

El Paso Community College
Syllabus
Part II
Official Course Description

SUBJECT AREA	<u>Geology</u>
COURSE RUBRIC AND NUMBER	<u>GEOL 2307</u>
COURSE TITLE	<u>Geological Field Methods</u>
COURSE CREDIT HOURS	<u>3 3 : 0</u> Credits Lec Lab

I. Catalog Description

Instructs in collection of field data, interpretation and construction of geologic and topographic maps, and examination of petrologic systems in a field setting. The class is intended to be taught in an outside setting to study local geology and will require multiple field trips and at least one overnight trip is required.

Prerequisite: GEOL 1301 and 1101 and GEOL 1302 and 1102 or GEOL 1303 and 1103 and GEOL 1304 and 1104 . (3:0).

II. Course Objectives

Upon successful completion of this course, the student will be able to:

- A. Describe the Rock Cycle and Bowen’s Reaction Series.
- B. Distinguish among igneous, sedimentary, and metamorphic rock types in the field.
- C. Identify geological structures in the field.
- D. Describe the various geological environments and the various rock types deposited in them.
- E. Explain the fundamental principles of sedimentary structures, trace fossils, and fauna in depositional environments.
- F. Locate himself/herself on a topographic map.
- G. Read topographic maps and aerial photos and recognize important geomorphic features using map symbols.
- H. Use a Brunton compass for taking bearings, strike and dip, fold axis trends, etc.
- I. Explain the processes involved in making a geological map.
- J. Utilize basic principles to construct a stratigraphic column.
- K. Utilize the basic principles of Remote Sensing and G.I.S. (Geographic Information Systems) for digital mapping.
- L. Create a geological cross section.

III. Evaluation

Both laboratory and lecture material may be on the same exam, or the instructor may choose to conduct separate exams. The procedure for determining the final grade will be decided by the instructor and presented to the student in the Instructor’s Course Requirements part of the course syllabus.

A. LECTURE

1. Exams and Quizzes:
The number, frequency, and types of quizzes and exams are left to the discretion of the Instructor.
2. Grading Scale:
90 and above=A
80-89 =B
70-79 =C
60-69 =D
below 60 =F

B. LABORATORY

Lab exercises are required for each unit. Homework and papers may be assigned, corrected, and graded as the instructor decides.

IV. Disability Statement (Americans 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 Rm C-112 (831-2426); TM Rm 1400 (831-5808); RG Rm B- 201 (831-4198); NWC Rm M-54 (831-8815); and MDP Rm A-125 (831-7024)

V. 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.