COURSE SYLLABUS FORM

American University of Beirut
Faculty of Arts and Sciences
Department of Geology

Geol 207- Map Interpretation

1. Course Learning Outcomes

This course is aimed at solving the problems involved in the three-dimensional analysis of geological maps. Students taking this course should participate in one-day field trip to familiarize themselves with the geological contacts, outcrops and significant structures in nature. Students taking this course are expected to develop their drawing skills, and at the end of the semester they should be able to define the types of planar geological surfaces, to identify linear structures and to list types of faults and folds. Also they are expected to differentiate planar surfaces and to relate drill-hole data to isopachytes and structure contours. Moreover, after taking this course the students will be able to explain outcrop shapes, to categorize fold shapes and to distinguish faults and estimate fault movements.

2. Resources Available to Students

The textbook is: Interpretation of Geological Structures Through Maps by Derek Powell, Longman.

Other resources: Geologic Maps: their solution and interpretation 1989, by Bolton, T., Cambridge University Press; Geology Department map collections.

3. Grading Criteria

Class Contribution (15%); Mid-Term (30%); Field Report (15%); Final Exam (40%)

4. Schedule

	Week	Topic	Activities	Assignments
1		Introduction to geological structures	Lecturing	
2		Types of planar geological surfaces	Lecturing	
3		Analysis of planar surfaces	Lecturing	Map exercises
4		Outcrop shape	Lecturing	Map exercises
5		Linear structures	Lecturing	Map exercises
6		Analysis of drill-hole data	Lecturing	Map exercises
7		Isopachytes (thickness contours)	Lecturing	Map exercises
8		**Midterm test**		
9		Faults and fault movements	Lecturing	Map exercises
10		Types of fault	Lecturing	Map exercises
11		Folds and fold shape	Lecturing	Map exercises
12		Structures associated with folds	Lecturing	Map exercises
13		Folds and faults	Lecturing	Map exercises
14		Map exercises and their solutions		Map exercises
15		Map exercises and their solutions		Map exercises

5. Course Policy

Attendance will be checked regularly as it is necessary to complete the class assignments.