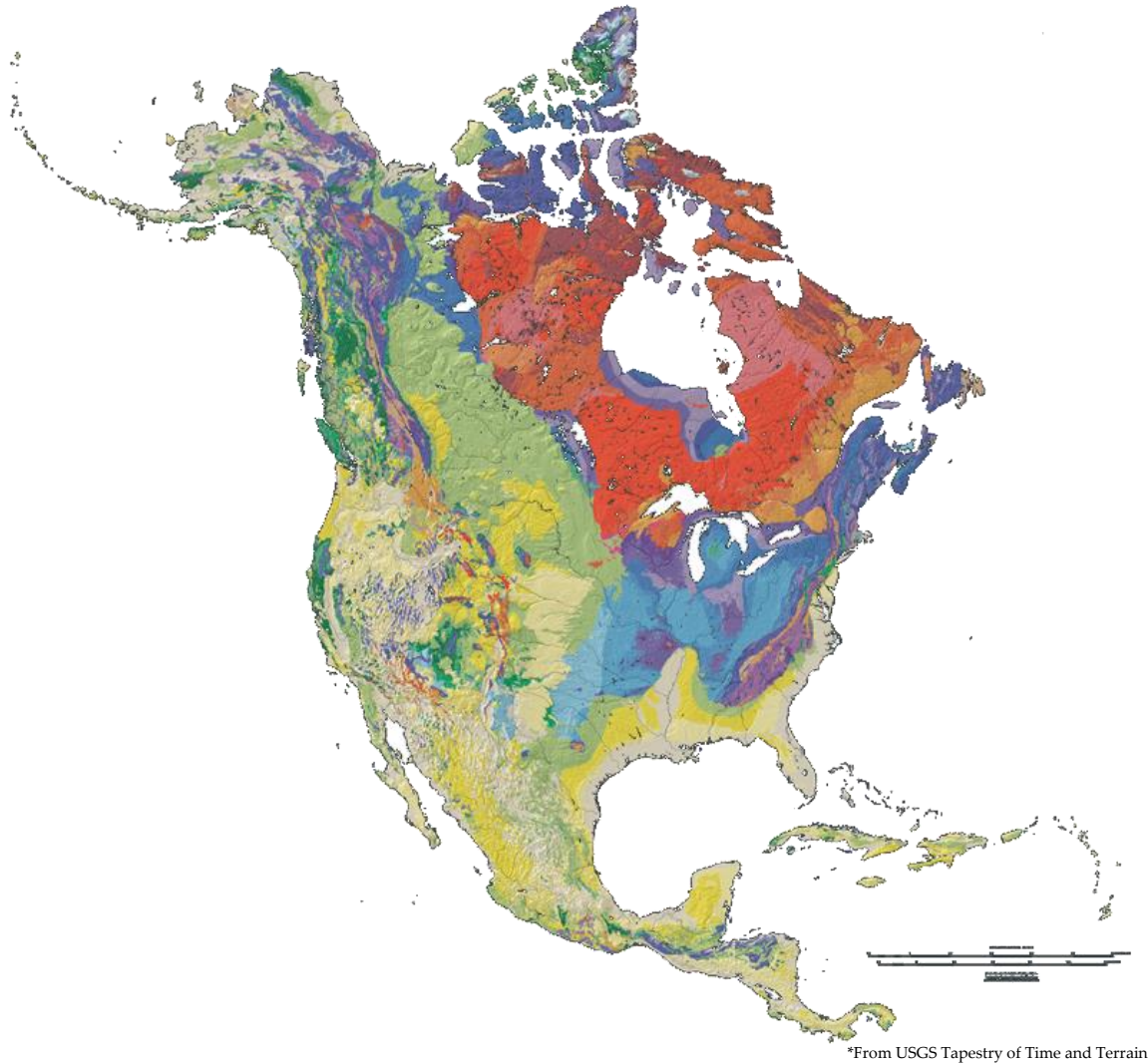


Geology 4331
Geology of North America
3 Credit Hours



*From USGS Tapestry of Time and Terrain

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Office: LDB 314
Phone: 4-1560
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GEL 4331 Course Syllabus

Fall 2016

Location: LDB 319

Time: TTh 11:00 AM – 12:20 PM

Professor: Joseph Hill

Office Hours: TR 8:30 – 9:30 AM or by appointment

Phone: 294-1560

Email: geojoe@shsu.edu

Required Text:

None: Course materials will be available on Blackboard or handed out in class.

Course Description:

This course is intended as an application of Plate Tectonic theory to develop a summary understanding of the geology of North America. This course will introduce and give you a basic understanding of the regional geology of the North American continent and the evolution of North America through geologic time. Through the assigned readings, lecture, and discussion, we will unravel the structural, stratigraphic, and tectonic evolution of the continent.

After this completing this course you should be able to:

- Identify the role of tectonics in shaping the various provinces of North America
- Discuss the timing of the various major tectonic and geologic processes that have affected the continent
- Discuss the ongoing tectonic evolution of the continent within the framework of plate tectonic theory
- Apply scientific principles in analyzing and synthesizing geologic information

Grading:

The standard grading scale of >90% = A, 89-80% = B, 79-70% = C, 69-60% = D, <60% = F will apply. There will be no extra credit. There will be no curve.

Semester Exams (2 X 20%)	40%
Final Exam (cumulative)	25%
Poster/Executive Summary	15%
Group Presentation	15%
Field Trip	5%
Total	100%

Important Class Dates:

Exam 1: September 28 Exam 2: November 16 Final: Dec 7, 12:00 – 2:00 PM
Presentations: Class Meetings November 21st, 28th, and 30th.

Missed Exams and Assignments

Make-up exams, quizzes, and assignments will be allowed for documented emergencies only (e.g., severe illness, death of immediate family, etc.). To be eligible to take a make-up for any work you missed, you must notify me **before** the missed exam and present sufficient proof to document your emergency. It is your responsibility to schedule a make-up exam/quiz and the exam/quiz must be taken within one week of the missed exam/quiz. There will be no make-up exam for the final.

Milestones:

- Approval of Paper/Presentation Topic: September 21
- Draft of Executive Summaries Due for Peer Review: November 9
- Peer Reviews Returned: November 14
- Final Paper Due: December 1

READ AND REMEMBER THIS! Milestones **MUST** be met. If not, your final grade on the paper will be docked 3 points per day, per milestone missed.

Paper/Presentations:

The topic of your paper/presentation must be approved by me on or before September 21st. You may choose any aspect of North American geology you are interested in, but not something we cover in the course. If you need help choosing a topic or in narrowing down your topic, please see me.

Presentations will be on the same topic as your paper/poster. They will be 15 minutes long and delivered in Powerpoint. An electronic copy of the presentation will be turned in to me on the day of your presentation. I will be available to review the presentation prior to your scheduled time.

Papers will follow the general format of a scientific paper as published in the discipline journals *Geology* or *GSA Bulletin*. Example papers will be provided. The paper will include a formal abstract, main body of paper with appropriately labeled sections, conclusions, and appropriately formatted references cited. Paper length will be no less than five double-spaced pages and no more than eight double-spaced pages, excluding figures and references. Font size should be no greater than 12-point and no less than 10-point in a standardized font (e.g. Times, Arial, Palatino). The paper must have at least five references from refereed sources (e.g. books, journal articles, etc.). No more than

two web sites may be used as references and should come from reputable sources and cited appropriately (e.g. USGS, State Surveys, Academic websites, etc.). Appropriate figures may be integrated or attached to the end of the paper. Each figure should have appropriate caption including the source of the figure.

If you have any questions on how to cite references, format the paper, or otherwise avoid big no-no's like plagiarism, please see me.

Field Trips

The best way to learn geology is in the field. There will be at least **one required (Thursday/Friday/Saturday/Sunday) field trip**.

Dates will be announced. When announced, make your arrangements ASAP.

Americans with Disabilities Act:

Any student with documented disabilities who may need classroom academic adjustments or auxiliary aids and services may request academic accommodations (for example, a note taker). Students must request assistance with academically related problems stemming from a disability by contacting the Director of the Counseling Center in the Lee Drain Annex or by calling (936) – 294-1720. It is the campus office responsible for reviewing documentation provided by students requesting academic accommodations, and for accommodations planning in cooperation with students and instructors, as needed and consistent with course requirements.

Class Policies on Attendance

Your attendance, motivation, and participation are integral to your success in this course. Regular attendance is by far the easiest way to achieve a good grade in this course. I implore you to attend each and every class and to actively participate. If **you** decide to drop the course, it is **your** responsibility to fill out the necessary paperwork or you will receive a grade based upon your performance in the class regardless of the amount of work you completed.

The university requires that I take attendance for the course. More than 9 unexcused absences will result in a failing grade for the course.

Academic Honesty

I expect you to fulfill your academic obligations through honest and independent effort. If I have sufficient reason to believe you are cheating on any graded work in this course,

you will be dropped from the course with a failing grade. You may refer to the SHSU Academic Policy Manual, student section, Policy #810213 for specific language.

Lecture Topics:

We will be investigating the assembly of North America from a temporal perspective. The topics of lecture are in relative chronological order but are subject to change. The dates of the exams are set and the material to be covered on an exam will be clarified based on lecture topics completed.

Topics

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Introduction/Review of Plate Tectonics

Crustal Deformation and Mountain
Building

Overview of the North American Craton

Archean Cratons

Proterozoic Rocks

Paleozoic North America

 Cambrian

 Ordovician

 Silurian

 Devonian

 Mississippian

 Pennsylvanian

 Permian

Mesozoic North America

 Triassic

 Jurassic

 Cretaceous

Cenozoic North America

 Tertiary

 Quaternary

Modern Geologic Setting

**Supplemental Readings will be made available as needed.*