

GEOLOGY 3301 - GEOLOGY OF WEST TEXAS**Spring 2022****TuThrs 12:30-1:45 Sul Ross and Midland College**

Dept of Biology, Geology and Physical Sciences; College of ALPS; Sul Ross State University

INSTRUCTOR: Dr. E Measures**OFFICE:** WSB 315**PHONE:** 837-8117**EMAIL:** measures@sulross.edu**MAIL BOX:** WSB 216**OFFICE HOURS:** MWF 11 – 11:50 am

MTW 2 – 4 pm

hours could change

or call or email to make an

appointment

COURSE DESCRIPTION

The class is an introduction to the geology of west Texas for geology majors and geology minors. It outlines the geologic evolution of the region and relates it to continental-scale and global-scale geologic events. Topics range from billion-year-old continental collisions, through deep sea deposition, reefs, explosive volcanism, mineral and petroleum deposits, to the evolution of present day west Texas landscape.

METHODS OF INSTRUCTION

The course consists of three hours of lecture per week. The course is delivered through interactive TV. In the rare event of a technical malfunction that prevents a daily lecture, the lecture will be recorded at a time/date soon after the malfunction and posted for viewing. Details will be posted on BlackBoard. Blackboard will be used to post announcements, assignments, and ancillary material.

FIELD TRIPS

One-day, or half-day, field trips will be offered. They will be scheduled for Thursdays, Fridays, Saturdays, or Sundays during the semester depending on what day is best.

TEXTS

Required:

Texas through Time. 2016. Thomas Ewing. Bureau of Economic Geology Udden Series No. 6. Bureau of Economic Geology. 431 p.

Optional books/maps:

Roadside Geology of Texas, 1991, by Darwin Spearing.

Geo-Texas, A Guide to the Earth Sciences, 2001, by Eric R. Swanson.

Geologic Atlas of Texas (a series of geologic maps) by the Bureau of Economic Geology, Austin, Texas.

Other readings:

Scientific articles will be assigned and PDF's will be posted on BlackBoard

CLASS ATTENDANCE POLICY

On-time attendance is expected in lectures, as well as staying throughout the entire class period. Tardiness and leaving during class are not acceptable except for serious, legitimate reasons (illness, family emergency, caregiver, emergency responder).

Keep the instructor informed, through email, before or after absences.

If you are going to miss a lecture, or have missed a lecture, written notification (email) must be provided as soon as possible. Be sure to get the notes from another student in the class.

Participation in University sanctioned events causing an absence needs prior written notification, documentation, and **arrangements** for any assignments due,

Missed lecture exams must be made-up within one week of the scheduled exam date and only for a legitimate excuse (legitimacy will be determined by the instructor). If lecture exam is not taken within the week, then an all-essay make-up exam will be administered on Dead Day.

CONDUCT

You are expected to pay attention to the lecture, take notes, or record them.

Working on another class is not acceptable and may result in your expulsion for that class period.

Students are expected to observe the University's Code of Student Conduct (see Student Handbook, <http://www.sulross.edu/pages/3633.asp>).

ELECTRONICS POLICY

Smart phone, cell phone, i-pod, laptop usage is prohibited during lecture except for the express purpose of recording or taking notes; points will be deducted from tests for violation of this policy. If electronics are accessed during a test then the test will receive a grade of zero.

Usage of electronic devices for note-taking needs written request and discussion with instructor.

Turn OFF all cell/smart phones, IPODs, MP3s, etc.**DISABILITIES ACCOMMODATION**

Sul Ross State University (SRSU) is committed to equal access in compliance with 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. Students seeking accessibility/accommodations services must contact SRSU's Accessibility Services Coordinator, Mary Schwartz Grisham, M.Ed., LPC, Director, Counseling & Accessibility Services, Ferguson Hall (room 112) at 432-837-8203 (leave a message and they will get back to you as soon as they can during working hours) or email mschwartz@sulross.edu. Mailing address is P.O. Box C-122, Sul Ross State University, Alpine, Texas 79832. Students receive letter with accommodations and then need to contact the instructor as soon as possible to initiate the recommended accommodations.

DISTANCE EDUCATION STATEMENT

Students enrolled in distance education courses have equal access to the university's academic support services, library resources, online databases, and instructional technology support. For more information about accessing these resources, visit the SRSU website. Students should submit online assignments through BlackBoard or SRSU email, which require secure login information to verify students' identities and to protect students' information. All lecture exams will be proctored. The procedures for filing a student complaint are included in the student handbook. Students enrolled in distance education courses at Sul Ross are expected to adhere to all policies pertaining to academic honesty and appropriate student conduct, as described in the student handbook

GRADING/COURSE REQUIREMENTS

The semester grade/assignments:	Grading Scale:		
72% from lecture exams (3)	100-90.00	A	
12% from homework assignments	89.99-80.00	B	
12% from term research reports	79.99-70.00	C	
4% from other misc items that may occur	69.99-60.00	D	☹
	(D will not be credited for Geology major)		
	<59.99	F	☹

Exams cover about 4.5 weeks of material.

Last exam is comprehensive (approximately 1/3 of the questions will be from exam 1 & 2 material).

Homework: Questions based on chapters in the text or assigned optional readings.

Homework will be scanned and sent as email attachments. Only single documents will be accepted, multiple files are not acceptable. Photos of homework are not acceptable. Homework questions may appear in some format on exams. Late homeworks will be penalized 25 points for each 24 hours late.

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

SCHEDULE IS TENTATIVE AND SUBJECT TO CHANGE

Week 1	Jan 10 – Jan 14	Intro
Week 2	Jan 17 – Jan 21	Precambrian
Week 3	Jan 24 – Jan 28	Precambrian - Paleozoic
Week 4	Jan 31 – Feb 4	Paleozoic
Week 5	Feb 7 – Feb 11	Paleozoic & <i>Exam 1 Thrs Feb 10</i>
Week 6	Feb 14 – Feb 18	Paleozoic
Week 7	Feb 21 – Feb 25	Paleozoic – Mesozoic
Week 8	Feb 28 – Mar 4	Mesozoic

Mar 7 – Mar 11 **SPRING BREAK – No class**

Week 9	Mar 14 – Mar 18	Mesozoic
Week 10	Mar 21 – Mar 25	Mesozoic & <i>Exam 2 Thrs Mar 26</i>
Week 11	Mar 28 – Apr 1	Cenozoic
Week 12	Apr 4 – Apr 8	Cenozoic
Week 13	Apr 11 – Apr 15	Cenozoic
Week 14	Apr 18 – Apr 22	Cenozoic
Week 15	Apr 25 – Apr 27	Presentations
	Apr 28	Dead Day
Finals Wk	Wed May 4	<i>Exam 3 10:15 am to 12:15 pm</i>

Field trips:

Feb 3, 4, 5, or 6	Marathon Basin
Mar 24, 25, 26, or 27	Mesozoic of I-10
Mar 31, Apr 1, 2, or 3	BBNP
Apr 21, 22, 23, or 24	BBNP

EXPECTED COURSE OBJECTIVES & LEARNING OUTCOMES (see list of SLO's below)

At the end of the semester, the successful student will be able to apply critical reasoning and problem solving skills to:

1. Knowing the stratigraphic sequence of rocks exposed in west Texas (SLO 4).
2. Using the units to interpret and explain the depositional geologic history of west Texas (SLO 1).
3. Using the units and their geologic structure to explain the tectonic events that occurred in west Texas (SLO 3).

GEOLOGY BACHELOR OF SCIENCE STUDENT LEARNING OUTCOMES (SLO's)

1. The student will be able to apply a diverse body of Geologic information in the area of Earth history.
2. The student will be able to apply a diverse body of Geologic information in the area of mineralogy and petrology.
3. The student will be able to apply a diverse body of Geologic information in the area of structural geology and tectonics.
4. The student will be able to apply a diverse body of Geologic information in the area of stratigraphy.
5. The student will be able to apply a diverse body of Geologic information in the area of field techniques.

GEOLOGY BACHELOR OF SCIENCE MARKETABLE SKILLS

1. Student will be able to conduct field work.
2. Student will be able to use field equipment.
3. Student will be able to use lab equipment.
4. Student will be able to use library resources.
5. Student will be able to communicate in written and oral format.

Academic Integrity and Classroom Climate of Respect

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 is appreciated. Examples of academic dishonesty include but are not limited to: turning in work as original that was used in whole or 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, examination, or quiz when collaboration is forbidden.

This class expects free expression, critical investigation, and open discussion of ideas. There will be an atmosphere of tolerance, civility, and respect for others. We can oppose and disagree without resorting to intimidation, harassment, or personal attack. No one will harass, belittle, or discriminate against another on the basis of race, religion, ethnicity, age, gender, national origin, or sexual preference.