

GEOG 2301-010 Physical Geography Spring, 2012

Dr. R. Gary Pumphrey
Office: Academic 001B
E-mail: gary.pumphrey@angelo.edu

Phone: 942-2201
Office hours: M-F: 8-10:00am, by appointment
or anytime my door is open you are welcome

Required Texts

Elemental Geosystems, 6th ed., Christopherson, R. W., 2010, Prentice Hall, ISBN: 9780321595218

Optional Readings

Goode's World Atlas, 21st (2005) or 22nd Edition (2010), Veregin (Editor), Pearson Prentice Hall/Rand McNally, 21st Edition ISBN: 9780528853395; 22nd Edition ISBN: 9780321652003.

Introduction

Geography is a wide ranging discipline with remarkable variety, but is unified by a common interest in understanding the world in *spatial* terms, the study of location and distribution of things. Physical Geography deals with larger fields of study, including Earth Sciences, Social Science *and* Geography. The main focus is on the interaction of the physical and human forces that give the earth its diversity and specifically concentrating on the processes, forms, and spatial components of natural systems operating at or near the surface of the earth (the lithosphere, biosphere, atmosphere and hydrosphere). The two main topics will be climate and landforms, as well as other relevant topics. This is an introductory physical geography course; no prior background in the subject is required.

Course Purpose

This course is presented from the point of view of a "systems theory," looking at the organization and the functioning of these systems in the natural world. There is a flow of energy and mass that connect various aspects of the environment (for example the atmosphere and biosphere). We will look at the spatial distributions of the natural systems and how those systems produce local and global patterns of weather and climate, various landforms, soil types, and vegetation. This course will hopefully give students a better understanding and appreciation of the natural environment found on Earth.

Expected Learning Outcomes

The main purpose of Physical Geography is to explain the spatial characteristics of the various natural phenomena that exist in the earth's lithosphere, biosphere, atmosphere and hydrosphere. At the end of the course, each student is expected to:

1. Gain a basic understanding of the processes and the interactions between the earth's lithosphere, biosphere, atmosphere and hydrosphere and the systems within these zones.
2. Learn geographic patterns to the earth's physical environment that result from various environmental processes. Place and spatial distribution are important.
3. Learn geographic theory and use it in understanding how the world interacts.
4. Develop critical thinking skills, not just knowing "a fact," but understanding why that information is important and when and how that information might be used. Students should be able to use that knowledge to analyze situations or solve a problem or predict what a particular place might be like.

This is covered in lecture, textbook reading and homework assignments. The student's knowledge of the above objectives will be assessed with four exams, two critical thinking exercises, five pop-quizzes and five one-minute papers.

Exams

The four exams (100 points each) will cover the lecture material, the chapter readings and the map locations for that section. Map locations include major physical features of the Earth (mountain ranges, rivers, etc.) and the assessment is done with map questions on exams. All exams are multiple-choice and answers will be recorded on Scantrons (that I will provide). Any student arriving after the first exam has been turned back in will be given an essay exam instead of the multiple choice test.

Make-up exams will only be permitted for verifiable and significant reasons that are described in the Student Handbook. On exam day, students arriving after the first exam has been turned back in will have to take a make-up exam. Make-up exams will consist of three essay questions selected by the instructor.

Pop Quizzes/One Minute Papers

For extra credit, five pop quizzes and five One Minute Papers will be given randomly throughout the semester which will be added to your semester total score. Each quiz/paper is worth 2 points. The maximum possible extra credit points will be 20. There will be no make-up on pop quizzes or One Minute Papers. If you are not in class when these are given, no points can be earned. There will also be two Critical Thinking Exercises that will be turned in as homework, each worth 20 points (40 points total). Total points possible for this course are 440, plus extra credit.

Course Grading

The grade *you earn* in this course comes from the total score on four exams (400 points), the Critical Thinking Exercises (40 points), and the extra credit pop quizzes/ One Minute Papers (a maximum of 20 points).

Letter and numerical grades for the course are as follows: A = 440-396 point is an A, B = 395-352, C = 351-308, D = 307-264, and 263 and below is an F.

Map Locations

The map locations for this class is will be posted on Blackboard. Along with the map locations are study questions that will serve as a study guide for each exam. These questions are not turned in as homework. Beware, do not just memorize terms or facts, but try to see how specific topics fit with the major concepts covered. In other words, look at the big picture. Many of the questions on the exams will be “concept questions,” instead of just definitions, etc. In other words, you have to have a good understanding of the topic to do well on the exams, not just memorization.

SCHEDULE

Week of	Topic	Readings (in <i>Elemental Geosystems</i>)
August 23	introduction systems planet Earth	Chapter 1 p. 264-273
September 1	energy Earth-Sun relations	Ch. 2, p. 43-44 Ch. 2, p. 40-50
September 6 (Labor Day Holiday: no class Monday)	atmospheric composition energy budget & global temps	Ch. 2, p. 50-70 Ch. 3

EXAM 1: September 15

September 17	winds-global & local; ocean currents	Ch. 4
	atmospheric moisture	Ch. 5
	mid-latitude & tropical weather systems	p. 119-120, 165-188, 171-188
	global climates	Ch. 7
October 1	global climate change	p. 199-202, 225-227, 484, 485
	biogeography	p. 526-548
	plate tectonics	p. 280-292, 297-304, 310-323

EXAM 2: October 13

October 15	rocks, weathering	p. 273-280, 337-348
	hydrology	Ch. 6
	fluvial geomorphology	Ch. 11
	eolian geomorphology	Ch. 12
November 1	glacial & periglacial landscapes	Ch. 14

EXAM 3: November 5

November 8	coastal geomorphology	Ch. 13
	mass wasting; karst geomorphology	p. 349-361
	structural geomorphology	p. 304-323
	volcanic geomorphology	p. 273-280, 323-333
	soils	Ch. 15

November 26 (no class Friday- Thanksgiving Holiday)

	global environments	p. 552-572
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FINAL EXAM: Dec. 6, 10:30am-12:30am

Note: For each exam--you must be present at the beginning. DO NOT be late.

Class Attendance

I expect you to come to class. Class attendance will be taken each class during this semester. If you know you will not be able to make it to class, please try to let me know and I will make note of your absence. Students with an excessive amount of absences will most likely not do exceedingly well on exams and your final semester grade will suffer. At the end of the semester and at my discretion, I will take into consideration the number of absences you have for the semester if your final grade is "borderline."

Classroom Etiquette

Because the classroom is small, it is especially important that an effort be made by all students to be courteous to other students and the instructor. This includes keeping quiet during lectures (except to ask a question of the teacher), arriving to class before lecture begins and staying until the lecture is completed, not reading newspapers or other material irrelevant to the lecture, **turning off cell phones, no text messaging in class**, and not sleeping. Disruptive students will be asked to leave. If you must leave prior to the end of class, it is common courtesy to inform the instructor before class starts.

Academic Misconduct

Angelo State University expects its students to maintain honesty and integrity in their academic pursuits. Students are responsible for understanding the Academic Honor Code, which is contained in both print and web versions of the *Student Handbook*. Cheating and plagiarism, as outlined in the *ASU Student Handbook* section on Academic Integrity, will not be tolerated in this course. Allowing another student to use your exam or written material to cheat or plagiarize is dishonest and will be treated in the same manner as

cheating and/or plagiarism. Any student who fails to adhere to the Academic Integrity guidelines as outlined above, will receive a zero on that assignment or exam and the Dean of the student's college and the Vice President for Academic and Student Affairs will both be notified.

Americans with Disabilities Act

If special needs accommodations are necessary to meet course requirements, please contact the instructor as early as possible to communicate these needs. Any person with disabilities that may require accommodations must contact the Student Life and Student Services, Room 112 University Center, in order to request such accommodations.