

GEOLOGY 5334 - GEOLOGICAL METHODOLOGY

Fall 2023

Geology Program, Natural Sciences Department, ALPS College
Sul Ross State University
Tues Thrs 11:00-12:15

Dr. Elizabeth Measures

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WSB 315 office

OFFICE HOURS

call or email; or by appointment

COURSE DESCRIPTION

This hands-on course is designed to orient the Geology graduate student to geological problems from research and project design, to field and lab work, to writing and presentation of results. Students will be made familiar with, and will use, the geologic literature and sources available in the library and on-line. Students will be made familiar with the geology of west Texas through lecture, readings and possible field trips. Field and lab methods of gathering geological information will be covered, demonstrated and practiced. Students will learn about the scientific method. Students will practice writing outlines and rough drafts. Plagiarism, formatting and editing will be covered. Students will be familiarized with the different options of MS plans in the Geology Program.

METHODS OF INSTRUCTION

The course consists of three hours of lecture, class participation/discussion, and activities each week.

One day field trip(s) **may** be offered.

TEXT

none
articles and books as needed

MATERIALS

Notebook/paper pens & pencils

CLASS ATTENDANCE/CONDUCT/ELECTRONICS POLICY

Attendance is expected in lectures. Come on time and do not leave during class or leave class early. Lecture exams and exercises missed cannot be made up at a later time **unless** prior arrangements are made. If you are going to miss an exam/homework/deadline for a legitimate reason, let the instructor know AHEAD of time. Use of electronic devices, not specifically related to taking notes or recording lecture, is considered inconsiderate, rude and disruptive and will not be tolerated. You are expected to check your Sul Ross e-mail and to access Blackboard.

EXPECTED LEARNING/COURSE/PROGRAM OBJECTIVES

At the end of the semester, the successful geology graduate student will be able to identify, compare/contrast, synthesize and apply bodies of geologic information to:

- * researching, writing, and presenting a topic of study (SLO 3, SLO 4)
- * field and lab research techniques (SLO 3)
- * analyzing and discussing current research papers in the geosciences (SLO 4)
- * geology of west Texas (SLO 1, SLO 2)

Geology Graduate (MS) Student Learning Outcomes (SLO's)

The geology graduate student will be able to:

1. Apply diverse bodies of geologic information in the area of **advanced sedimentary geology**.
2. Apply diverse bodies of geologic information in the areas of **advanced igneous processes, metamorphic processes, structure and tectonics**.
3. Apply diverse bodies of geologic information to **field and lab research techniques**.
4. Communicate diverse bodies of geologic information through the standard scientific format of an **oral presentation based on a written scientific paper**.

DISABILITIES ACCOMMODATION

Sul Ross State University is committed to equal access in compliance with the Americans With Disabilities Act of 1973. It is the policy of SRSU to provide reasonable accommodation to students with disabilities. If you would like to request such accommodation because of a physical, mental, or learning disability, please contact the Accessibility Services Coordinator (ADA coordinator), in Counseling & Accessibility Services, Ferguson Hall Room 112, 432-837-8203. It is the student's responsibility to initiate a request for accessibility services.

You will be provided with an accommodation letter which must be given to the instructor as early as possible in the semester.

GRADING

The semester grade:

	Grading Scale	
30% for resource notebook	100-90.00	A
30% for proposal presentation/ written proposal	89.99-80.00	B
40% from weekly activities/discussions/ homework/exam/other	79.99-70.00	C
	69.99-60.00	D
	<59.99	F

Incomplete (I) grades are given where passing work has been done and only a minor part of the requirements are incomplete.

SCHEDULE IS TENTATIVE AND SUBJECT TO CHANGE

	Tue	Thr
1	29-Aug Geol prog req	31-Aug Chair & committee
2	5-Sep Scientific Method	7-Sep Library, Research & Resources
3	12-Sep Library, Research & Resources	14-Sep Library, Research & Resources
4	19-Sep Library, Research & Resources	21-Sep Grant writing
5	26-Sep Grant writing	28-Sep Field Methods
6	3-Oct Field Methods	5-Oct Texas Geology
7	10-Oct Texas Geology	12-Oct Lab Methods
8	17-Oct Lab Methods	19-Oct Plagiarism
9	24-Oct Plagiarism	26-Oct Diagrams, Figures & Software
10	31-Oct Diagrams, Figures & Software	2-Nov Diagrams, Figures & Software
11	7-Nov Diagrams, Figures & Software	9-Nov Grammar
12	14-Nov Grammar	16-Nov Formatting & Thesis Guidelines
13	21-Nov Formatting & Thesis Guidelines	23-Nov
14	28-Nov Critique of Proposal Powerpoints	30-Nov Oral Proposal practice
15	5-Dec exam	7-Dec
16	MONDAY 11-Dec Written Proposal Final version & Powerpoint Final Presentation	