

GEOGRAPHY 259, LANDFORMS AND PHYSIOGRAPHIC REGIONS

DR. LEE DEXTER - DEPARTMENT OF GEOGRAPHY - FALL, 1996

Time/day: 11:30-12:20 MWF

Classroom: Bldg 82, F&G rooms 18 and 135

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Office hours: 1:00-2:00 M & W or by appointment

PREREQUISITES:

None, however, any Physical Geography or Physical Geology courses will help.

COURSE OVERVIEW:

Landforms and Physiographic Regions explores the origin and spatial distribution of the topography of our planet. A geographic approach to the interactions between the lithosphere, hydrosphere and atmosphere will be presented with an emphasis on the development of landscape. Exercises and field trips will be used to further develop the concepts presented in lecture.

COURSE OBJECTIVES:

The specific objectives of the course are:

- * To be able to describe the origin of individual landform types.
- * To be able to recognize landform types in the field.
- * To be able to map the spatial distribution of U.S. landforms .
- * To be able to employ the scientific method in the investigation of landforms.

COURSE REQUIREMENTS:

Assigned readings from the required text.

Exercises in a variety of formats including written problems, computer based exercises map work etc.

One short quiz, one mid-term exam and one comprehensive final exam, about 70% lecture based; 30% text, videos etc.

OR

Two exams and a comprehensive final about 70% lecture based; 30% text, videos etc.

Three field trips and associated map project.

COURSE POLICIES:

Students are expected to attend each class meeting and tardiness is discouraged. To this end, occasional spot attendance checks will be made and these checks will be used in borderline grade determinations. While a certain amount of collaboration among students is encouraged in this class, each student is expected to complete his or her own assignments. Anyone found plagiarizing assignments or cheating on exams will fail the course.

MATERIALS:

Tuttle, S. D. (1980) Landforms & Landscapes. William C. Brown, Dubuque, Iowa (required).

Bloom, A. L. (1991) Geomorphology: A Systematic Analysis of Late Cenozoic Landforms. 2nd edition, Prentice Hall, Englewood Cliffs, NJ. (optional).

Dexter, L.R. (1996) Landforms and Physiographic Regions Lecture Supplement. NAU duplication services, NAU Bookstore, Flagstaff, Arizona (required).

GRADING:

1 Quiz 50 points.

2 Exams (mid-term exam 100 points, final exam 150 points.)

OR

3 Exams, each 100 points

4 Written exercises 200 points

1 Field trip mapping project 50points

Total possible 600-750 points.

A > 90%, B > 80%, C > 70%, D > 60% F < 60% total possible points
or curved to the class distribution if lower.

TENTATIVE SCHEDULE:

Introduction

Aug 26-30 Intro to course & tools
Concepts in systems, energy and time
Fri Lab intro

Constructive Landforms

Sep 02-06 Labor Day Holiday
Crustal materials and landforms
Rock demo fri
Sep 07 Field trip #1 (SF Peaks)
Sep 09-13 Exam #1 Plate tectonics and first order landforms
Sep 16-20 Structural landforms
Fri diastrophic ex
Sep 23-27 Igneous landforms
Slides (all rocks)
Fri igneous ex
Sep 30-
Oct 04 Catch up &/or review
Exam #1
Oct 05 Field trip #2 (northeastern Arizona) (watch homecoming)

Destructive Landforms

Oct 07-11 Weathering, Karst, soils, hillslopes (#1)
Oct 14-18 Hillslopes (#2), Fluvial (#1 & 2)
Oct 21-25 Fluvial landforms (#3)
Slides
Fri = holiday
Oct 28- Coastal & shoreline landforms (one day)
Nov01 Weds hillslope & fluvial ex #3
Exam #2
Nov 04-08 Landscape change over time (cont)
Climatic influences on landforms (1 day)
Arid region landforms (1 day)
Nov 09-10 Field trip #3 (Grand Canyon & northwestern Arizona)
Nov 11-15 Cold region landforms (2 days)
Slides

Nov 18-22 Cold region landforms (2 days)
Arid/Cold exercise
Global landform summary (can omit)

Physiographic Regions

Nov 25-29 Eastern 1/2 landform provinces
Catch up
Thanksgiving break

Dec 02-06 Western 1/2 U.S. landform provinces
Review

Dec 10 Final exam Tuesday 10:00-12:00 A.M.