



GEOG 3200 Geomorphology: Mountains, Rivers, Deserts

Fall 2020

ONLINE COURSE

-Draft Syllabus-

Instructor: Dr. Zachary Lundeen
Email: z.lundeen@utah.edu (preferred contact method)
Phone Number: 801-585-3177
Office Hours: Virtual office hours via zoom Tu 10:30a-12p or by appointment
(Zoom link on course Canvas page)
Office Location: GC Rm 4641

Required Materials

Key Concepts in Geomorphology, Second Ed.(2020), Paul Bierman and David Montgomery, MacMillan Higher Education
ISBN-13: 978-1319059804

Course Description

Geomorphology: Mountains, Rivers, Deserts (4 credits) Prerequisite: GEOG 1000 or instructor's consent.

Why does Utah look different than Kansas? How did the Grand Canyon form? This course explores Earth's surface systems to see how landforms are created and modified over time. These systems include mountain building, and erosion and deposition by rivers, glaciers, landslides, wind, and shoreline processes. Analysis of landforms and processes will be directed towards understanding how the surface of the Earth got to be the way it is, and how it is changing. Comparison of different landforms will be used to illustrate how different processes operate. For example, mountain valleys carved by glaciers are significantly different than those carved by rivers. This course offers explanations for differences such as this, and explores reasons for changes that take place in landforms.

Course Outcomes

By end of course students will:

- Correctly identify geomorphic landforms in nature
- Recognize natural geomorphic processes in modern environment and as deduced from landforms
- Understand importance of spatial and temporal scale as they relate to both form and process
- Understand interactions between the Earth's geological, biological, physical, and chemical processes in evolution of landscape

- Appreciate and understand magnitude to which humans modify landscapes and affect geomorphic systems, both directly and indirectly.
- Understand feedbacks and interactions between topography and climate, and recognize impacts of climate change on landscape dynamics

Teaching and Learning Methods

For the current semester this course will be delivered entirely online. Lectures, and other learning resources will be available through the course Canvas page. All quizzes, exams, and assignments will be posted and turned in through Canvas. New course modules will be available weekly (posted Friday). Assignments and quizzes for each module will be due by end of day the following Friday. There will be a midterm and a final exam. All students will also be required to create an educational virtual field trip highlighting different landscapes/ landforms/ processes that will be peer reviewed by other students in the class.

Grading Policy (Evaluation Methods & Criteria)

Assignments	30%
Quizzes	20%
Exams	30%
Virtual Field Trip	20%

University Policies

[The following statements are **required** on every course syllabus.]

1. ***The Americans with Disabilities Act.*** The University of Utah seeks to provide equal access to its programs, services, and activities for people with disabilities. If you will need accommodations in this class, reasonable prior notice needs to be given to the Center for Disability Services, 162 Olpin Union Building, (801) 581-5020. CDS will work with you and the instructor to make arrangements for accommodations. All written information in this course can be made available in an alternative format with prior notification to the Center for Disability Services.
2. ***University Safety Statement.*** The University of Utah values the safety of all campus community members. To report suspicious activity or to request a courtesy escort, call campus police at 801-585-COPS (801-585-2677). You will receive important emergency alerts and safety messages regarding campus safety via text message. For more information regarding safety and to view available training resources, including helpful videos, visit safeu.utah.edu.
3. ***Addressing Sexual Misconduct.*** Title IX makes it clear that violence and harassment based on sex and gender (which Includes sexual orientation and gender identity/expression) is a civil rights offense subject to the same kinds of accountability and the same kinds of support applied to offenses against other protected categories such as race, national origin, color, religion, age, status as a

person with a disability, veteran's status or genetic information. If you or someone you know has been harassed or assaulted, you are encouraged to report it to the Title IX Coordinator in the Office of Equal Opportunity and Affirmative Action, 135 Park Building, 801-581-8365, or the Office of the Dean of Students, 270 Union Building, 801-581-7066. For support and confidential consultation, contact the Center for Student Wellness, 426 SSB, 801-581-7776. To report to the police, contact the Department of Public Safety, 801-585-2677(COPS).

4. ***Undocumented Student Support Statement.*** Immigration is a complex phenomenon with broad impact—those who are directly affected by it, as well as those who are indirectly affected by their relationships with family members, friends, and loved ones. If your immigration status presents obstacles to engaging in specific activities or fulfilling specific course criteria, confidential arrangements may be requested from the Dream Center. Arrangements with the Dream Center will not jeopardize your student status, your financial aid, or any other part of your residence. The Dream Center offers a wide range of resources to support undocumented students (with and without DACA) as well as students from mixed-status families. To learn more, please contact the Dream Center at 801.213.3697 or visit dream.utah.edu.
5. ***Drop/Withdrawal.*** It is the student's responsibility to formally drop/withdraw from the course if they wish for their grade to reflect this action. Instructor will not drop/withdraw student from course if student fails to attend/participate in course assignments/exams/activities.
6. ***Academic misconduct.*** Academic misconduct will not be tolerated. Penalties may include failure of an assignment, the entire course, and/or the filing of formal charges with appropriate university authorities. Academic misconduct includes, but is not limited to, cheating, misrepresenting one's work, and plagiarism:
 - * Cheating involves the unauthorized possession or use of information in an academic exercise, including unauthorized communication with another person during an exercise such as an examination.
 - * Misrepresenting one's work includes, but is not limited to, representing material prepared by another as one's own work or submitting the same work in more than one course without prior permission of all instructors.
 - * Plagiarism means the intentional unacknowledged use or incorporation of any other person's work in one's own work offered for academic consideration or public presentation.

Course Schedule

<u>Week/DueDate</u>	<u>Topic/Discussion</u>	<u>Reading</u>
<i>Week 1: Aug 28</i>	<i>Intro to Geomorph/Earth Systems</i>	<i>Chapter 1</i>
<i>Week 2: Sep 4</i>	<i>History of Geomorph/ Tools of the trade</i>	<i>Chapter 2 + 3</i>
<i>Week 3: Sep 11</i>	<i>Geomorphic Hydrology</i>	<i>Chapter 4</i>
<i>Week 4: Sep 18</i>	<i>Physical and Chemical Weathering</i>	<i>Chapter 5</i>
<i>Week 5: Sep 25</i>	<i>Soils</i>	<i>Chapter 6</i>
<i>Week 6: Oct 2</i>	<i>Hillslopes</i>	<i>Chapter 7</i>
<i>Week 7: Oct 9</i>	<i>River Channels</i>	<i>Chapter 8</i>
<i>Week 8: Oct 16</i>	<i>Drainage Basins. *(Midterm Exam)*</i>	<i>Chapter 9</i>
<i>Week 9: Oct 23</i>	<i>Coastal and Submarine Geomorphology</i>	<i>Chapter 10</i>
<i>Week 10: Oct 30</i>	<i>Wind/Aeolian Geomorphology</i>	<i>Chapter 11</i>
<i>Week 11: Nov 6</i>	<i>Volcanic Geomorphology</i>	<i>Chapter 12</i>
<i>Week 12: Nov 13</i>	<i>Glacial/Periglacial Geomorphology</i>	<i>Chapter 13</i>
<i>Week 13: Nov 20</i>	<i>Climate and Geomorphology</i>	<i>Chapter 14</i>
<i>Week 14: Nov 27</i>	<i>Thanksgiving week (Virtual Field Trip Due)</i>	<i>None</i>
<i>Week 15: Dec 4</i>	<i>Tectonic Geomorphology</i>	<i>Chapter 15</i>
<i>Week 16: Dec 11</i>	<i>Final Exam</i>	

Note: This syllabus is meant to serve as an outline and guide for our course. Please note that I may modify it with reasonable notice to you. I may also modify the Course Schedule to accommodate the needs of our class. Any changes will be announced and posted on Canvas under Announcements.