

GEOLOGICAL METHODOLOGY - GEOLOGY 5334**Fall 2026**

Geology Program

Natural Sciences Department; ALPS College

Sul Ross State University

Mon Wed 2:00 pm – 3:15 pm**Dr. Elizabeth Measures**measures@sulross.edu

837-8117

WSB 315

OFFICE HOURS

Mon Wed 3 pm to 5 pm

Thrs 2:30 pm to 5 pm

can't make these times?

call or email to make an appointment

weekly schedule is posted outside office door

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.

[2026-2027 SRSU Catalog]

METHODS OF INSTRUCTION

The course consists of three hours of lecture, class participation/discussion, and activities each week. One day field trip(s) **might** be offered.

TEXT

none

articles and books as needed

MATERIALS

notebook/paper

pens & pencils

STUDENT RESPONSIBILITIES STATEMENT

All full-time and part-time students are responsible for familiarizing themselves with the **Student Handbook** and the **Undergraduate & Graduate Catalog** and for abiding by the **University rules and regulations**. Additionally, students are responsible for checking their **Sul Ross email as an official form of communication from the university**. Every student is expected to obey all federal, state, and local laws and is expected to familiarize him/herself with the requirements of such laws.

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. Be sure to have documentation.

Use of electronic devices, not specifically related to taking notes or recording lecture, is considered inconsiderate, rude, disruptive, not acceptable, and will not be tolerated.

You are expected to check your Sul Ross e-mail.

DISABILITIES ACCOMMODATION ADA statement (Americans with Disabilities Act)

Sul Ross State University (SRSU) is committed to equal access in compliance with the Americans with Disabilities Act of 1973. It is SRSU policy to provide reasonable accommodations to students with documented disabilities. It is the student's responsibility to initiate a request each semester for each class for accessibility services. To help protect confidentiality, students seeking accessibility/accommodation services must submit the **Accommodation Request Form** (located on the Counseling and Accessibility Services website). For questions regarding the process, SRSU's Accessibility Services can be reached at 432-837-8203. The office is located on the first floor of Ferguson Hall, room 112. The mailing address is P.O. Box C-122, Sul Ross State University, Alpine, Texas, 79832.

Any accommodations will be sent as an email to the course instructor.

GRADING/METHOD OF ASSESSMENT/EVALUATION

The semester grade:

30% for resource notebook
 30% for proposal presentation/
 written proposal
 40% from weekly activities/discussions/
 homework/exam/other

Grading Scale

100-90.00 A
 89.99-80.00 B
 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

	Mon		Wed	
1	Aug 24	Geol prog req	Aug 26	Degree Plans
2	Aug 31	Chair & committee	Sept 2	Scientific Method
3	Sept 7	Library, Research & Resources	Sept 9	Library, Research & Resources
4	Sept 14	Library, Research & Resources	Sept 16	Library, Research & Resources
5	Sept 21	Grant writing	Sept 23	Grant writing
6	Sept 28	Field Methods	Sept 30	Field Methods
7	Oct 5	Texas Geology	Oct 7	Texas Geology
8	Oct 12	Lab Methods	Oct 14	Lab Methods
9	Oct 19	Plagiarism	Oct 21	Plagiarism
10	Oct 26	Diagrams, Figures & Software	Oct 28	Diagrams, Figures & Software
11	Nov 2	Diagrams, Figures & Software	Nov 4	Diagrams, Figures & Software
12	Nov 9	Grammar	Nov 11	Grammar
13	Nov 16	Formatting & Thesis Guidelines	Nov 18	Formatting & Thesis Guidelines
14	Nov 23	Oral Proposal practice & critique		Thanksgiving Holiday NO CLASS
15	Nov 30	Exam	Dec 2	Proposal Draft & Powerpoint Presen

EXPECTED COURSE LEARNING 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**.

Geology Graduate (MS) Student Marketable Skills

- ★ Student will be able to conduct field work.
- ★ Student will be able to use field equipment and lab resources.
- ★ Student will be able to use library resources.
- ★ Student will be able to communicate in written and oral format.

WARNING ABOUT GENERATIVE ARTIFICIAL INTELLIGENCE (AI)

Be aware that many generative AI tools (e.g., ChatGPT, Google Gemini, Microsoft Copilot) store user input and may use this data to train future models. For this reason, never upload or share personal, confidential, or identifiable information – such as names, ID numbers, health data, or assignment submissions containing such details – into any generative AI platform. IF using AI tools, verify whether the tool complies with student privacy standards, as indicated by the SRSU. Ultimate responsibility for data protection rests with users. SRSU is not liable for any adverse experience or impact when students interact with these tools.

LIBRARY

The Bryan Wildenthal Memorial Library offers FREE resources and services to the entire SRSU community. The library's website, library.sulross.edu/, has information on how to borrow or electronically access books, articles, and more. Off-campus access requires logging in with your LoboID and password. Librarians are a tremendous resource for coursework and can be reached in person, by email (srsulibrary@sulross.edu) or by phone (432-837-8123).

ACADEMIC INTEGRITY

Students are expected to demonstrate scholarly behavior and academic honesty in the use of intellectual property. Students should submit work that is their own. A scholar is expected to be punctual, prepared, and focused; meaningful and pertinent participation contributes to learning. Any violation of academic integrity is called academic dishonesty or cheating.

Examples of academic dishonesty (cheating) include, but are not limited to:

- ⊗ Turning in work as original that was used in whole or in part for another course and/or professor;
- ⊗ Turning in another person's work as one's own;
- ⊗ Copying from professional works or internet sites without citation;
- ⊗ Collaborating on a course assignment, exam, or quiz when collaboration is forbidden.
- ⊗ **Using AI for an assignment.**

Many of these examples are also considered plagiarism.

Violations of academic integrity can result in failing assignments, failing a class, and/or more serious university consequences. These behaviors also erode the value of college degrees and higher education overall.

Use of AI is considered to be academic dishonesty in this course. Use of AI will result in a final grade of "F" in this course.