

Course Type	Course Code	Name of Course	L	T	P	Credit
DP	NGLC525	Metamorphic Petrology Practical	0	0	2	1

Course Objective

The primary objective of the course is also to train students in identifying different metamorphic texture and using that information to build up the geological history of the rock.

Learning Outcomes

Upon completion of the course, students will be able to:

- Explaining reasons for development of specific texture in the rock.
- Understand effect of composition and physical condition on occurrence of metamorphic mineral.
- Building up geological history of a rock by integration of information gathered from microstructures.

Unit No:	Topics to be Covered	Lecture Hours	Learning Outcome
1	Texture: Identification of metamorphic textures under microscope in different rock composition of different metamorphic grade. Texture which will be covered are- Foliation (I phyllite schist, gneiss), mineral layering, Pressure Shadow, Pre, Syn, Post Kinematic porphyroblast, Granoblastis texture, Crenulation Cleavage, Symplectitic texture, Coronae texture	20	Thin section identification properties of metamorphic rocks and their textures
2	Schrienermakers Method, ternary Diagram-ACF, AKF, A(K)FM	6	Structure and property of common sorosilicate, ring silicate and inosilicate (single chain) minerals Construction of chemigraphic projections
3	Practical examination	2	
	Total Classes	28	

Reference Books:

1. Principles of Igneous and Metamorphic Petrology by John D. Winter., 2009, by Prentice Hall.
2. Igneous and Metamorphic Petrology, Myron G. Best, 2002, by Wiley, John & Sons

Other References:

1. Philpotts, A.R., Ague, J.J., 2009. Principles of Igneous and Metamorphic Petrology, Cambridge University Press, New York; 684 p.
2. Metamorphic Petrology, by Francis J. Turner, 1980, by Taylor & Francis Inc