

FLORIDA INTERNATIONAL UNIVERSITY

Department of Geology

GLY 3760C Geologic Map Analysis

Fall 2005

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Most of this course will consist of a first class meeting of short lectures followed by exercises where you will apply the theory. The second class meeting is a "clinic" to discuss problems that have arisen. The recommended book provides some additional explanation and exercises (for review, for example), but is not essential. **It is essential that you keep up with the assignments in this course - you cannot do all the work at the last minute.** All assignments will have a due date stamped on them. There will be a 5 point (half a grade point) penalty for each day that the assignment is late. Assignments more than one week late will not be graded.

Provisional Schedule

Date	Topic
Aug 30	Introduction;
Sep 1& Sep 6	Geographic base: scale, grids, topographic and planimetric maps; air photos
Sep 8 & 13	Nature of geological maps and sections; horizontal beds
Sep 15 & 20	Dipping beds: structure contours, thicknesses, dip and strike
Sep 22 & Sep 27	
Sep 29 & Oct 4	Continuation of dipping beds: structure contours, thicknesses, dip and strike
Oct 6 & Oct 11	Unconformities
Oct 13 & 18	Folded beds: curving structure contours, axes, axial planes
Oct 20	Review
Oct 25	MID TERM EXAM
Oct 27 & Nov 1	Faults
Nov 3 & Nov 8	Igneous features: flows, sills, dikes, stocks and batholiths
Nov 10 & 15	Construction of isopleth, isochore and isopach maps
Nov 17 & 22	Global geodetic base; lat/long and UTM grid; use of Global Positioning System(GPS)
Nov 24	<i>Thanksgiving - no classes</i>
Nov 29 ; Dec 1, 6	Introduction to remote sensing
Dec 8	Review
Week of Dec 12	Dec 16, 9.30 AM FINAL EXAM

Grading policy

Assignments form an important part of the grade. Explanation and assignment of problems will be made in the Thursday class and is due the following Thursday . This is to allow you the weekend to tackle the assignment. The Tuesday class is generally a "clinic" where problems can be addressed and the previous assignment reviewed.

The final grade will be calculated as follows:

Assignments	40%
Mid term exam	25%
Final Exam	35%

Materials

You will need the following materials:

Ruler (in 1/10 in and mm), set square (30-60), protractor, pencils (hardness 2=HB), colored pencils (good quality), eraser, inch and cm graph paper and tracing paper.