

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

Name of Faculty: Shritesh Mhapsekar

Subject: Geology

Paper code: GEO-302; Igneous Petrology

Program/Course: TY B.Sc.

Division:

Academic year: 2026- 2027

Semester: V

Total Lectures: 17

Course Objectives:

1. Describe the processes involved in the formation of igneous rocks and their diversity. CL2
2. Classify igneous rocks. CL2
1. 3. Discuss the crystallization of melts by studying textures and structure of igneous rocks. CL2

Course Learning Outcome:

1. Explain formation and diversity of igneous rocks. CL2
2. Interpret the cooling history of igneous rocks using textures and structures. CL3
3. Illustrate crystallization trends in magmatic systems. CL3
4. Identify common igneous rocks both in hand specimen and thin section. CL3

Month	Lectures From: To:		No. of lectures allotted	Topic, Subtopic to be covered	Learning outcome	ICT Tools	Reference books
July 2026	29/6/2026	5/7/2026	1	Introduction			1. Barker, D. S. (1983). Igneous Rocks. Prentice Hall.
	6/7/2026	12/7/2026	1	Megascopic identification of 20 igneous rocks.			2. Best, M. G. (2013). Igneous and

	13/7/2026	19/7/2026	1	Megascopic identification of 20 igneous rocks.			metamorphic petrology. John Wiley & Sons. 3. Bose Mihir: Igneous Petrology, World Press, 1997. 4. Hall, A. (1987). Igneous Petrology. Longman Scientific and Technical. 5. Hatch, F. H., & Wells, A. K. (1926). The Petrology of the Igneous Rocks.
	20/7/2026	26/7/2026	1	Megascopic identification of 20 igneous rocks.			
	27/7/2026	2/8/2026	1	Normative analysis of igneous rocks			
August 2026	3/8/2026	9/8/2026	1	Normative analysis of igneous rocks			
			1	Normative analysis of igneous rocks			
	10/8/2026	16/8/2026	1	Normative analysis of igneous rocks			
	17/8/2026	23/8/2026	1	Normative analysis of igneous rocks			
	24/8/2026	30/8/2026	1	Normative analysis of igneous rocks			
			1	Microscopic identification of igneous rock thin-section			
	31/8/2026	6/9/2026					
			1	Microscopic identification of igneous rock thin-section			
	7/9/2026	13/9/2026					
September 2026	14/9/2026	20/9/2026	1	Ganesh Break			
	21/9/2026	27/9/2026	1	Microscopic identification of igneous rock thin-section			
October 2026	28/9/2026	4/10/2026	1	Microscopic identification of igneous rock thin-section			

Semester Lecture Plan

5/10/2026	11/10/2026	1	Microscopic identification of igneous rock thin-section
12/10/2026	14/10/2026	1	Revision

*Note: Data filled in the above form is sample data.