

# Introduction to Physical Geology - Syllabus

University of Texas at El Paso  
UGLC 220

Spring 2023 • GEOL 1313 • CRN 25794  
Mon/Wed 1:30-2:50 PM

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Office Hours: Mon/Wed 3:30-5:30P

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## Course Goals and Objectives

This course will expose students to the fascinating principles of geology (earthquakes, volcanoes, plate tectonics, etc.). Students will learn about the impact of Earth processes on our everyday life. You will leave this course with a basic understanding of the concepts and vocabulary of the geosciences and be exposed to how scientists approach a scientific problem (observe, question, and analyze), distinguish facts from interpretations, and assess sources of information. Ultimately, the goal is for the students to become better informed citizens.

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## Learning outcomes

Among other outcomes, at the end of the course students will:

- Understand the interrelationship between Earth processes and human development, including the location of the resources (minerals, energy, water) that enabled society
- Understand plate tectonics and the concept of a dynamic planet
- Recognize various tectonic settings on Earth and predict the nature of seismic and volcanic activity at the different tectonic settings
- Identify basic rocks and minerals and relate them to their environment of formation
- Understand the rock cycle, the water cycle, and the life cycle (evolution)
- Understand the difference between weather and climate, the basic controls on climate and climate change, and the science behind human-induced global warming
- Appreciate the immense variety of temporal and spatial scales involved

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## Textbook / Blackboard

‘Exploring Geology’ By Reynolds, Johnson, Morin, and Carter. **Recommended to get a copy, even if a used older edition.** No need to purchase Connect.  
**Blackboard** Lectures (pdf) will be uploaded to Blackboard after each class.  
Assignments and class messages will be announced in Blackboard.

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## Grading

Grades will be calculated through a combination of four (4) assignments (15 pts each) and two (2) exams (20 pts each). See schedule below.

**Late assignment penalty: 10% from the score for each 24 hours that an assignment is turned in past due.**

Letter grade: A = 90-100, B=80 – 89.9, C = 70-79.9, D = 60-69.9, F = less than 60

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## CASS / Student Concerns

If you have a disability or if you are experiencing learning disabilities and need classroom accommodations, please contact the Center for Accommodations and Support Services (CASS) at 747-5148, or by email to [cass@utep.edu](mailto:cass@utep.edu), or visit their office located in UTEP Union East, Rm 106. For additional information, please visit [www.sa.utep.edu/cass](http://www.sa.utep.edu/cass).

### Looking for a note taker

If you are a good note taker and are interested in earning a stipend of \$100 for being a Note-Taker for the semester, please log into <http://cassportal.utep.edu> to sign up. Help a fellow student in being successful at UTEP, do not forget to include your Note Taker assignment in your resume.

If you are struggling with this class or experiencing difficulties at the university, please reach out to your instructor or teaching assistant. If they are unable to help you, then please contact the Dean of Students Office at [DOS@utep.edu](mailto:DOS@utep.edu) or phone (915) 747-5648

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### Schedule (subject to change)

Week	Date	Topic	Assignment / Exam
1	Jan. 18	Intro to course	
2	Jan. 23, 25	Geology and Society (Ch. 1, 2)	Assign. 1 – end of Jan. 29
3	Jan. 30, Feb. 1	Plate Tectonics (Ch. 3)	
4	Feb. 6, 8	Rocks and Minerals (Ch. 4)	
5	Feb. 13, 15	Magmas and Volcanoes (Ch. 5, 6)	
6	Feb. 20, 22	Sedimentary Rocks (Ch. 7) Deformation & Metamorphism (Ch. 8)	Assign. 2 – end of Feb. 26
7	Feb. 27, Mar. 1	Geologic Time (Ch. 9)	
8	Mar. 6, 8	Seafloor & Continental Margins (Ch. 10)	<b>Exam 1 (Mar. 8)</b>
9	Mar. 13-15	<b>Spring Break</b>	
10	Mar. 20, 22	Earthquakes and Hazards (Ch. 12)	
11	Mar. 27, 29	Geology and Climate (Ch. 13, 14)	Assign. 3 – end of Apr. 2
12	Apr. 3, 5	Climate Change (Ch. 13, 14)	
13	Apr. 10, 12	Energy Resources (Ch. 18-1)	
14	Apr. 17, 19	Water Resources (Ch. 17)	
15	Apr. 24, 26	Mineral Resources (Ch. 18-2)	Assign. 4 – end of Apr. 27
16	May 1, 3	Review	
17	May 8, 10	<b>Final Exam Week</b>	<b>Exam 2</b>