Semester Lecture Plan

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

Name of Faculty: Brahmanand N Sawant | **Subject:** Geology

Paper code: GEO304- SEDIMENTARY PETROLOGY -I | **Program/Course: TY B.Sc.** | **Division:**

Academic year: 2025 - 2026 | **Semester: VI** | **Total Lectures: 45**

Course Objectives: Explain the sedimentary processes and diagenesis. Describe the textures and structures of sedimentary rocks.Discuss the sedimentary depositional environments.

Course Learning Outcome: Interpret the depositional environments based on types of sedimentary rocks.
2. Identify sedimentary rocks based on textures and structures.
3. Deduce the provenance of sediment based on grain size and grain size parameters.
4. Explain the economic importance of sedimentary rocks.

Month	Lectures From:	To:	No. of lectures allotted	Topic, Subtopic to be covered	ICT Tools	Reference books
Dec	1/12/2025	6/12/2025	03	Introduction to this paper and syllabus discussion	PPT	Sedimentary rocks by F, J pettijoh; Introduction to sedimentary rocks by
	8/12/2025	13/12/2025	03	Sedimentary processes Diagenesis of sediments	Powerpoint Presentation	

						Maurice E Tucker
	15/12/2025	20/12/2025		Size frequency distribution Grain size analysis Fabric and packing in Grains	Powerpoint presentation	Sedimentary rocks by F, J pettijoh; Introduction to sedimentary rocks by Maurice E Tucker
Jan/Feb	2/01/2026	10/01/2026	03	Fabric in Gravels Sphericity Roundness	PPT	Sedimentary rocks by F, J pettijohn; Introduction to sedimentary rocks by Maurice E Tucker
	12/01/2026	17/01/2026	03	Structure in rocks Bedding and laminations Depositional & Erosional Structures	PPT	
	19/01/2026	24/01/2026	03	Texture in sedimentary rocks Classification of sedimentary rocks Post depositional structures	PPT	
	26/01/2025	31/01/2026	03	Conglomerates Breccias Types of Breccia and conglomerates	PPT	
	2/02/2026	7/02/2026	03	Classification of Rudaceous rocks Textural Maturity Compositional Maturity	PPT	

		/02/2				
	9/02/2026	14/02/2025	03	Mineralogy of sandstones Litharenites Quartz arenites Arkoses Mineralogy of argillites Classification and diagenesis of Argillites	PPT	
	16/02/2026	21/02/2026	03	Evaporites Phosphatic sediments Siliceous sediments	PPT	
Feb/March	23/02/2025	28/02/2026	03	Ferruginous sediments Coal Deposits Residual laterite Bauxites and soils	PPT	
March	2/03/2026	7/03/2026	03	Structural basins Morphological basins Tectonic basins Geosynclines	PPT	Sedimentary rocks by F, J pettijohn; Introduction to sedimentary rocks by Maurice E Tucker

March	9/03/2026	14/03/2026	03	Different depositional environments and its physical, chemical and organic factors	PPT	Sedimentary rocks by F, J pettijoh; Introduction to sedimentary rocks by Maurice E Tucker
March	16/03/2026	21/03/2026	03	Flysch and molasses sediments Revision	PPT	Sedimentary rocks by F, J pettijoh; Introduction to sedimentary rocks by Maurice E Tucker
March	23/4/2026	31/3/2026	03	ZTR index, grain size parametres	PPT	

COMPONENT	MAXIMUM MARKS
ISA I	7.5
ISA II	7.5
ISA III	7.5
PRACTICAL	25
SEMESTER END EXAM	60
TOTAL	100