

GEOL 1121 (CRN 8021)
Earth Materials, Processes and Environments
Fall 2014

Homepage: <http://itc.gsw.edu/faculty/speavy/spclass/geol1121.htm>

Instructor: Dr. Samuel Peavy

Office: Roney 206

Office hours: 8:30-9:15 MTWR, and by appointment

Email / Phone: speavy@gsw.edu / 931-2330

Class: Roney 213

TR 11:00 - 12:15 PM

Text: *The Changing Earth* (6th Ed.) by
James S. Monroe & Reed Wicander
AND GEOL 1121 Lab Manual

Lab: Roney 213

W 3:00 - 4:50 PM

Class Goals: By the end of the course the student will be able to:

- 1) identify and explain the origins of rock-forming minerals and igneous, sedimentary and metamorphic rocks;
- 2) interpret the Rock Cycle in terms of Plate Tectonics;
- 3) evaluate natural hazard potential (earthquake, mass movement, flood and coastal) for an area given geologic information; and
- 4) evaluate the natural resource potential (mineral and water resources) for an area given geologic information.

Class Policies:

- 1) All students at Georgia Southwestern State University are to abide by published rules outlining academic honesty. Please review the "Policy on Academic Integrity" from the undergraduate bulletin that can be found at the following URL:

<http://gsw.edu/Academics/Registrars-Office/GSW-CatalogBulletin/bulletin2013U/reg/index#POLICY-ACADEMIC>

- 2) **Don't Cheat!** Students found to have committed academic dishonesty **will receive a grade of zero for that particular assignment or exam.** In addition it is possible that this course will involve the use of plagiarism-prevention technology. For example, you may be required to submit written assignments on-line through a plagiarism-prevention service or to allow me to submit copies of your writing to such a service. The written assignments may then be retained by the service for the sole purpose of checking for plagiarized content in future student submissions.
- 3) Your RADAR account is the official mode of communication at GSW. **Please be sure to check this daily and don't forget to clear your mailbox regularly!**
- 4) A student requesting classroom accommodations or modifications due to a documented disability **must notify me within the first two weeks of the semester.** If the student has not already done so, he or she must contact the Office of Disability Services in order to receive these accommodations and modifications. The Office of Disability Services is located in Sanford Hall, room 101, and the phone number is 229-931-2661.
- 5) The Academic Resource Center is located in the ACE Building to assist students with their tutorial, first year experiences and advising needs. We welcome all returning and new students to use our lab and take advantage of group or individual tutoring. For more information contact Rita Wade at 931-2842 or email: rita.wade@gsw.edu.
- 6) ATTENDANCE IS REQUIRED for both lecture and lab. If you miss any exams, you **MUST** have a valid excuse to make them up. Failure to provide an adequate excuse **WITHIN ONE WEEK** will result in a grade of 0 ("zero") on the exam. **All allowed make-up exams will be administered on Friday, December 5 from 1– 5 PM.**
- 7) Come to class prepared to learn. You should not be talking with your neighbor during class unless it is necessary for an activity. Pay attention and take notes as appropriate. In addition, all electronic devices – with the exception of Personal Response Systems (PRS) – must be turned OFF before class begins. **You will be asked to leave for the rest of that class if your phone rings, I catch you texting, etc.**

- 7) Labs will *not* be formally graded; I will check your lab results before you leave. **Lab exams, however, will be graded.** They will be practical, comprehensive and will test your knowledge and ability to identify rocks and minerals, use topographic maps, and locate earthquakes. **Missed labs will be made up by the student on their own time.**
- 8) Your **grade** will be based on exams in lab and lecture, reading quizzes, homework assignments and a **COMPREHENSIVE Final Exam** at the end of the semester. There will also be four lecture exams, three lab exams, 10 quizzes, homework assignments and Post Exam Reflections (PER). All of these will count towards your final grade as follows:

4 Lecture Exams – 100 points each (400 points total)
 3 Lab Exams – 100 points each (300 points total)
 10 Reading Quizzes – 50+ points
 Homework and PER – 50 points
 1 Final Exam – 200 points
Total – 1000 points

- 9) Quizzes will be based on information in individual chapters according to the schedule below. Each quiz will have 10 questions (multiple choice, circle, and fill-in-the-blank). Since each correct answer will be worth one point, it is possible to earn more than 55 points on quizzes. **There are no make-up quizzes!**
- 10) Exams will consist of a combination of any of the following: multiple choice, fill-in-the-blank, matching, drawings, short answer, and/or essay questions. Please refer to your textbook, your notes and returned quizzes for more information on what the exams will cover.
- 11) The grading scale will be as follows:

Total Points	Letter Grade
900+ points	A
800 – 899 points	B
700 – 799 points	C
600 – 699 points	D
less than 600 points	F

QUIZ SCHEDULE

Date	Topic
Aug. 26	Chapter 1: Understanding Earth
Sept. 2	Chapter 3: Minerals
Sept. 9	Chapter 4: Igneous Rocks and Plutons
Sept. 16	Chapter 5: Volcanoes and Volcanism
Sept. 23	Chapter 6: Weathering, Erosion and Soil
Sept. 30	Chapter 7: Sediment and Sedimentary Rocks
Oct. 14	Chapter 8: Metamorphism and Metamorphic Rock
Oct. 23	Chapter 9: Earthquakes and Earth's Interior
Nov. 6	Chapter 12: Running Water
Nov. 18	Chapter 13: Groundwater

LECTURE TOPICS LIST

Dates	Topic	Readings
Aug. 21	Introduction to Geology	Chapters 1
Aug. 26-28	Minerals	Chapter 3
Sept. 2-4	Minerals / Igneous Rocks	Chapters 3 & 4
Sept. 9	Igneous Rocks	Chapter 4
Sept. 11	EXAM 1	Chapters 1, 3-4
Sept. 16-18	Volcanism	Chapter 5
Sept. 23-25	Weathering	Chapter 6
Sept. 30 - Oct. 2	Sedimentary Rocks	Chapter 7
Oct. 7	EXAM 2	Chapters 5-7
Oct. 9-10	<i>Fall Break (Enjoy!)</i>	
Oct. 14-16	Metamorphic Rocks	Chapter 8
Oct. 21-23	Metamorphic Rocks / Earthquakes	Chapters 8 & 9
Oct. 28-30	Earthquakes	Chapter 9
Nov. 4	EXAM 3	Chapters 8-9
Nov. 6	Running Water	Chapter 12
Nov. 11-13	Running Water	Chapters 12 & 13
Nov. 18-20	Groundwater	Chapters 13 & 16
Nov. 24-28	<i>Thanksgiving Break (Enjoy!)</i>	
Dec. 2	Groundwater	Chapter 16
Dec. 4	EXAM 4	Chapters 12 & 13
Dec. 9	FINAL EXAM, 10:30 AM – 12:30 PM	All Covered Topics

LAB SCHEDULE

Date	Topic
Aug. 20	No Lab
Aug. 27	Mineral Properties
Sept. 3	No Lab
Sept. 10	Mineral Identification
Sept. 17	Igneous Rock Identification
Sept. 24	Lab Exam 1
Oct. 1	Soils
Oct. 8	Sedimentary Rock Identification
Oct. 15	Metamorphic Rock and Mineral Identification
Oct. 22	Lab Exam 2
Oct. 29	Earthquakes*
Nov. 5	Introduction to Topographic Maps
Nov. 12	Interpretation of the Americus Topographic Map
Nov. 19	Lab Exam 3
Dec. 3	No Lab

*This lab is a handout