

# GEOMORPHOLOGY Syllabus Fall 2007 (Netoff)

## I. GENERAL INFORMATION

*Course:* GEO 442W (geomorphology) (Lecture and lab = 4 credits)  
*Instructor:* Dennis Netoff  
B.A. Chico State College, Chico, CA  
Ph.D. and M.A. University of Colorado, Boulder, CO  
*Office:* Lee Drain 322  
*Office hrs.:* To be announced  
*Phone:* (Office): (936)294-1454; FAX: (936) 294-3940; e-Mail: geo\_din@shsu.edu  
*Prerequisites:* GEL 133  
*Text:* **none. WEB sites, plus I will have some reference texts that you may check out.**  
**(Optional)** *Dictionary of Geological Terms. Reading the Earth: Landforms in the making (by Wyckoff, 1999). Messages in Stone: Colorado's Colorful Geology (Colorado Geological Survey)*  
*Lab materials:* 3-ring binder  
*Format:* 3 hours of lecture and 2 hours of lab/week.

## II. COURSE DESCRIPTION

The course focuses on surficial geological processes and the resulting landforms. Specific topics include landscape processes associated with streams, glaciers, wind, coasts, mass wasting, weathering and soil development, geologic structure, and igneous activities. Labs emphasize landform analysis through interpretation of topographic maps and aerial photos.

## III. COURSE OBJECTIVES

Students should be able to (1) identify specific landforms and landform assemblages that are characteristic of certain processes and structures by analyzing topographic maps and aerial photos, and (2) provide a rational explanation of the processes that create a large variety of fluvial, glacial, coastal, eolian, volcanic, and structurally pre-conditioned landforms.

## IV. GRADING POLICIES

**Grades are performance-based.** A combination of announced quizzes (6-8), exercises, and projects, each component of equal weight, will make up the lecture/lab grade.

No makeups are given for quizzes, exercises, or projects. No extra credit. Missed quizzes/exercises/projects are recorded as zeros.

**Grading scale:** 85-100% = A; 75-84% = B; 60-74% = C; 50-59% = D

Students with a disability which may affect their academic performance can arrange for a conference with the instructor within the first two weeks of the semester in order that appropriate achievement strategies can be considered.

## V. ATTENDANCE POLICY

The University requires each instructor to keep a record of attendance. Attendance is taken at the beginning of the hour. Tardies count as absences. An important part of the learning process takes place in the lecture and lab portion of this course. Class attendance and participation are therefore strongly encouraged. You have **12 'free' hours** of absence; beyond that limit, the course grade becomes an automatic **F**.

## VI. CLASS CONDUCT, CHEATING, PLAGIARISM

Actions that are detrimental to the learning environment of the class (talking, use of cell phones, leaving in mid-lecture, sleeping, tardies) will receive one warning & then will be dropped from the class. Cheating, dishonesty, and plagiarism will not be tolerated, and may, as a minimum, result in course failure.

## VII. VISITORS

Visitors (family, friends, etc.) are allowed in the classroom only by pre-arrangement with the instructor.

## VIII. COURSE CONTENT

### **Lecture Topics**

#### **Overview-**

#### **Weathering-**

physical  
chemical  
biological

#### **Karst landscapes**

#### **Soils**

#### **Mass Wasting**

causes  
types  
geomorphic expression

#### **Fluvial landscapes**

hydraulic variables  
erosion, transportation, deposition  
channel forms  
drainage patterns  
landscape evolution through time  
humid vs. arid landscapes  
rejuvenation

#### **Structurally-conditioned landscapes**

horizontal structure  
folded structure  
joints and faults

#### **Eolian landforms**

erosional processes and forms  
depositional features  
loess sheets  
eolian dunes

#### **Volcanic landscapes**

#### **Coastal landscapes**

wave development and characteristics  
nearshore current systems  
erosional processes and forms  
depositional processes and forms

#### **Glacial landscapes**

Pleistocene climatic change  
alpine glaciation  
continental glaciation  
periglacial processes and forms

### **Lab (tentative)**

Topographic maps, aerial photos

Weathering features

Karst landscapes

Mass wasting

Fluvial landforms (2 or 3 labs)

Structurally-conditioned landforms.

eolian landforms

Volcanic landforms

Coastal landscapes

Alpine glacial landscapes  
Continental glacial landscapes