

	Practical Plan	
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Name of the college: Government College of Arts, Science & Commerce, Sanquelim				
Name of Faculty: Delia Cardozo		Subject: Geology		
Paper code: GEO204 Geotectonics and associated rocks		Program: SY BSc	Division: A	
Academic year: 2024 - 2025		Semester: IV	Total Practicals/Labs: 16	
Credits: 01				
Course Objectives: 1. Describe the earth’s internal processes in regards to magnetism, gravity and high-pressure transformations. CL2 2. Explain the process of plate tectonics and plate interactions. CL2 3. Illustrate the causes of earthquakes and volcanoes. CL2 4. Identify various rock types associated with plate boundaries. CL2				
Expected Course Outcome: 1. Explain the variation of magnetism and gravity on the surface of the Earth. CL2 2. Identify plate boundaries. CL2 3. Calculate the Richter magnitude and Mercalli intensity values of an earthquake. CL3 4. Classify various rock types. CL3				
Student Learning Outcome:				
Month	Practicals/Labs Scheduled Date	No. of Practicals planned	List of Experiments	Reference books
December	9/12/2024	1	Earthquakes: Introduction , Epicentre, Magnitude and Intensity	1. Edward Keller (2012) Introduction to Environmental Geology. Pearson Prentice Hall. 5th Edition. 2. Montgomery, C. W. (2020). Environmental geology. New York, NY McGraw-Hill Education
	16/12/2024	1	Plotting the Epicentre of an Earthquake - 1	
	23/12/2024	1	Plotting the Epicentre of an Earthquake -2	
January	6/01/2025	1	Finding the (Richter) Magnitude -1	

	13/01/2025	1	Finding the (Richter) Magnitude -2	3. Earle, S. (2019). Physical Geology – 2nd Edition. Victoria, B.C.: BCCampus.
	20/01/2025	1	Calculating the magnitude of an Earthquake-1	
	27/01/2025	1	Calculating the magnitude of an Earthquake-2	
February	3/02/2025	1	Assigning Mercalli intensity values for hypothetical case descriptions	1. Blyth, F. G. H., & de Freitas, M. H. (2018). Geology for engineers (3rd ed.). CRC Press. 2. Grotzinger, J. P., & Jordan, T. H. (2020). Understanding Earth. Macmillan Learning. 3. Lutgens, F. K., Tarbuck, E. J., & Tasa, D. G. (2021). Essentials of geology(13th ed.). Pearson. 4. Marshak, S. (2015). Earth science (14th ed.). John Wiley & Sons.
	10/02/2025	1	Assigning Mercalli intensity values for hypothetical case descriptions	
	17/02/2025	1	Megascopic identification of rocks: Description of the physical properties	
	24/02/2025	1	Identification of Gabbro, Dolerite, Basalt (Amygdaloidal, vesicular), Dunite	
March	3/03/2025	1	Identification of Granites, pegmatite, aplite	
	10/03/2025	1	Identification of Slate, Marble, Gneiss, Granulite, Eclogite	
	17/03/2025	1	Identification of Sandstone, Limestone, Shale	
	24/03/2025	1	Revision	
April	7/04/2025	1	Revision	