

Name of Programme: M. Sc. Applied Geology

Course Code: GEO-507

Title of the Course: Geological Field Mapping (Practical) (Skill Based Course)

No of Credits: 03

Effective from AY: 2022-23

Prerequisites for the course:	Degree of Bachelor of Science in Geology from any UGC recognized University or an equivalent examination.	
Objective:	The main objective of this course is to give students the hands on experience in the field to understand the lithology structure and their plates in Stratigraphy besides getting a thorough knowledge of field mapping.	
Content:	The students will be taught the techniques of geological mapping, field data collection: recording the attitude of beds, foliation, lineation, joints and their analysis. Use of GPS, DGPS, GNSS for spatial data collection. Sampling of rocks, preparation of geological field report. The record of data will be maintained in a field-diary. This work will be carried out under the supervision of teachers who will accompany the students during the course of the field-traverse. There will be a viva-voce examination based on the field report.	90 hours
Pedagogy:	Lectures and on-field Training.	
References/ Readings	<ol style="list-style-type: none">1. <i>Geology of Gujarat</i>, Mehr S.S., Geological Society of India, 1991.2. <i>Geology of Karnataka</i>, Radharishnan B.P. and Vaidhyanadhan R., Geological Society of India. 1977.3. <i>Geology of Rajasthan</i>, S. Sinha Roy. Geological Society of India.1991.4. <i>Geology of Rajasthan (North-West India-Precambrian to Recent)</i> A.B Roy and S.R. Jakhar. Scientific Publishers, 2012.5. <i>Geology of Andhra Pradesh</i>. P.K. Raman and V. N. Murty, Geological Society of India. 2012.6. <i>Field Guide Book of Geology of Kutch (Kachchh) Basin, Gujarat, India</i>.7. <i>Geology and Mineral Resources of Goa</i>. A.G. Dessai8. <i>Geology of Maharashtra</i> Second Edition. G.G. Deshpande and Pitale U. L. Geological Society of India. 2012.	
Course outcomes	<ol style="list-style-type: none">1. The students will be able to identify the various rocks.2. The study of their structures will help in deciphering the processes of formation and tectonics.3. They will be able to prepare geological map based on their observations in the field4. They will get an idea to write a detailed technical report of the study area.	