GEOLOGY 5334 - GEOLOGICAL METHODOLOGY

Spring 2024

Geology Program

Department of Natural Sciences
Sul Ross State University

Mon Wed 5:00 pm - 6:15 pm

Dr. Elizabeth Measures

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OFFICE HOURS

Mon Wed Fri 8:30 am to 10:00 am
Tues Thrs 2:30 pm to 4:00 pm
can't make these times?
call or email to make an 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.

[2023-2024 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) **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 <u>unless</u> 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	Α	
30% for proposal presentation/	89.99-80.00	В	
written proposal			
40% from weekly activities/discussions/	79.99-70.00	С	
homework/exam/other	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			Jan 17	Geol prog req	
2	Jan 22	Degree Plans	Jan 24	Chair & committee	
3	Jan 29	Scientific Method	Jan 31	Library, Research & Resources	
4	Feb 5	Library, Research & Resources	Feb 7	Library, Research & Resources	
5	Feb 12	Library, Research & Resources	Feb 14	Grant writing	
6	Feb 19	Grant writing	Feb 21	Field Methods	
7	Feb 26	Field Methods	Feb 28	Texas Geology	
8	Mar 4	Texas Geology	Mar 6	Lab Methods	
	Mar 11 Mar 13				
	SPRING BREAK				
9	Mar 18	Lab Methods	Mar 20	Plagiarism	
10	Mar 25	Plagiarism	Mar 27	Diagrams, Figures & Software	
11	Apr 1	Diagrams, Figures & Software	Apr 3	Diagrams, Figures & Software	
12	Apr 8	Diagrams, Figures & Software	Apr 10	Grammar	
13	Apr 15	Grammar	Apr 17	Formatting & Thesis Guidelines	
14	Apr 22	Formatting & Thesis Guidelines	Apr 24	Oral Proposal practice & critique	
15	Apr 29	Exam	May 1	Proposal Draft & Powerpoint Presen	

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.

LIBRARY

The Bryan Wildenthal Memorial Library offers FREE resources and services to the entire SRSU community. Access and borrow books, articles, and more by visiting the library's website, library@sulross.edu/. 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 phone (432-837-8123).

ACADEMIC INTEGRITY

Students are expected to demonstrate scholarly behavior and academic honesty in the use of intellectual property. A scholar is expected to be punctual, prepared, and focused; meaningful and pertinent participation contributes to learning.

Examples of academic dishonesty 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's 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.

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.

CLASSROOM CLIMATE OF RESPECT

This class should foster free expression, critical investigation, and open discussion of ideas. All people in the class must help create and sustain an atmosphere of tolerance, civility, and respect for the viewpoints of others.