

**GEOL E103: ENVIRONMENT OF THE EARTH  
SYLLABUS\*\* SPRING 2012**

**Lectures:** M,W 5:30 – 6:45 PM EWSC 209  
**Lab** W 6:45 – 8:45 PM EWSC 209

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

**Textbooks:** *Introduction to Environmental Geology*: 5<sup>th</sup> edition,  
Edward A. Keller, Pearson Prentice Hall, Publishers.

**Topics:**

- [1] Foundations of Environmental Geology
- [2] Earth Processes and Natural Hazards
- [3] Resources and Pollution
- [4] Environmental Management, Global Perspective and Society

**EXAMS:** All exams will be based on the lectures, textbook readings and in-class discussions. 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, short answer or annotate the figure. 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:** 20% of final grade

**Attendance, Participation, Quizzes:** 20% of final grade

- Exams (60%)
  - Midterm Exam 1 (150 points) (15%)
  - Midterm Exam 2 (150 points) (15%)
  - Midterm Exam 3 (150 points) (15%)
  - Final Exam (150 points) (15%)
- Laboratory grade (200 points) (20%)
- Attendance, Participation, Quizzes (200 points) (20%)

**Know your class standing:** Based on this grading policy, you should be able to determine your grade in the course at any time:

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

**Course Objectives and Learning Outcomes:**

This course describes the earth as a system, the various processes that affect human-kind. It explains the makeup of the earth, its resources and the various uses and misuses of the same. This course will provide you with an excellent background on:

- (a) basic concepts of geology, rocks, minerals and earth processes;
- (b) information on natural hazards;
- (c) relation between natural resources and pollution
- (d) environmental management of human activities and earth resources

**Attendance:** Class attendance is one of the most important ways to gain knowledge of the material in this course. Attendance at all lectures is highly recommended, as many exam questions will be based on the lectures. Attendance will be taken in lecture.

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

**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.**

**Lab:** Lab attendance is **mandatory**.  
**No late homework or laboratory exercises will be accepted.**  
Make-up labs will only be permitted with a note from the doctor or proper authority. A basic function calculator is strongly recommended for lab work.

## **APPROXIMATE\*\* LECTURE SCHEDULE**

- 1) Chapter 1. – Philosophy and Fundamental Concepts
- 2) Chapter 2. – Internal Structure of the Earth and Plate Tectonics
- 3) Chapter 3. – Minerals and Rocks
- 4) Chapter 4. – Ecology and Geology
- 5) Chapter 5. – Introduction to Natural Hazards
- 6) Chapter 6. – Earthquakes and Related Phenomena
- 7) Chapter 7. – Volcanic Activity
- 8) Chapter 8. – Rivers and Flooding
- 9) Chapter 9. – Slope Processes, Landslides and Subsidence
- 10) Chapter 10. – Coastal Processes
- 11) Chapter 11. – Impact of Extraterrestrial Objects
- 12) Chapter 12. – Water Resources
- 13) Chapter 13. – Water Pollution
- 14) Chapter 14. – Mineral Resources
- 15) Chapter 15. – Energy Resources
- 16) Chapter 16. – Soils and Environment
- 17) Chapter 17. – Waste as a Resource: Waste Management
- 18) Chapter 18. – Air Pollution
- 19) Chapter 19. – Global Climate Change

**FINAL EXAM      Wednesday April 25, 2012 @ 5:30 PM in this room**

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

### **Important Dates:**

<b>Monday January 16, 2012</b>	<b>Martin Luther King Service Day</b>	<b>No Class</b>
<b>March 4, 2012 – March 11, 2012</b>	<b>Spring Break</b>	<b>No Class</b>
<b>Monday April 23, 2012</b>	<b>Last class day</b>	<b>Class ☺</b>