

STRUCTURAL GEOLOGY (19) - LECTURE SCHEDULE

Dates	Topics	Readings
09/01	Introduction to Structural Geology	Ch. 1
09/13, 15	Primary Structures	Ch. 1, App. C
09/20, 22	Geologic Mapping, Contacts	App. A, B
09/27, 29	Simple Folded Structure	Ch. 2
10/04, 06	Folded Structure, Map Interpretation	Ch. 4, 7
10/11; 10/13	Plate Tectonics	Ch. 10
10/18, 20, 25	Faults	Ch. 6
10/27, 11/01, 03	Folded Structure	Ch. 7
11/03	MIDTERM EXAM (in Lab – Ch 1, 2, 4, 6, 7, 10 and Appendix A-C)	
11/08, 11/10	Stereonet	App. H, I
11/15, 17	Joints	Ch. 5
11/22, 29	Cleavage, Foliation, Lineation	Ch. 8
12/01, 06	Progressive Deformation	Ch. 9
12/08	Review for Lab Practicum and Final exams	

TEXT: STRUCTURAL GEOLOGY OF ROCKS AND REGIONS
by Davis, G. H., and Reynolds, S. J., Second Edition, 1996, J. Wiley Publishers, 776 p.

CLASS HOURS: Lecture M, W 9:05 AM – 10:00 AM; Laboratory W 1:55 - 5:00 PM

OFFICE HOURS: Tuesday 9-12 PM or by appointment

E-MAIL: Charles.Merguerian@hofstra.edu

STRUCTURAL GEOLOGY (19) - LABORATORY SCHEDULE

Date	Lab #	Topics
09/01	01	Topographic Maps, Contour Lines, and Profiles
09/15	02	Strike and Dip, Apparent Dip, Map Patterns of Simple Structure
09/22	03	Structure Contours, Three Point Problems
09/29	04	Unconformities and Simple Folded Structure
10/06	05	Plunging and Overturned Folds and Simple Map Interpretation
10/13	06	Faulted Structure and Map Patterns of Faulted Terrains
10/20	07	Geological Map Interpretation
10/27	08	Stereonet I
11/03		MIDTERM EXAM (Chapters 1, 2, 4, 6, 7, 10, and App A-C)
11/10	09	Stereonet II
11/17	10	Igneous Structure
12/01	Ppt	Student PowerPoint Presentations during Lab
12/08	Prac	LAB PRACTICUM (Study Labs 1 to 10)
12/17	11	Complex Geologic Structures (Due Date: Extra Credit Option)

TERMS: *Cash Only!* At least until the end of the semester when all major credit cards will be accepted. Labs will meet on Wednesday in 162 Gittleson Hall from 1:55 to 5:00 PM and lab reports and practicum will account for 50% of your final grade. **All labs are due by the next lab class** and will be graded for content as well as professional appearance. The Lecture Midterm (03 November 2010) is a two-hour examination covering Chapters 1, 2, 4, 6, 7, 10 and Appendixes A to C in Davis and Reynolds' "Structural Geology of Rocks and Regions", and will account for 20% of the final grade. A 10-minute Powerpoint on the structural geology of some region will be given (by you!) on 01 December 2010 and will account for 15% of your grade. Finally, the Lecture Final (covering text Chapters 5, 6, 7, 8, 9 and Appendixes H and I), will be held during finals week in December and counts 15%. **Attendance is mandatory for all labs and exams!**

FIELD TRIPS: Interested students may elect to register for an integrated field trip (Geology 151 - Special Problems) and if enough students are interested I will arrange a suitable weekend field exercise (November 06/07). Copies of the **Geology Club Field Trip Rules** are available from Club Officers or from my faculty web page. Be sure to get and read a copy before attending any trips. **Note:** NYSGA field conference is 24-26 September 2010 and the GANJ conference is 08-09 October 2010. Attendance is highly recommended.

LAB SUPPLIES: The following supplies will be needed for course in addition to the text – protractor, rulers, sharp pencils, Rapidograph or other ink pens, colored pencil set. Purchase of a dictionary of geologic terms and a hand lens is recommended for serious students. Lab reports and all other course materials can be downloaded from the Blackboard site.