

**GEOL 101: INTRODUCTION TO THE EARTH
SYLLABUS** SPRING 2012**

Lectures: T, Th 11:00 AM – 12:15PM EWSC 209
Lab Sec 501 Th 12:45 – 3:30 PM EWSC 104
Sec 502 F 11:100 AM – 1:45 PM EWSC 104

Professor: **Dr. Robert Trenkamp**, Office: **EWSC 205**
Phone: 777-2419; e-mail trenkamp@geol.sc.edu
Office Hours: 1.0 hour before class (**T, Th**)
Call/e-mail for an appointment.

Lab Instructor **Julia Howell**, Office: **EWSC 310**
Phone: 777-1287; email jhowell@geol.sc.edu
Office Hours: TBD

Textbooks: *Essentials of Geology* Stephen Marshak, 2009, W.W. Norton & Company Inc., Publishers.

EXAMS: All exams will be based on the lectures and textbook readings. There will be a total of four exams (including the final). Each exam will consist of questions which will total 150 points. Exam questions will be multiple-choice, T/F, fill in the blanks or short essay. The exams will be given during the normal class meetings, with the exception of the Final Exam.

GRADING: The final course grade will be based on a total of 1000 points, as follows:

4 exams: worth together 60% of final grade.

Laboratory: 25% of final grade

Geology in the News Scrapbook: 15% of final grade

- Exams (600 points = 60%)
 - Midterm Exam 1 (150 points)
 - Midterm Exam 2 (150 points)
 - Midterm Exam 3 (150 points)
 - Final Exam (150 points)
- Laboratory grade (250 points = 25%)
- Scrapbook (150 points = 15%)

Know your class standing: Based on this grading policy, you should be able to determine your grade in the course at any time by adding up the points you have earned, and dividing that by the number of points possible up to that point in the course. Grades will be assigned on a scale as follows:

Grade Assignment:	90 – 100%	A
	80 – 89%	B
	70 – 79%	C
	60 – 69%	D
	< 60%	F

Course Objectives and Learning Outcomes:

This course is designed to direct students toward an understanding of the result of the internal and external heat engines on the material make-up and functioning of the planet Earth and the systems that result within, on and above it. Specifically, upon completion of this course, the student should understand...

- 1) The Earth's interior, surface and atmospheric systems.
Specifically: The carbon, hydrologic and rock cycles and their interactions.
- 2) Plate tectonics theory as it relates to crustal evolution, deformation and natural hazards.
- 3) The significance of time, temperature and pressure on geological processes.

Attendance: Class attendance is one of the most important ways to gain knowledge of the material in this course. In addition, a significant part of your grade will be based on class attendance and participation. Attendance at all lectures is highly recommended, as many exam questions will be based on the lectures. Attendance will not be taken daily in lecture.

USC policies allow instructors to assess a grade penalty for any student missing more than 10% of class periods.

Attendance at all labs is mandatory. A doctor's note is required for any missed lab. Please notify the instructor when you have a legitimate reason for missing a lecture. Students are responsible for obtaining any material presented at missed lectures.

Cell Phone Policy: Use of cellular and mobile phones, pagers, etc., during either lecture or lab time is inappropriate and will not be accepted. Turn off all such electronic communication equipment before entering the lecture hall or laboratory.

THE USC CODE OF ACADEMIC RESPONSIBILITY WILL BE ENFORCED.
(<http://www.sc.edu/academicintegrity/honorcode.html>)

**INTELLECTUAL AND ACADEMIC HONESTY IS EXPECTED
OF ALL CLASS MEMBERS.**

APPROXIMATE** LECTURE OUTLINE

- 1) Prelude – What is Geology
- 2) Chapter 1. – The Earth in Context
- 3) Chapter 2. – The Way the Earth Works: Plate Tectonics
- 4) Chapter 3. – Patterns in Nature: Minerals
- 5) Chapter 4. – Up from the Inferno: Magma and Igneous Rocks
- 6) Chapter 5. – The Wrath of Vulcan: Volcanic Eruptions
- 7) Interlude B – Weathering
- 8) Chapter 6. – Pages of Earth’s Past: Sedimentary Rocks
- 9) Chapter 7. – Metamorphism: A Process of Change
- 10) Interlude C – The Rock Cycle
- 11) Chapter 8. – A Violent Pulse: Earthquakes
- 12) Interlude D – Earth’s Interior
- 13) Chapter 9. – Crags, Cracks and Crumples: Crustal Deformation and Mountain Building
- 14) Chapter 10. – Deep Time: How Old is Old
- 15) Interlude F – The Hydrologic Cycle
- 16) Chapter 13. – Unsafe Ground: Landslides and Other Mass Movements
- 17) Chapter 14. – Running Water: Geology of Streams and Floods
- 18) Chapter 15. – Restless Realm: Oceans and Coasts
- 19) Chapter 16. – A Hidden Reserve: Groundwater
- 20) Chapter 17. – Dry Regions: The Geology of Deserts
- 21) Chapter 18. – Amazing Ice: Glaciers and Ice Ages
- 22) Chapter 12. – Riches in Rock: Energy and Mineral Resources

FINAL EXAM **Monday – April 30, 2012 @9:00 AM in this room**

**** Changes in scheduling may be required during the semester.**

Important Dates:

Monday January 16, 2012	Martin Luther King Service Day	No Class
March 4, 2012 – March 11, 2012	Spring Break	No Class
Thursday April 19, 2012	Last class day	Class ☺