

# **GEO 2410 – Introduction to Physical Geography**

## **Fall, 2006**

**Instructor:** Dr. Mark A. Fonstad  
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**Telephone:** (512) 245-7809      **Email:** mfonstad@txstate.edu  
**Office Hours:** 2:30 – 3:30 p.m. Tuesdays and Thursdays, *or by appointment*

**Class Time:** 3:30 p.m. – 4:50 p.m. Tuesdays and Thursdays  
**Classroom:** Evans Liberal Arts (ELA) Building, Room 311  
**Course Line Number:** 301693      **Course section number:** 2410.003

**Laboratory Instructors:** Mindy Conyers      E-mail: mc1062@txstate.edu  
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### **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:**

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, cryosphere, and lithosphere of the Earth.
3. Students are able to explain spatial distributions of environments from an energy/matter physical geography perspective.

**Skills:**

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 (8<sup>th</sup> Edition) available at the Texas State Bookstore, and other academic bookstores. Supplemental readings may also be handed out or posted on TRACS. Other materials are required for the lab sections, and will be discussed by your lab instructor.

## EVALUATION AND GRADING POLICIES

A maximum of 400 points is possible in the course, determined from your performance and grades in two sections: exams and lab work. First, I will assess your knowledge of the lecture material with three examinations (two midterms and a final, 100 points each). The lecture material includes all readings and materials presented in lecture, including handouts, images and diagrams. Second, your performance in the laboratory section is also used to evaluate your final grade (100 points).

All students are expected to take exams at the scheduled time. If you have an unexcused absence on an exam day, you will receive a zero on that exam. 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 *immediately after* the Final Exam. I will make every effort to return the exams in a timely manner.

Course component	Points	Percentage
Exam 1	100	25%
Exam 2	100	25%
Final Exam	100	25%
Lab	100	25%
<b>Total</b>	<b>400 points</b>	<b>100%</b>

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 necessary for your success in this course. This course moves quickly, averaging one chapter per class meeting and it is difficult to catch up once you begin to fall behind. My lectures are aimed at complementing the readings, expanding upon them and making them accessible. You will not get the full benefit of the lectures if you do not read the book chapters beforehand, so come prepared. If you must miss 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.

Also, I like an interactive class environment and appreciate every question and comment. I encourage those of you who are not shy to ask questions in class and those of you who are reluctant to speak in a large group to talk me during office hours and/or send me an email.

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. Everyone should attend class, be prepared with readings and pay attention. This means no conversations with friends, reading the newspaper, coming late, or leaving early. All cell phones should be turned off during class. Such behavior is disruptive to the instructor and to your fellow classmates. Thank you for your cooperation.

## 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 LBJ 5-5.1 (512.245.3451). 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 *Texas State Student Handbook*.

### Tentative Course Schedule

Schedule	Topics	Textbook Readings*
August 24 <sup>th</sup>	Introduction, Earth Representations	Chapters 1
August 29 <sup>th</sup> , 31 <sup>th</sup>	Earth Representations Earth and Solar Energy	Chapters 2 & 3
September 5 <sup>th</sup> , 7 <sup>th</sup>	Atmosphere, Temperature, & the Heat Budget Atmospheric Pressure, Winds, Circulation	Chapters 4 & 5
September 12 <sup>th</sup> , 14 <sup>th</sup>	Moisture, Condensation, Precipitation Air Masses and Weather Systems	Chapters 6 & 7
September 19 <sup>th</sup> , 21 <sup>st</sup>	Changes in the climate	Chapters 8
September 26 <sup>th</sup> , 28 <sup>th</sup>	<b>Exam 1</b> Classifying climates	<b>Chapters 1-8</b> Chapters 8 & 9
October 3 <sup>rd</sup> , 5 <sup>th</sup>	Climates (cont'd) Soils	Chapters 10 & 12
October 10 <sup>th</sup> , 12 <sup>th</sup>	Biogeography Environmental biomes (chapter 11 cont'd)	Chapter 11
October 17 <sup>th</sup> , 19 <sup>th</sup>	Lithosphere and Plate Tectonics Volcanoes, Earthquakes, Tectonic Landforms	Chapters 13 & 14
October 24 <sup>th</sup> , 26 <sup>th</sup>	Weathering and Mass Wasting Finish chapters 8-15	Chapter 15
October 31 <sup>st</sup> , November 2 <sup>nd</sup>	<b>Exam 2</b> Groundwater and Karst Landforms	<b>Chapters 8-15</b> Chapter 16
November 7 <sup>th</sup> , 9 <sup>th</sup>	Fluvial Processes and Landforms	Chapter 17
November 14 <sup>th</sup> , 16 <sup>th</sup>	Arid Landforms and Eolian Processes	Chapter 18
November 21 <sup>st</sup> November 23 <sup>rd</sup>	Glacial Processes and Landforms <b>NO CLASS ON WEDNESDAY</b>	Chapter 19
November 28 <sup>th</sup> , 30 <sup>th</sup>	Glacial Processes and Landforms (cont'd) Oceans, Coastal landforms	Chapters 19, 20, & 21
December 5 <sup>th</sup> December 7 <sup>th</sup>	NO CLASS DAY <b>Final Exam, 3:00 p.m. – 5:30 p.m.</b>	Chapter 21 <b>Chapters 16-21</b>

\*Supplemental readings may also be assigned throughout the semester.