

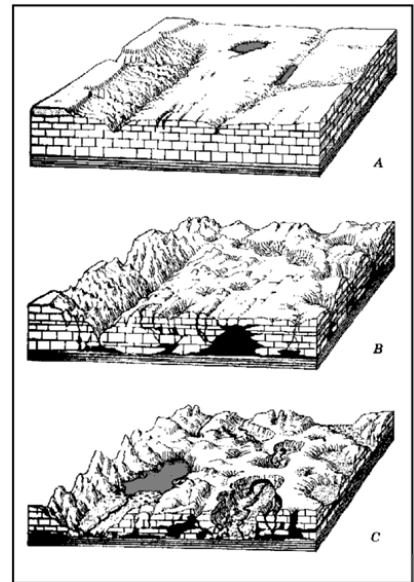
Geog 312 Geography of Landforms

Jerry D. Davis Fall 2008 (11 am, HSS 287)

Office HSS 273 338-2983, or GIS lab 338-6140/6332.
Office Hours W 3-4 TuTh 12:15-12:45, 4-5 or by appt.

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:

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.



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* (hard to find, try Amazon)

Course format: lecture/discussion (3 hrs) + field trips (1 hr).

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

Scheduled Field Trips:

9/26-28: *Lassen Volcanic National Park field trips*. glacially-induced stream capture, volcanics, weathering, slopes, glacial features. We may leave SFSU Thu evening.

11/8 : *San Mateo Coast*. structural, coastal, wind, slopes, human impact, fluvial.

Schedule (TuTh)

Dates	days	Reading (H=Huggett; K=Kane)	Topic(s)
Tue, 08/26	1	H: 1	Introduction to the course
Thu, 08/28 to Tue, 09/02	2	H: 2-3; K: 1	Geomorphology & Landforms in context of the planet & plate tectonics; megageomorphology
Thu, 09/04 to Tue, 09/09	2	H: 3-4; K: 2-3	Volcanism & Volcanic Landforms; Erosion of post-volcanic igneous structures
Thu, 09/11 to Tue, 09/16	2	H: 5; K 4-5	Introduction to Weathering & Erosion: rock resistance and physical/chemical weathering processes
Thu, 09/18 to Tue, 09/23	2	H: 2	The effect of gravity on slopes: mass wasting
Thu, 09/25 to Thu, 10/02	3	H: 7	Water as an agent: Fluid transport processes; Slopewash
Tue, 10/07	1		Exam 1
Thu, 10/09 to Tue, 10/14	2	H: 7	Fluvial Systems & Landforms
Thu, 10/16 to Tue, 10/21	2	H: 11	Coastal processes & landforms
Thu, 10/23 to Tue, 10/28	2	H: 10	Wind as an agent; Aeolian Processes & Landforms
Thu, 10/30	1		Exam 2
Tue, 11/04 to Tue, 11/11	3	H: 3-4	Structures and Structural Control
Thu, 11/13 to Thu, 11/20	3	H: 6	Karst
Tue, 12/02	1	H: 9, 12	Effects of Climate and Climatic Change on Geomorphology: Periglacial, Arid and Wet Tropical examples
Thu, 12/04 to Thu, 12/11	3	H: 8	Glaciers and the Quaternary Period. Ice as an agent; glaciology, glacial erosion, deposition & landforms.
Thu, 12/18	1	10:45-1:15	Exam 3