# Geology 3 LAB

Tuesday 2:00 to 5:00pm
El Camino College Fall 2009

Instructor: Dr. Robin Bouse (310)-660-3593 x 4832
Office: Natural Sciences Bldg. Room 209 rbouse@elcamino.edu
Office Hours: Tuesdays 1:00-2:00pm
Lab Manual: El Camino Geology Laboratory Manual

## OBJECTIVE

The goal of this introductory laboratory course is to expand your knowledge in all aspects of geology. You will learn to: use topographic and geologic maps, identify minerals and rocks, and recognize geologic structures and landforms. You will become comfortable using the scientific vocabulary of geology to describe the natural processes you will learn about and observe in lab. There will be required reading, three exams, and at least one alternate site activity. Some math will be necessary and use of the metric system is essential. At the end of the course, you will be more knowledgeable about Earth's processes and how they affect you life.

## STUDENT LEARNING OUTCOMES

- Students can identify the salient features of the basic concepts of geology. (This includes the ability to recall the definitions of the specialized vocabulary of geology.)
- Students recognize and can accurately articulate how the Earth affects humans' lives and how human activities affect the Earth.
- Students can identify the key elements of the scientific method (hypotheses, tests, observations, conclusions/interpretation of observations) in popular accounts of scientific research in magazines, newspapers, etc.

## RECOMMENDED MATERIALS

Pencils and erasers
Lecture Textbook

## LAB AGENDA

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| **Week 1** | **9/1** | **Metric System and Map Skills** |
| **Week 2** | **9/8** | **Contouring** |
| **Week 3** | **9/15** | **Plate Tectonics** |
| **Week 4** | **9/22** | **Plate Tectonics** |
| **Week 5** | **9/29** | **San Andreas Fault** |
| **Week 6** | **10/6** | **Exam 1 and Earthquakes** |

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| **Week 7** | **10/13** | **Global Warming** |
| **Week 8** | **10/20** | **Relative Age Dating and Fossils** |
| **Week 9** | **10/27** | **Minerals and Igneous Rocks** |
| **Week 10** | **11/3** | **Exam 2 and Volcanoes** |
| **Week 11** | **11/10** | **Sedimentary Rocks** |
| **Week 12** | **11/17** | **ASA** |
| **Week 13** | **11/24** | **ASA** |
| **Week 14** | **12/1** | **Metamorphic Rocks** |
| **Week 15** | **12/8** | **Exam 3 and Geologic Structures** |
| **Week 16** | **12/15** | **ASA** |

## GRADING

Your grade will be based on the exams, labwork, and attendance as follows:

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| Full attendance and completion of work for 12 lab meetings (10 points each) | = 120 points |
| Alternate Site Activities | = 80 points |
| Three exams (100 points each) | = 300 points |
| Total points | = 500 points |

## GRADING SCALE

A = 90-100%, B = 80-90%, C = 70-80%, D = 60-70%, <60 = F

## EXAMS

There will be three exams. Each exam will be worth 1/5 (20%) of your grade. Test questions will be similar to those in the weekly lab exercises.

## ATTENDANCE

Attendance is expected and will be taken.

## MISSED LABS, MISSED EXAMS, TARDINESS, and CELL PHONES

I expect that there will be none of the above. There will be no make-up labs or make-up exams without a verifiable written excuse. Tardiness is disruptive to the whole class, be respectful and be on time. Answering cell phones and private unrelated conversations are not allowed in the classroom as they are distracting to the other students.

## ALTERNATE SITE ACTIVITIES - To be determined