9-2002

GEOL 330.01: Structural Geology

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University of Montana - Missoula

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Course Objectives
The goal of this course is to introduce students to the patterns and processes of deformation of earth materials at a variety of scales. Lecture topics will cover faulting and fault mechanics, folding and ductility, stress and strain, and fundamental principles of plate tectonics. Laboratories will introduce techniques for visualizing three-dimensional geometric relationships and will develop skills in interpreting geologic and topographic maps and field study.

Lecture: Monday and Wednesday, 11:10-12:00, SC 348
Laboratory: Monday 12:10-2, SC 348

Office hours: Tuesday 9:00-10:00, Thursday 11:00-12:00 or by appointment.

Grading

Mid-term exam = 20%
Comprehensive Final Exam = 30%
Laboratory = 40%
Problem sets = 10%

Please read the assigned sections prior to lecture.

Things you should bring to lab...
Ruler (one of the clear ones with a protractor on it is best)
Protractor
Mechanical pencil (.5mm)
Colored pencils
Fine black markers (0.3, 0.5, and 0.7mm)
Graph paper (10 squares to an inch)
Tracing paper
We will go on at least one field trip during the semester which we will schedule during class (first weekend in October?).

We will (hopefully) have a web page soon on which lecture notes and other information will be posted. I’ll announce the address when it is up and running.

**List of Topics and Reading Assignments (This schedule will probably change as we progress through the semester).**

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<td>Kinematic Analysis</td>
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<td>Laboratory 1: Topographic and Geologic maps, introduction.</td>
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<td>Laboratory 3: Geometric principles, 3 point problems</td>
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<td>9/25</td>
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<td><strong>FINAL EXAM IS COMPREHENSIVE!!</strong></td>
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