	Chapter 3	M Sep 7: No Class F Sep 11: HW #1
4	Is the Temperature Rising?	supplemental	<b>F Sep 18:</b> <b>Midterm #1</b>
<b>Part II: Weather and Climate</b>			
5	Atmospheric Moisture and Precipitation	Chapter 4	
6	How and why the winds blow Weather Systems	Chapter 5-6	
7	Global Climates: Biogeography: Foods of the World	Chapter 7, 17	F Oct 9: HW #2
<b>Part III: Shaping of Landscapes</b>			
8	Rock Types and Plate Tectonics	Chapter 8	<b>M Oct 12:</b> <b>Midterm #2</b>
9	Volcanoes and Earthquakes Weathering	Chapter 9-10	
10	Hydrologic and Glacial Influences	Chapter 11-12, 14	
<b>Part IV: Critical Issues Facing the Planet</b>			
11	Observed Changes in Climate and associated Impacts	IPCC	<b>M Nov 2:</b> <b>Midterm #3</b>
12	Carbon Cycle and the Rise of CO <sub>2</sub>	Supplemental	
13	Your 100 year Forecast: climate predictions for the 21 <sup>st</sup> century	IPCC	
14	Impacts: Ecology and Biodiversity Impacts: Water Resources	Chapter 16	
15	Debates, Decisions and Solutions	Supplemental	HW #3 Due : TBD

Final Exam Period: Thursday, December 17th, 10-noon

## *University Policy*

### *Disability Support Services Reasonable Accommodations Statement:*

Reasonable accommodations are available for students who have a documented disability. Please notify the instructor during the first week of class of any accommodation(s) needed for the course. Late notification may mean that requested accommodations might not be available. All accommodations must be approved through Disability Support Services located in the Idaho Commons Building, Room 333. See <http://www.students.uidaho.edu/taap> for additional detail.

*Academic Integrity:* Your own commitment to learning, as evidenced by your enrollment at the University of Idaho, and the University's Academic Integrity Policy requires you to be honest in all your academic course work. Writing assignments in this course are designed to assess your knowledge of course topics and your ability to express it in written form, meaning that while you may work together on homework and classwork assignments, the work you hand in must be written in your own words. In addition, while tempting, plagiarism, particularly of the internet variety (i.e., cutting and pasting with your pal Google), is certainly *not* acceptable. UI is a learning institution with the goal to develop freethinking students who can analyze new concepts and develop their own ideas and opinions. In order to discourage plagiarism, the course will adopt a zero tolerance approach. This means that if you are caught plagiarizing or cheating, you will receive absolutely no credit for that work and possibly a failing grade for the course. Furthermore, you will be formally reported to the Dean of Students for appropriate disciplinary action. The University of Idaho's policy on cheating is described in Article II--Academic Honesty of the <http://www.webs.uidaho.edu/fsh/2300.html>.

*Cell phones and Laptop computers:* Students are asked to please turn their cell phones off or put them on vibrate mode during class. Laptop computers may be used in class for note taking only. Repeated offenses that disrupt the course and do not stop when requested by the instructor will be referred to the Judicial Affairs Officer of the University.