

Lecture: Tu & Th 11-12:15, Thaw Hall 203 (4 Credits)

Laboratory (Required): Mon 4-5:50, SRCC 210

Class Description: The goal of this intermediate to advanced level course is to provide you with the basic knowledge and tools to understand surficial processes including: (1) erosion and deposition by water, ice, wind, and gravity, (2) physical and chemical weathering, (3) mass wasting and hill slope evolution, (4) soil development, and (5) fluvial and land form evolution.

Prerequisites: Geology (GEOL 0800) and Geology laboratory (GEOL 0055).

Instructor: Dr. Mark Abbott, Geology and Planetary Science

Office: SRCC 404; **Phone:** 412-624-1408; **Email:** mabbott1@pitt.edu

Office Hours: Tu and Th 12:20-2 and *by appointment*.

I do my very best to have an *open-door* policy and strongly encourage students to come see me with questions even if it is not my office hours. If you are having trouble with a concept or a section of the class please come see me before it becomes a bigger problem.

Required Text: Geomorphology: A systematic analysis of late Cenozoic landforms by Arthur Bloom.

Laboratory: Required. Monday 4 to 5:50 in SRCC 210. Matt Finkenbinder is the instructor for the laboratory component of this class. All lab exercises must be completed and turned in on time. Lab exercises cannot be made up without a written excuse. The laboratory exercises are worth 30% of your grade.

Class Participation and Attendance: Required. Brief exercises will be given during some class periods and will be counted toward the class participation part of your grade (5%).

Examinations: Two exams and a final exam will be given during the semester (see attached schedule). They will cover separate blocks of material presented in the lectures and reading assignments. The final exam will be cumulative.

Grade Summary:

Laboratory grade	30%
Class participation and attendance	5%
Exam 1	15%
Exam 2	15%
Final exam (cumulative)	35%

Make-Up Policy on Exams and Late Work: There are no make-up exams unless there are absolutely unavoidable circumstances and a written excuse is provided. Make-up exams consist of essay questions.

Web Site: The course web site is located at:
<http://www.pitt.edu/~mabbott1/climate/mark/Teaching/teaching.html>

The site will contain the syllabus, announcements and assignments for the class. I tend to revise the class schedule as the term progresses, so please check there for the most current class information.

Cell Phones: Use of cell phones (this includes talking, texting, or using the internet) is not allowed in class. Before class starts, turn your phone off or put the ringer on silent.

Disability Resources: If you have a disability for which you are or may be requesting an accommodation, you are encouraged to contact both your instructor and the Office of Disability Resources and Services, 216 William Pitt Union 412-624-7890 as early as possible in the term.

Academic Integrity: All students are expected to adhere to the Academic Integrity Policy of the University pertaining to cheating and plagiarism. Cheating/plagiarism will not be tolerated. Students suspected of violating the University of Pittsburgh Policy on Academic Integrity, noted below, will be required to participate in the outlined procedural process as initiated by the instructor. A minimum sanction of a zero score for the exam or paper will be imposed.

The integrity of the academic process requires fair and impartial evaluation on the part of faculty and honest academic conduct on the part of students. To this end, students are expected to conduct themselves at a high level of responsibility in the fulfillment of the course of their study. It is the corresponding responsibility of faculty to make clear to students those standards by which students will be evaluated, and the resources permissible for use by students during the course of their study and evaluation. The educational process is perceived as a joint faculty-student enterprise, which will perforce involve professional judgment by faculty and may involve - without penalty- reasoned exception by students to the data or views offered by faculty.

Senate Committee on Tenure and Academic Freedom (February 1974)

Course Organization: The lecture schedule is subject to change.

Day	Date	Lecture Topic	Reading Assignment
Th	Jan. 6	Introduction and energy flow in geomorphic systems	Chps. 1 and 2
Tu	Jan. 11	Cenozoic climate change	Chp. 4
Th	Jan. 13	Rock weathering	Chp. 7
Tu	Jan. 18	Rock weathering	Chp. 7
Th	Jan. 20	Karst and speleology	Chp. 8
Tu	Jan. 25	Karst and speleology	Chp. 8
Th	Jan. 27	Mass wasting and hillslopes	Chp. 9
Tu	Feb 1	Mass wasting and hillslopes	Chp. 9
Th	Feb. 3	The fluvial geomorphic system	Chp. 10
Tu	Feb. 8	The fluvial geomorphic system	Chp. 10
Th	Feb. 10	Exam 1	
Tu	Feb. 15	Evolution of the fluvial system	Chp. 11
Th	Feb. 17	Evolution of the fluvial system	Chp. 11
Tu	Feb. 22	Structural control of fluvial erosion	Chp. 12
Th	Feb. 24	Arid and savanna landscapes: Eolian processes and landforms	Chp. 13
Tu	Mar. 1	Arid and savanna landscapes: Eolian processes and landforms	Chp. 13
Th	Mar. 3	Periglacial geomorphology	Chp. 14
Tu	Mar. 8	No Class - Spring Break	
Th	Mar. 10	No Class - Spring Break	
Tu	Mar. 15	Glaciers as landforms: glaciology	Chp. 16
Th	Mar. 17	Glaciers as landforms: glaciology	Chp. 16
16Tu	Mar. 22	Glacial geomorphology	Chp. 17
Th	Mar. 24	Glacial geomorphology	
Tu	Mar. 29	Exam 2	Chp. 17
Th	Mar. 31	Late Quaternary climatic geomorphology	Chp. 18
Tu	Apr 5	Late Quaternary climatic geomorphology	Chp. 18
Th	Apr. 7	Shore-zone processes and landforms	Chp. 19
Tu	Apr 12	Shore-zone processes and landforms	Chp. 19
Th	Apr. 14	Explanatory description of coasts	Chp. 20
Tu	Apr 19	Explanatory description of coasts	Chp. 20
Th	Apr. 21	Review	
		Final Exam – TBA	