

## INTRO TO PHYSICAL GEOLOGY

Instructor: Dr. Adriana E. Pérez

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Office hours: TBA (GEOL 317) or by appointment

**I. Description**

Covers the fundamental principals of physical geology including the origin of minerals and rocks, geologic time, rock deformation, and plate tectonics. It explains the physical processes that shape the planet on which we live.

**II. Course objectives:** Upon satisfactory completion of this course, the student will be able to:

- A. Identify the composition and structure of the basic rock forming and ore minerals.
- B. Identify the basic igneous, sedimentary, and metamorphic rocks.
- C. Draw the rock cycle and explain the origins of the basic rock types.
- D. Understand the influence of weather on the formation of regolith, soils and the landscape.
- E. Identify the basic volcanic processes and their effects.
- F. Identify the basic tectonic processes and their effects.
- G. Identify the geologic hazards associated with the above physical processes.
- H. Describe how man has a significant effect on the environment.
- I. Study climatic change including global warming and ice ages.
- J. Identify past and possible future changes in climate and describe possible causes.

**III. Evaluation**

Final grades will be determined based on the following:

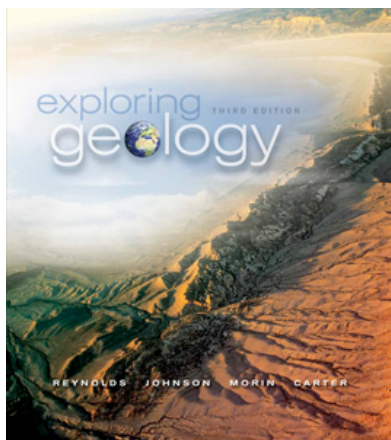
Exams	(50%)	(Average of 4 exams).
Lectures	(25%)	lowest grade will be dropped
Investigations	(25%)	lowest grade will be dropped

\*Final exam (optional): This will be a comprehensive exam. Students who are failing OR need to make up an exam may choose this option. The grade will replace the lowest exam grade, which can be a missed exam.

**\*Attendance Policy:** Class attendance will be recorded. ONLINE: failure to work on activities and/or exams may result in you being dropped from the class. IN-CLASS: More than two unexcused absences will reflect on your grade and may cause you to be dropped from class.

**IV. Missed exams.** You may drop one exam for whatever reason and take the final to replace it. **There will be no makeup exams.** Please don't ask!!! Exams may be taken before the scheduled time but not afterwards, please make arrangements 1 week ahead of time for any test date changes.

**V. Text-** Exploring Geology, Reynolds, 3<sup>rd</sup> Edition. ISBN 978-0-07-352412-2.



Older editions are OK

**Class materials:** syllabus, calendar, notes and reviews are available through the Bb platform

#### **VI. Academic dishonesty & Disruptive Behavior**

Students are encouraged to collaborate on class assignments. You are also strongly encouraged to form study groups and make this class a team effort. However, academic dishonesty (plagiarism, copying, etc) will not be tolerated. Students caught cheating will receive a zero for that assignment and will not be allowed to retake it. (Remember honesty is the best policy and there is not better work than your own!

Any academic or non-academic misconduct will be reported to the appropriate official and adjudicated in accordance with the UTEP student code of conduct. For students taking on-line courses; communication that is threatening, sexual, and/or any other language that is unwelcome is strictly prohibited.

#### **VII. Students with disabilities**

If you think you have a disability or if you are experiencing some learning difficulties, please contact the Disabled Students Services Offices (DSSO) at 915-747-5148 (voice or TTY) in Union East Room 106, or by email at [DSS@utep.edu](mailto:DSS@utep.edu). They will provide any necessary accommodations. You should also meet with your instructor in order to facilitate your needs. Please provide proper documentation of your disability and special needs.

**VIII. Grading Scale:** Above 90=A, 80-89=B, 70-79=C, 60-69=D, Below 60=F

**IX. Extra Credit!!!**

There are four extra credit projects that are worth 5 pts each towards your exam(s) grade. Students may turn in all projects if need be. Please note the deadlines as are given in the class calendar. NO late work will be accepted.

1. **SUMMARY:** Write a summary on NOVA/DISCOVERY/NATIONAL GEOGRAPHIC/OTHER television/video/online special OR scientific journal of with a geology focus. (2 page, double spaced). Please include relevant information given on the topic and your thoughts on it.
2. **PET ROCK:** Students will collect an unknown mineral/rock sample to identify using the textbook, lab manual\*, and techniques learned in class.
3. **RESEARCH PAPER:** Students may write a 3-page research paper on a geologic topic of interest. You are free to choose your topic but must first get instructor's approval. Make sure to include a title page, figures or photographs (1 minimum) and references (3 minimum, 2 may be webpages), and proofread your paper.
4. **FIELD TRIP:** Students may go to any of the National Parks in the area (or anywhere else) on a personal field trip. Make sure to bring back an entrance ticket to confirm attendance plus a 1-page summary. Students are usually offered discounts at these places. Some local attractions include: Carlsbad Caverns, White Sands, Zuhl Museum (NMSU), Centennial Museum (UTEP), Aerial Tramway (El Paso, Albuquerque), Guadalupe National Park, Hueco Tanks, Insights Museum\*, Albuquerque Natural History Museum, IMAX theatre\*.

