

GEO 2410 – INTRODUCTION TO PHYSICAL GEOGRAPHY

TEXAS STATE UNIVERSITY, FALL 2005

Instructor: Mark A. Fonstad

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Office Hours: 4:45 PM – 6:45 PM Tuesdays and Thursdays or by appointment

Class Time: 3:30 PM – 4:45 PM Tuesdays and Thursdays

Classroom: Evans Liberal Arts (ELA) Building, Room 311

Course Line Number: 285100

Laboratory Instructors:

Carol Sawyer (cs1123@txstate.edu, ELA 399, 245-0341)

Rebecca Brown (rb53372@txstate.edu, ELA 399, 245-0341)

Lynn Smollin (ls1213@txstate.edu, ELA 113, 245-7961)

COURSE DESCRIPTION

This course is a systematic study of the various elements that make up the Earth's physical environment, weather, climate, vegetation, soil, and landforms. These systems transfer matter and energy among different earth systems (atmosphere, hydrosphere, lithosphere, biosphere).

This course is concerned with the natural processes that interact to produce the earth's varying physical environments. Relationships and explanations involving the basics of matter and energy transfer are emphasized throughout the course -- not descriptions. Because geography is a discipline that encompasses both natural and social science, physical geography deals with the interface between human and natural systems. The emphasis of the course, however, is on the nature of the processes that affect the lithosphere, hydrosphere, atmosphere, and biosphere.

LEARNING OUTCOMES

Knowledge outcomes.

1. Students will explain how the earth works as an energy/matter system with emphasis on the inputs of solar and internal earth energy.
2. Students compile and integrate information about the atmosphere, hydrosphere, biosphere, and lithosphere of the earth.
3. Students are able to explain spatial distributions of the environment from an energy/matter physical geography perspective.

Skills outcomes.

1. Students will apply skills learned in laboratory section in the measurement of earth's physical systems, for example map reading, soil analysis, data collection and analysis of atmospheric or hydrologic process and conditions.
2. Students will analyze patterns and processes of the landscape during accurately conducted fieldwork.

COURSE MATERIALS

Readings for this class will be from the textbook, Essentials of Physical Geography by Gabler, Petersen, and Trapasso (7th Edition) available at the Texas State Bookstore. Other materials are required for the lab sections, and will be discussed by your lab instructor.

EVALUATION AND GRADING POLICIES

I will evaluate your performance and assign grades based on two major areas of work in this course. First, I will assess your knowledge of the lecture material with three examinations (two midterms and a final). Second, your performance in the laboratory section is also used to evaluate your final grade.

All students are expected to take exams at the scheduled time. Make up exams will be given to students who have excused absences; however, make up exams will be different than those given at the scheduled time, and all make up exams will be given on the same day as the Final Exam. Exams should be returned to students within one week of the exam date.

There is a maximum of 400 points for all of the lecture exams and lab exercises. The basis for grading will be as follows: 100 points for each of two midterm examinations, 100 points for a final examination, and 100 points for the laboratory section grade. The final grades will be determined based on the following rules:

A	≥90% (≥360 points)
B	≥80% and <90% (320 – 359 points)
C	≥70% and <80% (280 – 319 points)
D	≥60% and <70% (240 – 279 points)
F	<60% (< 240 points)

CLASSROOM AND ATTENDANCE POLICIES

Good attendance in lecture and lab is key to your success in this course. First, the exams will be based on lecture material. Second, the lab schedule is rigorous, and you will quickly fall behind if you repeatedly miss labs. If you have an unexcused absence on an assignment due day and fail to turn in the assignment, or if you fail to complete an exam, you will receive a zero on that exam or assignment.

If you must miss class or an exam because of an illness, a personal emergency, or some other extenuating circumstance, please contact me as soon as possible so I can make alternative arrangements for you (this is key). Of course, good attendance means more than just showing up for class. Please read and adhere to the policy on classroom etiquette that appears below. These codes of conduct will allow everyone to participate equally as learners. Thank you for your cooperation.

In the Department of Geography, instructors strive to create an atmosphere of mutual trust and respect in which learning, debate, and intellectual growth can thrive. Creating this atmosphere, however, requires that instructors and students work to achieve a classroom in which learning is not disrupted. At the most basic level, this means that everyone should attend class, be prepared with readings and assignments completed, and that students pay attention. This means no conversations with friends, reading the newspaper, coming late, or leaving early. Such behavior is disruptive to the instructor and to your fellow classmates.

STUDENTS WITH DISABILITIES

Students with special needs (as documented by the Office of Disability Services) that will require compensatory arrangements must contact the instructor no later than the fourth class period to discuss specific arrangements and logistics. Students who have not already done so will be required to contact the Office of Student Disability Services located at LBJ5-5.1 (245.3451). *Texas State is dedicated to providing these students with necessary academic adjustments and auxiliary aids to facilitate their participation and performance in the classroom.*

TEXAS STATE ACADEMIC HONESTY POLICY

Learning and teaching take place best in an atmosphere of intellectual fair-minded openness. All members of the academic community are responsible for supporting freedom and openness through rigorous personal standards of honesty and fairness. Plagiarism and other forms of academic dishonesty undermine the very purpose of the university and diminish the value of an education. Specific sanctions for academic dishonesty are outlined in the *Texas State Student Handbook*.

Schedule by Week	Topics	Readings
Aug 23, 25	<i>No Class Tuesday</i> , Intro & Earth Representation	Chapter 1 & 2
Aug30, Sep 1	Earth and Solar Energy; Atmosphere, Temperature, and Heat Budget	Chapter 3 & 4
Sep 6, 8	Atmospheric Pressure, Winds, Circulation Moisture, Condensation, Precipitation	Chapter 5 & 6
Sep 13, 15	Air Masses and Weather Systems Global Climates	Chapter 7 & 8
Sep 20, 22	Climate Change Exam 1 (Thursday, September 22)	Chapter 8 Chapters 1-8
Sep 27, 29	Low-latitude and Arid Regions	Chapter 9
Oct 4, 6	Mid-Latitude, Polar, and Highland Regions; Soils	Chapter 10 & 12
Oct 11, 13	Biogeography; Biomes	Chapter 11
Oct 18, 20	Earth Material, Lithosphere, and Plate Tectonics	Chapter 13
Oct 25, 27	Volcanoes, Earthquakes, Tectonic Landforms Exam 2 (Thursday, October 27)	Chapter 14 Chapters 9 -14
Nov 1, 3	Weathering, Groundwater, and Karst	Chapter 15 & 16

Nov 8, 10	Hillslope and Fluvial Landforms	Chapter 15 & 17
Nov 15, 17	Arid and Eolian Landforms	Chapter 18
Nov 22, 24	Glacial Systems and Landforms <i>No Class Thursday</i>	Chapter 19
Nov29,Dec 1	Oceans and Coastal Landforms	Chapter 20 & 21
Dec 6, 8	<i>No Class Tuesday</i>	
Final Exam, Thursday, Dec 8, 3:00 – 5:30 pm		Chapters 15-21

ABOUT THE INSTRUCTOR

The instructor is Mark A. Fonstad, assistant professor of geography. He is a specialist in spatial and hydrological analysis of river systems, applied remote sensing, and theoretical fluvial geomorphology. Mark received his Ph.D. in Geography from Arizona State University (2000) where he researched mountain fluvial systems and the prediction of channel change in New Mexico. For the past five years, Mark has directed the field research on channel morphology, watershed hydrology, and the remote sensing of rivers in Yellowstone National Park.

