GEO 2410 – INTRODUCTION TO PHYSICAL GEOGRAPHY
SOUTHWEST TEXAS STATE UNIVERSITY, FALL 2002

Instructor: Mark A. Fonstad
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Office Hours: 10:00 AM – 12:00 PM Mondays and Wednesdays or by appointment
Class Time: 9:00 AM – 9:50 AM Monday, Wednesday, and Fridays
Classroom: Evans Liberal Arts (ELA) Building, Room 311
Course Line Number: 236775
Laboratory Instructors:

Amanda Keen-Zebert (keenzebert@hotmail.com, ELA 391, 245-1937)
Dawna Cerney (water@uleth.ca, ELA 388, 245-1329)
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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.

COURSE OBJECTIVES

By the end of this course, you should be able to understand introductory principles of how the earth "works" within its relationship with the sun and solar system, and the nature of the earth's surface. In addition, you should have developed a basic understanding of the atmosphere, hydrosphere, biosphere, and lithosphere of the earth. Toward this end, an integral part of this course will be both lectures and laboratory exercises.

COURSE MATERIALS

Readings for this class will be from the textbook, Essentials of Physical Geography by Gabler, Sager, Wise, and Petersen (6th Edition) available at the SWT 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.

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 exam or assignment due day, 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 having special needs/disabilities that require accommodations for successful completion of this course must notify both SWT's Office of Disability Services and the course instructor by no later than the end of the first week of classes. Failure of the student to do so may result in the necessary accommodations not being made.

SWT 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 *SWTexan*.

Schedule by Week	Topics	Readings
Aug 26, 28, 30	*No Class Monday* Introduction, Earth Measurement, Earth Systems	**Chapter 1 & 2**
Sep 2, 4, 6	*No Class Monday (Labor Day)* Earth Systems, Earth-Sun Relationships	**Chapter 3**
Sep 9, 11, 13	Electromagnetic Spectrum, Composition & Structure of the Atmosphere	**Chapter 4**
Sep 16, 18, 20	Radiation and Budgeting, Greenhouse Effect, Atmospheric Temperature and Pressure	**Chapter 4 & 5**
Sep 23, 25, 27	Winds, Global Circulation Patterns	**Chapter 5 & 6**
Sep 30, Oct 2, 4	**Exam 1 (Monday, September 30)** Moisture and Air Masses, Synoptic Meteorology	**Chapter 7 & 8**
Oct 7, 9, 11	*No Class Friday – (I'll be in Pennsylvania)* Present-day Climatology, Climate Classification	**Chapter 9 & 10**
Oct 14, 16, 18	Paleoclimatology , Regional Climates	**Chapter 10 & 11**
Oct 21, 23, 25	Biogeography	**Chapter 12**
Oct 28, 30, Nov 1	Soils, Introduction to Ecosystems	**Chapter 13**
Nov 4, 6, 8	**Exam 2 (Monday, Nov 4)** Plate Tectonics	**Chapter 14**
Nov 11, 13, 15	Constructional Landforms, Weathering	**Chapter 15 & 16**

Nov 18, 20, 22	Mass Wasting, Hillslopes, Karst, Groundwater	**Chapter 16 & 17**
Nov 25, 27, 29	Fluvial Processes and Landforms *No class Friday (Thanksgiving)*	**Chapter 18**
Dec 2, 4, 6	Glacial Systems, Arid Lands Landforms	**Chapter 19 & 20**
Dec 9, 11, 13	Coastal Landforms *No class Wednesday, Friday* **Final Exam, Mon., Dec 16, 8:00am – 10:30 am**	**Chapter 22**

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 three years, Mark has directed the field research on channel morphology, watershed hydrology, and the remote sensing of rivers in Yellowstone National Park.