

EARTH SURFACE PROCESSES 12:102/159:102
FALL 2012

PREREQUISITES: none

RECOMMENDED BACKGROUND: 12:008/153:008 or 12:005 or 44:003 or equivalent

General Description of Course: The processes that shape the surface of the earth are presented. Emphasis is placed on the basic geomorphic processes of weathering, mass movement such as creep, landslides and earth and debris flows, erosion, transport and deposition by fluid agents such as wind, water and ice and related climatic and geomorphic processes.

LECTURES: Tuesdays and Thursdays in Trowbridge 125 at 12:30 PM – 1:45 PM

INSTRUCTOR:

Prof. Frank Weirich

Office: 217 Trowbridge Hall (Geoscience)

Phone: 335-0156

Email: frank-weirich@uiowa.edu

Office Hours: Tuesdays/Thursdays 10:45 AM – 12:15 PM

(and by appointment)

TEACHING ASSISTANT:

Megan Schettler

Office Hours: Tue 9:30–10:30AM

Thur 9:30-11:30AM

Office: Room 24D Trowbridge Hall

READING MATERIALS:

- 1) Process Geomorphology, 5th Ed., Ritter, Kochel and Miller, McGraw Hill
(available at Iowa Book and Supply)
- 2) assigned readings
- 3) suggested readings on specific topics will be provided

GRADING AND POINT DISTRIBUTION:

2 Tests	= 50%	(1 st = 20%, 2 nd = 30%,
Exercises/Presentations	= 15%	
Abstract/Outline of paper	= 5%	
Essay	= 30%	

Approximately 50% of the test content will come from the text and assigned readings and approximately 50% of the test content will be based on lecture supplemental materials. Tests will consist of a combination of multiple choice, fill-in the blanks, short answer and essay questions. There are no scheduled make-up exams. Make-up exams require a written and verified medical excuse.

Lecture attendance is required. Students should expect to spend, on average 6 hours per week on course related activities such as readings, assignments, work on the essay and test preparation. It should be noted that this course follows the course procedures and policies as governed by the College of Liberal Arts and Sciences.

Complaint Procedures: Please contact Prof. Weirich by telephone, email or office.

Unresolved issues or concerns should be addressed to the Department of Geoscience Chair, Mark Reagan. Please see the full policy as provided in the Schedule of Courses.

Students with Disabilities: Please notify Prof. Weirich. Accommodations for students with documented learning disabilities or physical disabilities are arranged by the Office

of Student Disability Services in consultation with the instructor. Please refer to the full policy as outlined in the Schedule of Courses and the attached handout.

Academic Misconduct: Plagiarism and/or cheating may result in grade reduction and/or other serious penalties. Please refer to the full policy on this as outlined in the Schedule of Courses (Student Academic Handbook and Operations Manual).

TOPICS, SCHEDULE OF LECTURES*

DATE	TOPIC
Week 1 (Aug 21/23)	Introduction to basic geomorphic concepts
Week 2 (Aug 28/Aug30)	Climate and geologic forces
Week 3 (Sept 4/6)	Chemical weathering and soils
Week 4 (Sept 11/13)	Physical weathering processes
Week 5 (Sept 18/20)	Mass movement and slopes
Week 6 (Sept 25/27)	The hydrologic cycle/ Test 1
Week 7 (Oct 2/4)	The drainage basin and hydrology
Week 8 (Oct 9/11)	Fluvial processes
Week 9 (Oct 16/28)	Fluvial landforms
Week 10 (Oct 23/25)	Coastal and Aeolian processes and landforms
Week 11 (Oct30/Nov 1)	Karst/ Glacial processes
Week 12 (Nov 6/8)	Glacial landforms
Week 13 (Nov 13/15)	Periglacial processes and landforms/Test 2
Week 14 (Nov 20/22)	THANKSGIVING BREAK
Week 15 (Nov 27/29)	Presentations
Week 16 (Dec 4/6)	Presentations

Papers Due by Friday Dec. 14, 5 PM

*The schedule may be adjusted to allow for field trips/detailed discussion of specific topics of interest that may be event driven.

Department of Geoscience Syllabus Information:

Department Office: 121 Trowbridge Hall
Department Chair (DEO): Prof. M.K. Reagan
DEO Telephone: 319-335-1820

Telephone: 319-335-1818
DEO Office: 121C TH
DEO Email: geology-deo@uiowa.edu

Administrative Home

The College of Liberal Arts and Sciences is the administrative home of this course and governs matters such as the add/drop deadlines, the second-grade-only option, and other related issues. Different colleges may have different policies. Questions may be addressed to 120 Schaeffer Hall, or see the CLAS Academic Policies Handbook at <http://clas.uiowa.edu/students/handbook>.

Electronic Communication

University policy specifies that students are responsible for all official correspondences sent to their University of Iowa e-mail address (@uiowa.edu). Faculty and students should use this account for correspondences. (*Operations Manual*, [III.15.2](#). k.11.)

Accommodations for Disabilities

A student seeking academic accommodations should first register with Student Disability Services and then meet privately with the course instructor to make particular arrangements. See www.uiowa.edu/~sds/ for more information.

Academic Honesty

All CLAS students have, in essence, agreed to the College's Code of Academic Honesty: "I pledge to do my own academic work and to excel to the best of my abilities, upholding the IOWA Challenge. I promise not to lie about my academic work, to cheat, or to steal the words or ideas of others; nor will I help fellow students to violate the Code of Academic Honesty." Any student committing academic misconduct is reported to the College and placed on disciplinary probation or may be suspended or expelled ([CLAS Academic Policies Handbook](#)).

CLAS Final Examination Policies

The final examination schedule for each class is announced around the fifth week of the semester by the Registrar. Final exams are offered only during the official final examination period. No exams of any kind are allowed during the last week of classes. All students should plan on being at the UI through the final examination period. Once the Registrar has announced the dates and times of each final exam, the complete schedule will be published on the Registrar's web site.

Making a Suggestion or a Complaint

Students with a suggestion or complaint should first visit the instructor, then the course supervisor, and then the departmental DEO. Complaints must be made within six months of the incident ([CLAS Student Academic Handbook](#).)

Understanding Sexual Harassment

Sexual harassment subverts the mission of the University and threatens the well-being of students, faculty, and staff. All members of the UI community have a responsibility to uphold this mission and to contribute to a safe environment that enhances learning. Incidents of sexual harassment should be reported immediately. See the UI [Comprehensive Guide on Sexual Harassment](#) for assistance, definitions, and the full University policy.

Reacting Safely to Severe Weather

In severe weather, class members should seek appropriate shelter immediately, leaving the classroom if necessary. The class will continue if possible when the event is over. For more information on Hawk Alert and the siren warning system, visit the Public Safety [web site](#).

Rights and responsibilities in the classroom

The College's statement on student rights and responsibilities can be found at: <http://www.clas.uiowa.edu/students/handbook/x/>.