

Semester Lecture Plan

Name of the college: Government College of Arts, Science & Commerce, Sanquelim-Goa							
Name of Faculty: DATTARAJ JAWDEKAR				Subject: Geology			
Paper code: GEO 111			Program/Course: Introduction to Geology			Division:	
Academic year: 2026 – 2027			Semester: I			Total Lectures: 60	
The objectives of this course are to: 1. 1. Discuss the origin and various components of the earth system. CL2 2. 2. Describe minerals and rocks using physical properties. CL2							
At the end of the course the student will be able to: 1. Distinguish between the layers of the earth based on the structure and composition. CL2 2. Explain the Earth System. CL2 3. Identify the minerals based on their physical properties. CL3 4. Categorize different rock types. CL4							
Month	Lectures From: To:		No. of lectures allotted	Topic, Subtopic to be covered	Learning outcome	ICT Tools	Reference books

MONTH	LECTURE		No. of lectures allotted	Topic, Subtopic to be covered	Learning outcome	ICT Tools	Reference books
	FROM	TO					
JUNE	19/06/2026	20/06/2026	0	Classes Suspended due to NEET exam protocol			
	22/06/2026	27/06/2026	4	Lectures Suspended due to SIP		Chalk and Board	
JUNE	29/06/2026	30/06/2026	4	Introduction to Geology; Applications and Career opportunities in Geosciences. Origin, Shape, Size and internal structure of the earth. Introduction to Plate Tectonics.		Chalk and Board	Markshak, Holmes, P. Singh, Tarbuk and Lutgens
JULY	01/07/2026	04/07/2026	4	Introduction to Plate Tectonics.		Chalk and Board	Markshak, Holmes, P. Singh, Tarbuk and Lutgens
	6/07/2026	11/07/2026	4	The Earth System: Atmosphere: Structure and Composition, Hydrosphere: Occurrence and distribution of water, Hydrological Cycle,		Chalk and Board	Markshak, Holmes, P. Singh, Tarbuk and Lutgens
	13/07/2026	18/07/2026	4	Introduction to Minerals and Rocks: Physical and		Chalk and Board	Markshak, Holmes, P. Singh, Tarbuk and Lutgens

				crystallographic properties of minerals, colour, streak, lustre, diaphaneity, cleavage, fracture, form, habit, hardness, specific gravity and crystal system. Uses of Minerals.			
	20/07/2026	25/07/2026	4	Introduction to Minerals and Rocks: Physical and crystallographic properties of minerals, colour, streak, lustre, diaphaneity, cleavage, fracture, form, habit, hardness, specific gravity and crystal system. Uses of Minerals. Introduction of common rock – forming minerals: quartz, feldspar, micas, pyroxenes, amphiboles and olivine.		Chalk and Board	Markshak, Holmes, P. Singh, Tarbuk and Lutgens
JULY/ AUGUST	27/07/2026	31/07/2026	4	Introduction to Minerals and Rocks: Physical and		Chalk and Board, Demo	Markshak, Holmes, P. Singh, Tarbuk and Lutgens

				crystallographic properties of minerals, colour, streak, lustre, diaphaneity, cleavage, fracture, form, habit, hardness, specific gravity and crystal system. Uses of Minerals. Introduction of common rock – forming minerals: quartz, feldspar, micas, pyroxenes, amphiboles and olivine.			
	03/08/2026	08/08/2026	4	Practicals on Properties		Chalk and Board, Demo	Markshak, Holmes, P. Singh, Tarbuk and Lutgens
	10/08/2026	15/08/2026	4	Scope and importance of Petrology, Rocks: their classification into three broad classes, igneous, sedimentary and metamorphic, Rock Cycle.		Chalk and Board, Demo	Markshak, Holmes, P. Singh, Tarbuk and Lutgens
	17/08/2026	22/08/2026	4			Chalk and Board, Demo	Markshak, Holmes, P. Singh, Tarbuk and Lutgens

	24/08/2026	28/08/2026	4	Igneous Rocks: Mode of occurrence, Forms, structures and textures. Bowen's Reaction series. Classification based on grain size and mineral composition.		Chalk and Board, Demo	Markshak, Holmes, P. Singh, Tarbuk and Lutgens
				Igneous Rocks: Mode of occurrence, Forms, structures and textures. Bowen's Reaction series. Classification based on grain size and mineral composition.			
SEPTEMBER	31/08/2026	5/9/2026	4	Igneous Lectures		Chalk and Board, Demo, Fieldwork	Markshak, Holmes, P. Singh, Tarbuk and Lutgens
	07/09/2026	12/09/2026	4	Sedimentary Rocks: Structures, textures and classification.		Chalk and Board, Demo, Fieldwork, Videos	Markshak, Holmes, P. Singh, Tarbuk and Lutgens
				Sedimentary Rocks: Structures, textures and classification.			

	21/09/2026	26/09/2026	4	Metamorphic Rocks: Agents of metamorphism, types of metamorphism, fabric and classification.		Chalk and Board, Demo	Markshak, Holmes, P. Singh, Tarbuk and Lutgens
	28/09/2026	30/09/2026	4	Metamorphic Rocks: Agents of metamorphism, types of metamorphism, fabric and classification.		Chalk and Board, Demo	Markshak, Holmes, P. Singh, Tarbuk and Lutgens
OCTOBER	01/10/2026	03/10/2026	4	Practicals on rocks		Chalk and Board, Demo	Markshak, Holmes, P. Singh, Tarbuk and Lutgens
	05/10/2026	10/10/2026	4	Origin and Evolution of life on earth		Chalk and Board, Demo	Markshak, Holmes, P. Singh, Tarbuk and Lutgens
	12/10/2026	14/10/2026	4	Minerals and rocks		Chalk and Board, Demo	Markshak, Holmes, P. Singh, Tarbuk and Lutgens

*** Assessment Rubrics**

Component	Max Marks
ISA 1	10
ISA 2	10

Practical	-
Project	-
Semester End Exam	80