

## **AG-203: FIELD GEOLOGY**

**(03 Credit hrs)**

**Prerequisite:** AG-104

### **Learning Outcomes**

This course is designed to acquire the knowledge about the various field techniques like sedimentary and structural features, igneous and metamorphic structures, correlations, preparation of base maps, topographic maps, geological maps and geological sections.

### **Course Content**

Instruments used in field mapping. Introduction to topographic and geological maps. Methods and techniques of surface and subsurface geological mapping. Correlation techniques. Field description of igneous, metamorphic and sedimentary rocks. Modes of geological illustration including structural contour, isopach and lithofacies maps, block and fence diagrams. Field mapping, preparation of geological maps and cross sections

### **Lab.**

Uses of field instruments. Introduction to topographic and geological maps. Field data acquisition and interpretation. Geological fieldwork and report writing of an assigned area.

### **TEACHING – LEARNING STRATEGIES**

- Lecture based examination
- Presentation/seminars
- Class discussion
- Quizzes

### **ASSIGNMENTS – TYPE AND NUMBER WITH CALENDAR**

It is continuous assessment. The weightage of Assignments will be 25% before and after midterm assessment. It includes:

- classroom participation,
- attendance, assignments and presentation,
- homework
- attitude and behavior,
- hands-on-activities,
- short tests, quizzes etc.

## ASSESSMENT AND EXAMINATIONS

Sr. No.	Elements	Weightage	Details
1.	Mid Term Assessment	35%	It takes place at the mid-point of the semester
2.	Formative Assessment	25%	It is continuous assessment. It includes: classroom participation, attendance, assignments and presentation, homework, attitude and behavior, hands-on-activities, short tests, quizzes etc.
3.	Final Assessment	40%	It takes place at the end of the semester. It is mostly in the form of a test, but owing to the nature of the course the teacher may assess their students based on term paper, research proposal development, field work and report writing etc.

### Books Recommended

1. Elements of field geology by Himus, G.W., Sweeting, G.S., Latest Ed., University Tutorial Press Ltd.
2. Field Geology by Lahee, F.H., 1961, McGraw Hill.
3. Geology and the field by Compton, R.R., 1985, John Wiley & Sons.