

ERTH 307 Structural Geology Fall 2007

Instructor: Dr. Sarah L. Hanson
Office: Peelle 204
Office Hours: MWTh 2:00-3:00

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Required Text: Structural Geology; Davis & Reynolds

Lecture Schedule

Week 1 (8/27-8/31)	Introduction Nature of Structural Geology	Ch. 1
Week 2 (9/3-9/7)	Labor Day – No Class Monday Kinematic Analysis	Ch. 2
Week 3 (9/10-9/14)	Kinematic Analysis / Strike & Dip Review Dynamic Analysis	Ch. 2 Ch. 3
Week 4 (9/17-9/21)	Stratigraphic Orientation Joints & Shear Fractures	Ch. 5
Week 5 (9/24-9/28)	Joints & Shear Fractures Exam 1	Ch. 5
Week 6 (10/1-10/5)	Faults – it's not my fault Thrust Faults	Ch. 6 Ch. 6
Week 7 (10/8-10/12)	Normal Faults Strike-slip faults	Ch. 6 Ch. 6
Week 8 (10/15-10/19)	Fall Break Seismicity from faulting	
Week 9 (10/22-10/26)	Exam 2 Fold Descriptions	Ch. 7
Week 10 (10/29-11/2)	Mechanics of Folding Regional Tectonic Fold Mechanisms	Ch. 7 Ch. 7
Week 11 (11/5-11/9)	Cleavage, Foliation & Lineation Shear Zones and Progressive Deformation	Ch. 8 Ch. 9
Week 12 (11/12-11/16)	Exam 3 Divergent Plate Boundaries	Ch. 10
Week 13 (11/19-11/2)	Divergent Plate Boundaries Thanksgiving Break – No Class Wednesday	Ch. 10
Week 14 (11/26-12/30)	Transform Plate Boundaries Convergent Plate Boundaries	Ch. 10 Ch. 10
Week 15 (12/3-12/7)	Triple Junctions Catch up and review for exam	Ch. 10

Final Exam: Wed 12 December; 12:00 – 2:00

Lab Schedule

Week 1 (8/28)	No Lab
Week 2 (9/4)	Introduction to Topographic and Geologic Maps
Week 3 (9/11)	Attitudes
Week 4 (9/18)	Stratigraphic Thicknesses
Week 5 (9/25)	Geologic maps of Homoclinal Beds
Week 6 (10/2)	Faults
Week 7 (10/9)	Lab Midterm Exam
Week 8 (10/16)	Fall Break – No Lab
Week 9 (10/23)	Faults
Week 10 (10/30)	Folds
Week 11 (11/6)	Folds
Week 12 (11/13)	Maps & Cross Sections
Week 13 (11/20)	Maps & Cross Sections
Week 14 (11/27)	Maps & Cross Sections
Week 15 (12/4)	Lab Final Exam

Course Policies and Procedures

Attendance:

It is imperative that you attend all scheduled classes and labs. Attendance will not be taken in lecture. However, it is **your** responsibility to get any homework assignments which may have been given in class and the lecture material (some of which may not be covered in the text). Attendance **will** be taken in lab. If you miss a lab, it is **YOUR** responsibility to get and complete the assignment in the allotted time. Lab Assignments will be due at the beginning of the following lab period. Points **WILL** be deducted for late assignments. Quizzes will generally take place during the first ten minutes of lab. No extra time will be allowed for late arrivals.

Exams:

You **MUST** notify me in advance if you are going to miss an exam. Make-up exams will be given **ONLY** if you have a substantiated emergency (i.e. medical emergency, death in family etc.).

Grades:

Lecture:

4 exams @ 15% each 60%

Lab:

Lab exercises 10%
2 exams @ 15% each 30%

If necessary, I will adjust the grade scale for each exam *upwards* to a class mean of 75%. No extra credit assignments will be given. Final grades will be calculated as follows:

93 – 100%	A
90 – 92%	A-
87 – 89 %	B+
83 – 86%	B
80 – 82%	B-
77 – 79%	C+
73 – 76%	C
70 – 72%	C-
67 – 69%	D+
63 – 66%	D
60 – 62%	D-
Below 60%	F