

Earth & Environmental Sciences 111

EARTH, ENERGY, & THE ENVIRONMENT Spring 2011

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 For the fastest response, use email

COURSE WEB SITE is on blackboard. Lecture files will be posted on blackboard about 24 hours before each lecture, excluding movies and animations. Updates to lectures after the posting will not be put on blackboard.

REQUIRED MATERIAL:

1. ***How Does Earth Work?*** by Smith and Pun, Prentice-Hall, second edition
2. ***iclicker*** - Graded quizzes using iclickers start on Wednesday January 19th
3. ***EAES 111 Laboratory Manual***- distributed in lab, week 1 (cost covered by lab fees)

Time: Lecture- MONDAY/WEDNESDAY/FRIDAY 10-10:50 AM in Lecture Center E101
Lab Sections- in 1101 Science and Engineering Labs (SEL)

		WEEKS 2-15 SCHEDULE:		WEEK ONE SCHEDULE:
31340	section 1	9:00 AM - 10:50 AM	T	T 10:00 - 10:50 AM
31333	section 2	1:00 PM - 2:50 PM	T	T 1:00 - 1:50 PM
31335	section 3	8:00 AM - 9:50 AM	W	W 9:00 - 9:50 AM
31336	section 4	1:00 PM - 2:50 PM	W	W 1:00 - 1:50 PM
31340	section 5	3:00 PM - 4:50 PM	W	W 3:00 - 3:50 PM
31338	section 6	9:00 AM - 10:50 AM	R	R 10:00 - 10:50 AM



2001 Eruption near Goma, Congo, East African Rift



Tsunami damage from Dec. 26, 2004 Sumatra earthquake

Eruption of Eyjafjallajokull in Iceland on April 17, 2010 (<http://www.earthice.hi.is>)

This course is an introduction to how the solid earth works, how it affects our environment, and how its workings give rise to energy and other resources. The course has lectures and laboratories. The required field trip is on Saturday, April 9, 2011 (8 AM – 7 PM).

Students may not use laptop computers, cellular phones, or electronic equipment other than Iclickers during class.

GRADES are based on tests (about 46%), labs (about 29%), and quizzes (about 25%). **NO MATTER HOW WELL YOU DO ON THE EXAMS, IF YOU FAIL THE LABS YOU WILL FAIL THIS COURSE!** See page 4 for more details.

LECTURE TESTS: There are three 50-minute tests during the term (NO FINAL TEST DURING FINALS WEEK) based on the lectures and reading. There are no make-up tests.

QUIZZES will be given each lecture (EXCEPT for test days and the first week). **Your** iclicker will be used to answer the quiz questions. The five lowest scores on quizzes will be dropped. There are no make-up quizzes.

LAB SECTIONS: You will **not** get credit for a lab if you did not attend. Please read the lab chapter before coming to lab. Some labs may require work to be done before the lab session. Bring your lab book to lab each time. Lab exercises are due in one week at the BEGINNING of the next lab period. No late reports will be accepted. The lowest lab grade will be dropped. There are no make-up labs. There is a lab test during week 15 in lab.

ATTENDANCE at lectures is expected. Poor attendance almost invariably results in poor grades. Not all subjects in lecture are in the text. You are responsible for knowing about any announcements made during lectures.

PROBLEMS: Please bring any problems to my attention or your teaching assistant in a timely manner! We will deal with them in a timely manner. If you have a valid excuse for missing an exam or lab, or for turning in an assignment late, you must discuss your reasons with Prof. Stein or your teaching assistant in advance or within 24 hours afterwards. Remember that the five lowest quizzes and one lowest lab are dropped. We cannot provide "makeup" quizzes or labs or exams.

ACADEMIC INTEGRITY: Academic dishonesty will not be tolerated. For all work you must adhere to the guidelines regarding academic integrity as described in the UIC Student Handbook & UIC web pages. Any student caught and proven to have committed an act of academic dishonesty in this class will receive a zero for the particular item and may fail this course. This may result in a recommendation to your college for dismissal from the University. Students are expected to turn in their own work.

Students with disabilities who require accommodations for access and participation in this course must be registered with the Office of Disability Services (ODS). Please contact ODS 1200 W. Harrison St. Room 1190, SSB (M/C 321) at 312/413-2103 (voice) or 312/413-0123 (TTY) or 312/413-7781(FAX). Then, please inform Prof. Stein and your teaching assistant so your needs may be appropriately met.

This schedule is subject to change without notice. Chapters for the lectures are from the textbook. Lab are from the EAES 111 Lab Manual. The Monday dates for each week are listed.

Week 1: Introduction- Chapter 1

Jan. 10 **Labs meet for 1 hour. The schedule is on the first page.**

Week 2: Minerals- Chapter 2 (NO LECTURE MON. Jan. 17th, Martin Luther King Day)

Jan. 17 Lab 2: Minerals

Week 3: Rocks & Igneous Rocks- Chapters 3 & 4

Jan. 24 Lab 4: Igneous Rocks

Week 4: Sedimentary Rocks- Chapter 5

Jan. 31 Lab 5: Part 1- Sedimentary Rocks

Week 5: Metamorphic Rocks- Chapter 6 / **TEST 1- Friday Feb. 11th**

Feb. 7 Lab 5: Part 2- Metamorphic Rocks & mineral quiz

Week 6: Time- Chapter 7

Feb. 14 Lab 6: Radioactivity & Geologic Time

Week 7: Earth's Interior- Chapter 8

Feb. 21 Lab 7: Geologic Maps & Relative Geologic Time

Week 8: Origin of Earth- Chapter 9

Feb. 28 Lab 9: Seafloor Spreading and Continental Drift

Week 9: Motion Inside Earth- Chapter 10

March 7 Lab 10: The Stable Interior of North America

Week 10: Deformation of Rocks- Chapter 11; / **TEST 2- Friday March 18**

March 14 Lab 12: Paleogeography & Paleoclimatology

Spring Break Week: March 21- March 27

Week 11: Global Tectonics- Chapter 12

March 28 Lab 13: Earthquakes & Earthquake Hazards

Week 12: Tectonics and Surface Relief & Chicago Geology- Chapter 13

April 4 **No Labs; Required Field Trip, Saturday April 9th from 8 AM - 7 PM; BRING LAB 8**

Week 13: Water- Chapter 17

April 11 Lab 14: Groundwater

Week 14: Chicago Geology & Climate Change- some of Chapters 18 & 21

April 18 Lab: Lab Review

Week 15: Mineral and Energy Resources (again) / **TEST 3- Friday April 29**

April 25 Lab: **LAB TEST** **THERE IS NO FINAL DURING FINALS WEEK.**

USE THIS SHEET TO COMPUTE YOUR GRADE. TOTAL POINTS=532

Guaranteed minimum points needed for A=452; B=399; C=346; D=293; Failing is less than 293. However, regardless of your total number of points, if you do not pass the lab part, you will NOT pass this course.

WEEK	MONDAY QUIZ (each 4 pts)	WEDNESDAY QUIZ (each 4 pts)	FRIDAY QUIZ (each 4 pts)	LAB (each 10 pts)	TESTS (each 80 pts)
1	-----	-----	-----	-----	-----
2	-----				-----
3					-----
4					-----
5			-----		Test 1
6					-----
7					-----
8					-----
9			-----		-----
10					Test 2
11					-----
12					-----
13					-----
14				-----	-----
15			-----	LAB TEST=50 pts	Test 3
TOTAL POINTS					

TOTAL QUIZ POINTS - FIVE LOWEST SCORES (132 MAXIMUM)= _____

TOTAL LAB POINTS - LOWEST LAB SCORE (160 MAXIMUM)= _____

TOTAL TEST SCORES (240 MAXIMUM)=..... _____

TOTAL POINTS (532 MAXIMUM)=..... _____