Mar. 9, 2022

Introduction to Physical Geology - Syllabus

University of Texas at El Paso
LART 323

Spring 2022 • GEOL 1313
Mon/Wed 1:30-2:50 PM

Instructor: Antonio Arribas
Office: 302B Geological Sciences
Zoom Personal Meeting ID: 640 577 4246

CRN: 28591
Office Hours: Mon/Wed 3:30-5:30P
E-mail: aarribas@utep.edu.

Course Goals and Objectives

This course will expose students to the amazing world of geology and show the impact of Earth processes on our everyday life. A student should leave this course with a basic understanding of the concepts and vocabulary of the geosciences. You will also 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 use the knowledge acquired on Earth processes to become more informed citizens.

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 mineral resources that have enabled modern 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
- Learn how geologic energy resources are formed (hydrocarbons, uranium, geothermal) and how water resources are studied and used
- Appreciate the immense variety of temporal and spatial scales involved

---

Textbook / Zoom / Blackboard

'Exploring Geology'	By Reynolds, Johnson, Morin and Carter (ISBN: 9781260702019) **Strongly recommended to get a copy, even if a used older edition.** No need to purchase access to McGraw Hill Connect/LearnSmart.
Zoom / Blackboard	Lectures in Zoom will be uploaded to Blackboard after each class. Assignments and class messages will be announced in Blackboard.

Grading

Grades will be calculated through a combination of four assignments (12.5 pts each) and three Exams (Exams I and II: 15 points each, Exam III: 20 points). See schedule below.

Late assignment penalty: 20% 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

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, or visit their office located in UTEP Union East, Rm 106. For additional information, please visit www.sa.utep.edu/cass.

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 or phone (915) 747-5648

Academic Misconduct

Academic dishonesty will be not tolerated in this class (please refer to the student conduct code handbook for details regarding university policy and definitions). Dishonesty includes, but is not limited to, plagiarism on term papers, unauthorized notes brought into an exam; copying answers from another student or letting another student copy your answers. The penalty for the first offense will be a grade of zero points on the exam or assignment. Penalty for the second offense will be an F for the course.

Helpful Hints

- Attend the lectures!
- Review material regularly - multiple short study sessions over a period of weeks are more effective than a single "cram" the night before an exam.
- Form a study group. Each member should study material on their own before meeting with the group for discussion and comparison.
- Ask questions if you don't know or are confused.
- Combine class notes, textbook, and web materials when studying. Each provides a different perspective.

Schedule (subject to change)

Week	Date	Topic and Exam	Assignment Due (end of)
1	Jan. 19	Intro. to Geology	
2	Jan. 24, 26	Plate Tectonics (Ch. 3)	Assign. 1 - Jan. 30
3	Jan. 31, Feb. 2	Rocks and Minerals (Ch. 4)	
4	Feb. 7, 9	Rocks and Minerals (Ch. 4) Magmas and Volcanoes (Ch. 5, 6)	
5	Feb. 14, 16	Magmas and Volcanoes (Ch. 5, 6) **Mid Term Exam I (Feb. 16)**	
6	Feb. 21, 23	Sedimentary Rocks (Ch. 7) Deformation & Metamorphism (Ch. 8)	
7	Feb. 28, Mar. 2	Deformation & Metamorphism (Ch. 8) Geologic Time (Ch. 9)	Assign. 2 - Mar. 6
8	Mar. 7, 9	Geologic Time (Ch. 9) Seafloor & Continental Margins (Ch. 10)	
9	Mar. 14-16	**Spring Break**	
10	Mar. 21, 23	Seafloor & Continental Margins (Ch. 10) Earthquakes and Hazards (Ch. 12)	Assign. 3 - Mar. 27
11	Mar. 28, 30	Earthquakes and Hazards (Ch. 12) **Mid Term Exam II (Mar. 30)**	
12	Apr. 4, 6	Climate and Geology, Climate Change (Ch. 13, 14)	
13	Apr. 11, 13	Water resources (Ch. 17)	
14	Apr. 18, 20	Energy Resources (Ch. 18-1)	Assign. 4 - Apr. 24
15	Apr. 25, 27	Mineral Resources (Ch. 18-2)	
16	May 2, 4	Review	
17	May 11	**Final Exam: Wed. May 11 4:00-6:45PM**	