

**GEOLOGY 4311 – Special Topics: HISTORY OF GEOLOGY
SPRING 2017
Dept of Biology, Geology and Physical Sciences
Sul Ross State University
MW 6:00-7:15 pm**

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Office hours:

MW	9:00 am to 10:00 am
TuTh	8:00 am to 9:00 am
TuWed	3:00 pm to 4:00 pm

or by appointment

Course Description and Objectives

This senior-level course covers the history of geology. The development, growth and evolution of the science of geology, its theories and contributors, will be traced from ancient beginnings (Egypt, Greece and Rome), through the Middle Ages and the Renaissance, and to the Modern Period.

Lower level geology courses and texts do not cover the development of the geological science. This course will:

- 1) discuss the historical figures and explain their contribution to the science of geology;
- 2) discuss and evaluate the evidence used to formulate geologic theories;
- 3) discuss the processes of the growth of the science of geology;
- 4) trace the debates involved in the growth of the science of geology.

Pre-requisites/Co-requisites

Historical Geology (GEOL 1304/1104) and Optical Mineralogy (GEOL 2405).

Methods of Instruction

The course consists of classroom lecture. Blackboard will be used.

Texts

Cutler, A. 2004. The Seashell on the Mountaintop. Penguin Grp.

ISBN 0-452-28546-1

Winchester, S. 2001. The Map That Changed the World. HarperCollins Pub.

ISBN 0-06-019361-1

Lanham, U. 1991. The Bone Hunters. Dover Publications, Inc.

ISBN 0-486-26917-5

Materials

notebook/paper

pens& pencils

Attendance

You are expected to be in lecture, on time, every scheduled class day and to stay for the entire class period.

Tardiness and leaving during lecture are not acceptable except for serious, legitimate reasons (illness, family emergency, caregiver, emergency responder). Keep the instructor informed either immediately 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. Documentation also needs to be provided. Be sure to get the notes from another student in the class.

Schedule appointments around lecture times.

Arrangements for missed assignments must be done, and the assignment also done, within one week of the scheduled due date. Only legitimate excuses will allow for make-up (legitimacy will be determined by the instructor). If an assignment is not taken within the week, then an all-essay make-up assignment will be administered on Dead Day.

Conduct

You are expected to be engaged, awake and on task and to take notes.

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).

Electronics Policy

Smart phones, cell phones, 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.

Class recordings are not to be posted on any social media/web site.

If electronics are accessed during a test then the test will receive a grade of zero.

Electronics are TURNED OFF. If you need to be excluded from this, email the reason(s) why you need access to these electronics during class.

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.

Please inform the instructor ASAP of accommodations

Grading/Course Requirements

Requirements:

Presentations & Papers (3)	78%
Other	22%
homework	
quizzes	
partic/attend	

Standard grading scheme:

A	≥90%
B	80-89%
C	70-79%
D	60-69%
	(D does not count for majors)
F	≤ 59%

Presentations & Papers – covers topics from 4 to 4.5 weeks of material; Presentations will be approximately 5 to 10 minutes long and will be made using Powerpoint; an 8 to 12 page written paper will accompany the presentation

Homework – questions over readings

Quizzes – short questions over previous class periods material; notes may be used on some quizzes

The following schedule is approximate and subject to change:

Week 1	Jan 17 – Jan 20	Introduction
Week 2	Jan 23 – Jan 27	Ancient Greece
Week 3	Jan 30 – Feb 3	Ancient Greece & Rome
Week 4	Feb 6 – Feb 10	Ancient Rome & Eastern Empires
Week 5	Feb 13 – Feb 17	Topics of Concern to Ancients
Week 6	Feb 20 – Feb 24	Topics of Concern to Ancients
FEB 22 - First set of Presentations		
Week 7	Feb 27 – Mar 3	Sixteenth-Seventeenth Centuries
Week 8	Mar 6 – Mar 10	Seventeenth Century

Mar 13 – Mar 17 Spring Break – No class

Week 9	Mar 20 – Mar 24	Seventeenth-Eighteenth Centuries
Week 10	Mar 27 – Mar 31	Eighteenth Century
Week 11	Apr 3 – Apr 7	Early Nineteenth Century
APR 5 - Second set of Presentations		
Week 12	Apr 10 – Apr 14	Late Nineteenth Century

Apr 14 Good Friday Holiday – No class

Week 13	Apr 17 – Apr 21	Nineteenth-Twentieth Century
Week 14	Apr 24 – Apr 28	Twentieth Century
Week 15	May 1 – May 3	Twentieth Century

Finals Week TUES May 9 - Third set of Presentations

Expected Student Learning Outcomes

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

- * describe and evaluate the contributions of numerous individuals in the areas of Earth History, Mineralogy and Petrology, Tectonics and Stratigraphy (SLO # 1, SLO # 2, SLO # 3, SLO # 4)
- * summarize, compare and contrast the body of evidence for numerous geologic theories in Earth History, Mineralogy and Petrology, Tectonics and Stratigraphy (SLO # 1, SLO # 2, SLO # 3, SLO # 4)
- * explain, interpret and integrate different developments in the growth of Earth History, Mineralogy and Petrology, Tectonics and Stratigraphy (SLO # 1, SLO # 2, SLO # 3, SLO # 4) Earth History, Mineralogy and Petrology, Tectonics and Stratigraphy (SLO # 1, SLO # 2, SLO # 3, SLO # 4) (SLO # 3)
- * evaluate and critique the historical debates in the areas of Earth History, Mineralogy and Petrology, Tectonics and Stratigraphy (SLO # 1, SLO # 2, SLO # 3, SLO # 4)

GEOLOGY UNDERGRADUATE STUDENT LEARNING OUTCOMES (BACHELOR OF SCIENCE 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.

METHODS OF ASSESSMENT/EVALUATION

Learning outcome assessment will be made on three (3) presentations and three (3) papers that expand upon the presentation.

The presentations will assess the application of critical reasoning skills through the synthesis of differing geologic theories, proposed by various people, as the science of geology evolved.

The papers will assess the application of critical reasoning skills through the synthesis of differing geologic theories, proposed by various people, as the science of geology evolved.

Homework assignments will assess student comprehension of the reading material.