

Geog 312 Geography of Landforms

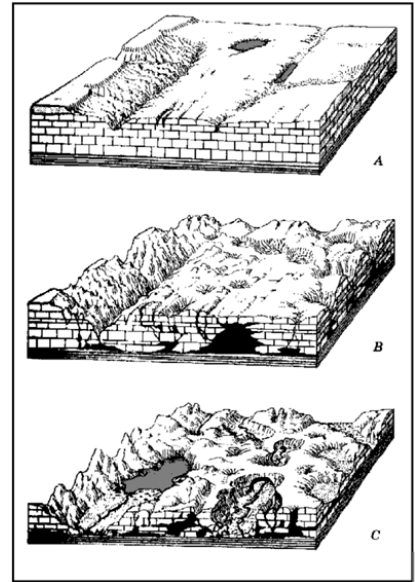
Jerry D. Davis Fall 2011 (1:10-2:00, HSS 287)

Office HSS 279, 338-2983.

Office Hours M-Th 2:15-3:30

Course Description: This course is about the surface of the earth and the processes that shape it. The landforms we will study exhibit the influence of both internal and surficial processes and materials. The discussion will include: a statement of scope, content, course objectives and expected student learning outcomes of the course;

1. structural processes and landforms, that is those resulting primarily from internal earth processes;
2. degradational processes and landforms, or those systems that exhibit the impact of surface conditions (weathering, erosion/ deposition) on pre-existing structures;
3. a consideration of the relative impact of structural and climatic controls in the development of landforms;
4. a study of systems which are characterized by a dominant influence of either climate or structure.



Learning Outcomes. The above outline and the outline on the next page describes the specific topics of the course, and an understanding of these systems and how the various geomorphic processes work represent the specific learning outcomes of the course topics. Other learning outcomes include the ability to observe landforms and geomorphic processes in the field and on remotely sensed imagery, using Google Earth and other online resources.

Lectures online at <http://bss.sfsu.edu/jdavis/geog312>. **Please note:** Having and even reading the notes is not the same as taking them and joining in class discussions. For some reason, the mechanical process of writing notes is important to learning. Having copies of the slides in class will help you pay attention in class, since you won't need to take as many notes, but you should find a way to replace the note-taking process, after class, with something that will help you learn the material. Attendance is also critical, since important class discussions are not reflected in the printouts.

Texts: Huggett (2004). *Fundamentals of Geomorphology*
Kane, P. S. (1980). *Through Vulcan's Eye*

Course format: lecture/discussion (3 hrs) + field trips (1 hr). Students with disabilities who need reasonable accommodations are encouraged to contact the instructor. The Disability Programs and Resource Center (DPRC) is available to facilitate the reasonable accommodations process. The DPRC is located in the Student Service Building and can be reached by telephone (voice/TTY 415-338-2472) or by email (dprc@sfsu.edu).

Grading policy, etc.: Your grade in this course will be determined from three exams (25% each), exercises (15%), and field trips (10%).

Schedule (MWF)

Dates	Reading (H=Huggett; K=Kane)	Topic(s)
Wed, 08/24	H: 1	Introduction to the course
Fri, 08/26 to Wed, 08/31	H: 2-3; K: 1	Geomorphology & Landforms in context of the planet & plate tectonics; megageomorphology
Fri, 09/02 to Fri, 09/09	H: 3-4; K: 2-3	Volcanism & Volcanic Landforms; Erosion of post-volcanic igneous structures
Mon, 09/12 to Fri, 09/16	H: 5; K 4-5	Introduction to Weathering & Erosion: rock resistance and physical/chemical weathering processes
Mon, 09/19 to Mon, 09/26	H: 2	Hillslopes
Wed, 09/28 to Wed, 10/05	H: 7	Fluvial
Fri, 10/07		Exam 1 (through mass wasting in hillslopes)
Mon, 10/10 to Wed, 10/12	H: 7	Fluvial (cont)
Fri, 10/14 to Fri, 10/21	H: 11	Coastal processes & landforms
Mon, 10/24 to Wed, 10/26	H: 10	Wind as an agent; Aeolian Processes & Landforms
Fri, 10/28		Exam 2
Mon, 10/31 to Fri, 11/04	H: 3-4	Structures and Structural Control
Mon, 11/07 to Fri, 11/18	H: 6	Karst
Mon, 11/28 to Wed, 11/30	H: 9, 12	Effects of Climate and Climatic Change on Geomorphology: Periglacial, Arid and Wet Tropical examples
Fri, 12/02 to Mon, 12/12	H: 8	Glaciers and the Quaternary Period. Ice as an agent; glaciology, glacial erosion, deposition & landforms.
Fri, 12/16	10:45-1:15	Exam 3

Scheduled Field Trips:

9/23-25: *Lassen Volcanic National Park*. Volcanics, weathering, slopes, fluvial, glacial features.

11/5 : *San Mateo Coast*. structural, coastal, wind, slopes, human impact, fluvial.