

Semester Lecture Plan

Name of the college: Government College of Arts, Science & Commerce, Sanquelim, Goa-India

Name of Faculty: Ms. Ashita Salgaokar

Subject: Geology

Paper code: GEO 211, THE CHANGING EARTH

Program/Course: SY B.Sc.

Division:

Academic year: 2024 - 2025

Semester: III

Total Lectures: 17

Course Objectives:

1. This course will provide knowledge on mainly the optical properties of minerals and their identification
2. It will also provide the general description and distinction of silicate group of minerals.

Course Learning Outcome:

At the end of the course, the student will be able to:

1. Explain the processes of weathering, erosion, transportation and deposition by various agents. CL3
2. Interpret various landforms associated with work of wind and groundwater. CL3
3. Identify various landforms formed by action of rivers, glaciers and oceans and seas. CL3
4. Solve problems related to fluvial geomorphology. CL3

Month	Lectures From: To:		No. of lectures allotted	Topic, Subtopic to be covered	Exercise/ Assignment	ICT Tools	Reference books
August	20/8/24	24/8/24	2	Geological work of rivers: Drainage Basin and River System, Drainage Patterns.	Assignment on all the features formed by different agents (i.e rivers, seas, ocean, glaciers)	Projector	i. Earth An Introduction to Physical Geology by Edward J. Tarbuck Frederick K. Lutgens Dennis G. Tasa.
	26/8/24	31/8/24	2	i. Geological work of rivers: Erosion by rivers, erosional		Projector	

				<p>Features - Steep Valleys, Gorges, Potholes, Waterfall, Meander, Ox Bow Lake, Hogbacks, Cuestas</p> <p>ii. Depositional Landforms by River; Floodplains, Deltas, Alluvial Fans.</p>
September	2/9/24	7/9/24	1	i. Geological work of ocean and seas: Waves and Currents
	09/9/24	14/9/24	1	Geological work of ocean and seas: Erosion and the features - Sea-cliffs, wave-cut platform, sea-arches, sea-caves, sea-stacks.
	16/9/24	21/9/24	2	Geological work of the ocean and seas: deposition and the features- lagoon, tombolo, spits, barrier island, beaches, dunes, bars, atolls.
	23/9/24	28/9/24	2	Geological work of Glaciers

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ii. Earth Portrait of a Planet by Stephen Marshak.

October	1/10/24	5/10/24	2	Geological work of Glaciers: Erosional Features of Glaciers: Valley glacier - U- shaped Valleys, Cirques, Fjords. Erosional Striations, Drumlins, Erratics.	Projector
	7/10/24	12/10/24	2	Depositional Features of Glaciers - Glacial Drift; Till and Stratified Drift, Moraines	
	14/10/24	19/10/24	2	Revision	
	21/10/24	22/10/24	1	Revision	

Practical Plan

Name of the college: Government College of Arts, Science & Commerce, Sanquelim				
Name of Faculty: Ms. Ashita Salgaokar		Subject: Geology		
Paper code: GEO 211		Program: SY BSc		Division:
Academic year: 2024 - 2025		Semester: III		Total Practicals/Labs: 07
Credits: 1				
Course Objectives:				
<ol style="list-style-type: none"> 1. Discuss the processes involved in shaping the Earth's surface by natural agencies. CL2 2. Describe various erosional and depositional landforms. CL2 				
Course Outcome:				
<ol style="list-style-type: none"> 1. Explain the processes of weathering, erosion, transportation and deposition by various agents. CL3 2. Interpret various landforms associated with work of wind and groundwater. CL3 3. Identify various landforms formed by action of rivers, glaciers and oceans and seas. CL3 4. Solve problems related to fluvial geomorphology. CL3 				
Student Learning Outcome:				
Month	Practicals/Labs	No. of Practicals/Labs planned	List of Experiments	Reference books

	Scheduled Date			
August	21-8-24	1	Basin morphometry	
	28-8-24	1	Basin morphometry	
September	4-9-24	1	Drawing long and cross profile of rivers	
	18-9-24	1	Drawing long and cross profile of rivers	
	25-9-24	1	Identify and interpret the formation of landforms using images	
October	9-10-24	1	Identify and interpret the formation of landforms using images	Carlson, D.H., Plummer, C.C., McGeary, D. (2008). Physical Geology: Earth revealed. Higher Education. Online Resources
	16-10-24	1	Revision	