Semester Lecture Plan

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

Name of Faculty: Ms. Magnolia Aurea Miranda	**Subject:** Geology	
Paper code: GEO-100	**Program/Course: FY B.Sc.**	**Division:**
Academic year: 2024 - 2025	**Semester: II**	**Total Lectures: 30**

Course Objectives:

1. Discuss the origin, shape, and size of the Earth. CL2
2. Explain the concepts of continental drift and plate tectonics. CL2
3. Demonstrate the symmetry in crystals. CL2
4. Describe minerals and rocks using physical properties. CL2

Course Learning Outcome:

1. Differentiate the layers of the Earth based on their structure and composition. CL2
2. Identify minerals based on their physical properties. CL3
3. Deduce the symmetry of crystals. CL4
4. Categorize rocks based on their properties. CL4

Month	Lectures From:	To:	No. of lectures allotted	Topic, Subtopic to be covered	Exercise / Assignment	ICT Tools	Reference books
December	9/12/24	14/12/24	2	Physical properties of minerals		Projector/ Smart board	Marshak, S. (2015). Earth science (14th ed.). John
	16/12/24	21/12/24	2	Physical properties of minerals		Projector/ Smart board	

	6/1/25	11/1/25	2	Physical properties of minerals		Projector/ Smart board	Wiley & Sons. Monroe, J. S., &Wicander, R. (2015). The changing earth: Exploring Geology and Evolution. Cengage Learning.
January	13/01/25	18/1/25	2	External characteristics of crystals, face, form, interfacial angles, law of constancy of interfacial angles. Goniometers, crystal symmetry.		Projector/ Smart board	Klein, C., & Hurlbut, C. S. Jr. (2021). Dana manual of mineralogy. Wiley**.**
	20/1/25	25/1/25	2	Classification of crystals, crystallographic axes and systems		Projector/ Smart board	
	27/1/25	31/1/25	2	Parameters and indices, study of the normal symmetry classes.		Projector/ Smart board	
February	3/2/25	8/2/25	2	Applications of crystal properties	Assignment	Projector/ Smart board	

				Introduction of common rock - forming minerals			
	10/2/25	15/2/25	2	Introduction of common rock - forming minerals	Assignment	Projector/ Smart board	Marshak, S. (2015). Earth science (14th ed.). John Wiley & Sons. Monroe, J. S., &Wicander, R. (2015). The changing earth: Exploring Geology and Evolution. Cengage Learning.
	17/2/25	22/2/25	2	Introduction of common rock - forming minerals	Assignment	Projector/ Smart board	
	24/2/25	28/2/25	2	Rocks: their classification into three broad classes, igneous, sedimentary and metamorphic,		Projector/ Smart board	
March	3/3/25	8/3/25	2	Rock Cycle Igneous Rocks: plutonic hypabyssal and volcanic types.	Assignment	Projector/ Smart board	
	4/3/25	9/3/25	2	Forms, structures and textures. Bowen's Reaction series.	Assignment	Projector/ Smart board/ Smart board	
	10/3/25	15/03/25	2	Classification based on grain size and mineral composition. Mineralization.		Projector/ Smart board	
	17/03/25	22/03/25	2	Sedimentary Rocks: Structures, Textures	Assignment	Projector/ Smart board	
	24/03/25	29/3/25	2	Classification of Sedimentary Rocks. Depositional Environments.	Assignment	Projector/ Smart board	

	31/03/25		1	Revision		Projector/ Smart board	
April	1/04/25	5/04/25	2	Revision		Projector/ Smart board	
	7/04/25	11/4/25	2	Revision		Projector/ Smart board	

Assessment Rubrics

Component	Max Marks
ISA 1	7.5
ISA 2	7.5
Practical	25
Project	-
Semester End Exam	60