Geography 101: Physical Geography

Spring 2008 – Tuesday/Thursday – 11:00-12:15

Meets in Tapy 201
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Course Overview

This course is an introduction to the physical environment of the Earth. In this class, you will learn how various atmospheric, hydrological, geological and ecological processes interact to produce patterns and phenomena in the natural landscape. There is no prerequisite for this class, so we will spend more than half the class learning how basic principles from other sciences can be understood from a spatial (geographical) point of view. Once students have mastered these concepts, the course will turn toward analysis of specific landforms and unique landscapes in different parts of the world. Throughout the class, we will also focus on ways that human settlements both influence and are influenced by their natural environment.

What will you get out of this course?

By the end of the class, you should possess the following basic competencies. All readings and class activities will be oriented toward helping you master these competencies. In addition, all examinations will be designed to assess your progress toward achieving these learning outcomes.

1) Students will be able to identify the basic **atmospheric** processes that shape Earth's landscape.
2) Students will be able to identify the basic **geological** processes that shape Earth's landscape.
3) Students will be able to identify the basic **hydrological** processes that shape Earth's landscape.
4) Students will be able to identify the basic **biological** processes that shape Earth's landscape.
5) Students will be able to explain how and why landscapes vary spatially.
6) Students will be able to visually interpret the historical physical processes that shaped at least two specific landscape forms.
7) Students will be able to visually interpret the current physical processes that shape at least two specific landscape forms.
8) Students will be able to assess at least two examples of proposed human activity in the natural world, identifying the natural processes and landscapes that would be impacted by such action.

What are your responsibilities?

If you are conscientious in doing the following, you will be successful in this course:

1) Do assigned readings in advance, using the reading guides to focus your attention.
2) Come to class each day and participate in all activities.
3) Reflect on course concepts outside of class, preferably in a study group.
4) Call, email, or visit me when you are having trouble with the course material.

Class Format

Although this is a "lecture course," students are expected to participate actively in each class session through the use of a classroom-response system ("clickers") and through peer instruction. These activities will accomplish two important goals: [1] you will get regular feedback that helps you assess how well you understand the material, and [2] you will get regular opportunities to improve your understanding by working one-on-one or in small groups with your peers. Research shows that this is the most effective way for students to learn in large classes.

The course covers a significant amount of material, and many of the later lectures build on material presented earlier in the course. For this reason, please realize the importance of attending every class session and participating in all activities.

Required Textbook and Readings

The required text for this class is *Elemental Geosystems 5th edition* by Robert W. Christopherson. This comprehensive textbook covers far more material than any student (or professor) could master in a single semester. For each chapter covered in lecture, a preview sheet will be posted online to direct your attention to the most important concepts. It will include a set of questions that you should be able to answer BEFORE coming to class.

The book comes with a CD of animations that are very helpful in illustrating various concepts and processes of physical geography. We will be using this CD in class, and I encourage you to review it at home or with your study group as well. The textbook is also packaged with an atlas that will help you study for the map quiz and identify global locations of the landscape features, climate types, and biomes we will be studying.

You may purchase an online subscription for the textbook that is less expensive but requires you to read the text on your computer. There is no content or pagination difference between the online text and the hardback version. If you are interested in this option go to the following url <**http://www.safarix.com**> and select **Geography** on the left side of the page and then select the textbook from the list.

Class Communications and Website

Class materials will be posted on the course website on WebCT. They will NOT be available in paper copies. To log in to our class site, go to http://vista.unm.edu, enter your UNM NetID and password, then click on the GEOG 101-003 Physical Geography course. The class website will be updated regularly with the class calendar, chapter previews (reading guides), answers to in-class clicker questions, exam review sheets, and student grades.

I will also use WebCT to make periodic class announcements via email. Please make sure that you check your WebCT mail regularly, or change the settings to forward messages to the email address you check most often.

Clickers

Clickers are required for this class. If you have already purchased an iClicker remote for another class, there is no need to purchase another. (You can use the same clicker for multiple classes since it is registered under your name.) If you do not already own an iClicker remote, your textbook is packaged with a discount coupon that can be redeemed at the bookstore. Please note: clickers CAN be purchased in used condition, as long as you register the clicker ID number under your own name.

Instructor Contact

In large classes, it is common for students to feel like they are lost and don't know who to turn to for help. I have designed the course and the course materials to make it easy for you to figure out which topics you are learning well and where you still need help. If you realize you are not meeting your goals for this class, I encourage you to contact me directly. I am happy to work with you on a one-to-one basis to review your reading habits, note-taking skills, study strategies, etc. If you have any questions or concerns about the course and/or your ability to do well, please don't wait to contact me. The earlier in the semester you get help, the better. If your schedule does not permit you to visit during office hours, I am happy to meet with you another time.

Note: Whenever you email me, you MUST include "GEOG101" in the subject line of your email, and you must sign your email with your full name. This will prevent the problem of your email getting caught in my junkmail filter.

Exams

Three regular exams and a comprehensive final exam will be given over the course of the semester. Every exam will include a combination of multiple choice questions, identification questions, true/false questions, map questions, and short-answer questions. The final exam will cover ALL of the material from the course. To help you prepare for exams, I will post review sheets online before each exam. These will include sample short-answer questions, some of which are the exact questions that will be included on the exam.

Note: Your lowest score from the three regular exams will be dropped. (The final exam CANNOT be dropped.) Therefore, **no makeup exams will be given for any reason.** If you miss an exam, I will simply drop it as your lowest score.

Class Participation

In every class session, I will ask questions that you will answer using your clickers. The main purpose of these mini-quizzes is for me to determine which concepts you have mastered and which concepts need further explanation. Therefore, most of your grade for clicker questions (75%) is awarded on the basis of participation, regardless of whether you get the answer correct. A small percentage of your score (25%) comes from answering the question correctly.

Study Groups

I strongly encourage you to use study groups to review/clarify your understanding of course content. This class moves very quickly, and you will be building knowledge of physical geography in a cumulative manner over the course of the semester. Forming a study group that meets regularly is the single best way to make sure you don't fall behind. Working with a group often motivates students to be more organized, more prepared, and more attentive. Plus, it is more fun than studying alone!

In-Class Film

In the last week of the course, we will be viewing the documentary film *An Inconvenient Truth* over two class sessions. This film portrays a politician's quest to make global warming a recognized issue, and it is directly relevant to many of the topics we will cover in this course. At the end of the film, you will be asked to write a short critique of the film's arguments and evidence, using your newly developed expertise in physical geography. This in-class assignment will count toward your participation grade. Material from the film will also be on the final exam.

Grading

Your mastery of course content and concepts will be evaluated through clicker questions and exams, as described above. Please see the table below for a grading breakdown.

	Points	Description	Dates
Regular Exams	500	Based on two best exam scores (out of three), 250 points each	See schedule.
Class Participation	250	Clicker questions and in-class activities	Every class session.
Final Exam	250	Comprehensive Exam	Tues, May 13 12:30-2:30pm
TOTAL POINTS =	**1,000**		

Final grades will be computed using the scale below. There will not be any rounding.

A+	990-1000	C+	780-799
A	920-989	C	720-779
A-	900-919	C-	700-719
B+	880-899	D+	680-699
B	820-879	D	620-679
B-	800-819	D-	600-619
		F	0-599

GEOG 105L – Physical Geography Lab

The Physical Geography lab (GEOG 105L) is based on the same content as this lecture course, but it is not required. If you are taking GEOG 105L to fulfill your science lab requirement, you will be attending the lab with students from multiple lecture sessions. Your grade in GEOG 105L is not in any way tied to your grade in GEOG 101.

Students with Disabilities

The office of Accessibility Services offers services to UNM self-identified students with disabilities. Students with documented disabling conditions that affect a major life activity are eligible for these services. This includes students with visual, hearing, learning, and mobility disabilities, and chronic conditions.

If you have a disability that requires you to sit for examinations outside of the regular classroom, you must schedule the exam to start at the EXACT same time as the rest of the class. Please submit your test scheduling requests well in advance so that I have time to communicate with the Accessibility Services office on this issue.

Academic Assistance

If this is your first year in college or your first semester in a science course (or if you are concerned about your ability to do well in this course), I encourage you to take advantage of the options offered by the Center for Academic Program Support (CAPS). CAPS provides academic assistance free-of-charge to UNM students enrolled in undergraduate courses on the Albuquerque campus. If you need assistance developing good study strategies or reading habits, consider using the CAPS tutoring service. A student may make 25 minute or 50 minute appointments with tutors to review notes, work problems, or better understand lectures and textbooks. Individual tutoring appointments may be made in person at CAPS or by phoning 277-7205 and may be made one week in advance. Individual appointments are conducted at CAPS on the Third Floor of Zimmerman Library.

Academic Honesty

Intellectual integrity is expected in all work. Study groups are strongly encouraged outside of class, peer instruction will be used during all lecture sessions, but all exams must be completed independently. Anyone caught cheating will receive an F in the course and will be referred to the Dean of Students Office.

Course Schedule

The course schedule from the next page will also be posted on WebCT. In case of changes, updates will be made on the website and students will be notified via email and in class.

Physical Geography Course Schedule, Spring 2008

Reading assignments should be completed before the date shown. See the online "previews" for each date to find specific page assignments and reading guides.

Date	Topic	Readings from:
22-Jan	Course Introduction	--
24-Jan	Introduction to Physical Geography	Syllabus
29-Jan	Earth's Energy Balance	Ch.3
31-Jan	Temperature	Ch.3
5-Feb	Wind and Air Pressure	Ch.4
7-Feb	Humidity	Ch.4
12-Feb	Atmospheric Stability	Ch.5
14-Feb	Clouds and Weather	Ch.5
19-Feb	**EXAM 1**	--
21-Feb	Post-Exam Assessment	--
26-Feb	Climate	Ch.7
28-Feb	Hydrologic Cycle	Ch.6
4-Mar	Plate Tectonics	Ch.8
6-Mar	Folding and Faulting	Ch.9
11-Mar	Mountain Landscapes	Ch.9
13-Mar	**EXAM 2**	--
18-Mar	**NO CLASS - SPRING BREAK**	
20-Mar	**NO CLASS - SPRING BREAK**	
25-Mar	Weathering and Mass Movement	Ch.10
27-Mar	Ecosystem Concepts	Ch.16
1-Apr	Fluvial Processes	Ch.11
3-Apr	Fluvial Landscapes	Ch.11
8-Apr	Desert Landscapes	Ch.12
10-Apr	Eolian Processes and Landscapes	Ch.12
15-Apr	**EXAM 3**	--
17-Apr	**NO CLASS - INSTRUCTOR OUT OF TOWN**	
22-Apr	Coastal Processes	Ch.13
24-Apr	Coastal Landscapes	Ch.13
29-Apr	Glacial Processes	Ch.14
1-May	Glacial Landscapes	Ch.14
6-May	*An Inconvenient Truth*	--
8-May	*An Inconvenient Truth* + Final Exam Review	--
13-May	**Final Exam, 12:30 - 2:30**	