

Course Type	Course Code	Name of Course	L	T	P	Credit
DP	GLC204	Structural Geology Practical	0	0	2	2

Course Objective
- The student will learn the basics of map reading. - The student will learn to solve problems in Structural Geology.
Learning Outcomes
Upon successful completion of this course, students will be able to: - Learn about structural geological problems - Learn interpretation of geological maps - Learn projection of structural data in stereographic plots

Unit No.	Topics to be Covered	Lecture Hours	Learning Outcome
1	Interpretation of Topographic Maps ; Interpretation of Geological Maps; Attitude and Cross sections	4	Basics about map reading.
2	Outcrop completion; One point problem and V – rule; Three point problem	3	Students will learn interpretation of different structural problems.
3	Unconformable beds; Folded beds; Faults and dykes;	3	To make the students understand and interpret folds, faults and unconformities.
4	Stereographic projection; Planes and lines; Determination of angles and Bisectrix	3	Stereographic projection of different structures.
5	Practical Examination	1	To test the practical knowledge gained during the semester.

Text Books:

1. Lisle, R.J., 2004. *Geological Structures and Maps*, Elsevier Butterworth-Heinemann, Oxford; 106 p.
2. Rowland, S.M., Duebendorfer, E.M. and Schiefelbein, I.M., 2007. *Structural Analysis and Synthesis – A Laboratory Course in Structural Geology*, Blackwell Publishing, Malden; 304 p.

Reference Books:

1. Van der Pluijm, B.A., Marshak, S., 2004. *Earth Structure – An Introduction to Structural Geology and Tectonics*, W.W. Norton & Company, New York; 656 p.
2. Davis, G.H., Reynolds, S.J., 1996. *Structural Geology of Rocks and Regions*, John Wiley & Sons, Inc., New York; 776 p.
3. Billings, M.P., 1987. *Structural Geology*, Prentice Hall of India, New Delhi; 514 p.