

El Paso Community College
GEOL 1403
PHYSICAL GEOLOGY



Instructor: Dr. Adriana E. Perez
Phone: 422-2569
Office hours: B407

I. Catalog Description

Studies the principles and processes of physical geology with emphasis on earth materials structures, landforms, and mineral resources. Recommended for all students majoring in science or engineering. Prerequisite: READ 0309 (can be taken concurrently) or by placement exam. (3:3). Lab fee.

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. (SCANS: Allocating resources (materials)).
- 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

Both laboratory and lecture material will be on the same exam. Final grades will be determined based on the following:

OPTION A

Exams (50%)	(average of 4 exams).
Labs (25%)	lowest grade will be dropped.
Quizzes (25%)	lowest grade will be dropped

*Final exam (optional): students who are failing may choose this option. The grade will replace the lowest exam grade, which can be a missed Exam.

IV. Laboratory

Laboratory will reinforce the material covered in the lecture section of the class. Labs are due on the date specified in the calendar.

V. Missed 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.

VI. Required Text-

1. The Changing Earth, 6th. ed. (2012), Monroe and Wicander. Older editions are OK.

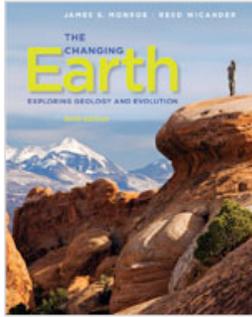
e-chapters available at:<http://www.cengage.com/> Higher education link.

Books may also be rented at the bookstore or at www.Chegg.com

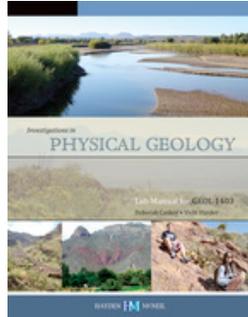
2. Investigations in Physical Geology. (2010), Caskey and

Harder. Digital copy available at:

<http://www.coursesmart.com/investigations-in-physical-geology/caskey-harder/dp/9780738043173>



TEXTBOOK



LAB MANUAL

BOTH ARE REQUIRED

VII. Honors Program

This class may be taken to as an honors credit. In general, this requires the students to have a research project, do some field work and have a presentation and final report at the end of the semester. Students interested in receiving honors credit for the class should contact instructor for possible projects.

VIII. Samples

Students are encouraged to take advantage of the mineral and rock samples on reserve at the library. Please keep them in order.

IX. Academic dishonesty

Students are encouraged to work collaborate on lab and 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 and will be handled as stated in the EPCC student rulebook. Remember honesty is the best policy and there is not better work than your own!

X. Grading Scale

Above 90	=A
89-89	=B
70-79	=C
60-69	=D
below 60	=F

XII. Disability Statement (American with/Disabilities Act [ADA])

EPCC offers a variety of services to persons with documented sensory, mental, physical, or temporary disabling conditions to promote success in classes. If you have a disability and believe you may need services, you are encouraged to contact the Center for Students with Disabilities to discuss your needs with a counselor. All discussions and documentation are kept confidential. Offices located: VV Room C-112 (831-2426); TM Room 1400 (831-5808); RG Room B-201 (831-4198); NWC Room M-54 (831-8815); and MDP Room A-125 (831-7024).

XIII. 6 Drop Rule

Students who began attending Texas public institutions of higher education for the first time during the fall 2007 semester or later are subject to a 6-Drop limit for all undergraduate classes. Developmental, ESL, Dual Credit and Early College High School classes are exempt from this rule. All students should consult with their instructor before dropping a class. Academic assistance is available. Students are encouraged to see Counseling Services if dropping because exemptions may apply. Refer to the EPCC catalog and website for additional information.

XIV. Extra Credit!!!

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

1. **SUMMARY:** Write a summary on NOVA/DISCOVERY/NATIONAL GEOGRAPHIC/OTHER television/video special OR scientific journal with a geology focus. (2-page, double-spaced). Please include the information given on the topic and your thoughts on it.
2. **PET ROCK:** Students may bring in an unknown mineral/rock sample to identify using the textbook, lab manual, and techniques learned in class. Must have it approved by instructor.
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 write a 1-page summary. Students are usually offered discounts at these places. Some local attractions include: Carlsbad Caverns, Aerial Tramway, Guadalupe National Park, Hueco Tanks, Insights Museum*, Albuquerque Natural History Museum, IMAX theatre*.

**Students who are not working on their online modules or turning in any work are subject to being dropped by the instructor. It is your responsibility to be checking into BB for new announcements, assignments and deadlines. You will be given notice if you are in danger of being dropped in the form of a blackboard message.

