

# **AG-201: GEOMORPHOLOGY**

**(03 Credit hrs)**

**Prerequisite:** AG-101

## **Learning Outcomes**

This course is designed to acquire the knowledge about the formation of various landforms on the surface of the earth. This will help the students to understand the processes by which the various types of structures developed on the earth surface due to erosional and depositional processes.

## **Course Contents**

Geomorphic cycles and associated landforms. Uses and interpretation of topographic maps, aerial photographs and satellite imageries. Interpretation of geological structures. Glaciers and their erosional and depositional land forms. Geological work of wind. Its types, drainage pattern, stream meandering and development of flood plains. Occurrence and geological work of groundwater. The erosional and depositional work of sea, development of coastal land forms. Landforms produced by tectonics and volcanic activity.

## **Lab.**

Terrain analysis using topographic maps, aerial photographs and satellite imageries. Techniques of photogeological mapping.

## **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. Geomorphology of Earth Surface Processes and Form by Aharna, V.K., 1986, McGraw Hill.
2. Geomorphology by Chorley, R.J., 1984, Methuen.
3. Image interpretation in Geology by Drury, S.A. 1986, Allen & Unwin.
4. Remote Sensing & Image Interpretation by Lillis, T.M. & Kiefer, R.W., 1987 John Wiley & Sons.
5. Principles of Geomorphology by Thornbury, W.D., 1991 John Wiley & Sons.
6. Process Geomorphology by Ritter, Kochel & Miller, 2002.