

Semester Lecture Plan

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

Name of Faculty: Shritesh Mhapsekar

Subject: Geology

Paper code: GEO-321; Hydrogeology

Program/Course: TY B.Sc.

Division:

Academic year: 2026- 2027

Semester: V

Total Lectures: 17

Course Objectives:

1. Describe the occurrence and movement of freshwater on Earth. CL2
- . Illustrate the occurrence of groundwater and its flow. CL2
3. Discuss water quality parameters and standards. CL2

Course Learning Outcome:

1. Measure the various components of the hydrological cycle. CL3
2. Recognize types of aquifers and infer groundwater flow direction. CL3
3. Prepare and interpret stream hydrographs. CL5
4. Assess groundwater quality. CL5

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. Davis, S.N. and De Weist, R.J.M. (1966). Hydrogeology, John Wiley & Sons Inc., N.Y. 2. Fetter, C.W.
	6/7/2026	12/7/2026	1	Groundwater level measurement; Preparation and			

				analysis of hydrographs			(2001). Applied Hydrogeology, Prentice Hall Inc., N.J., U.S.A. 3. Hiscock, K. M. (2005). Hydrogeology: Principles and practice. Blackwell Publishing
	13/7/2026	19/7/2026	1	Groundwater level measurement; Preparation and analysis of hydrographs			
	20/7/2026	26/7/2026	1	Groundwater level measurement; Preparation and analysis of hydrographs			
	27/7/2026	2/8/2026	1	Groundwater level measurement; Preparation and analysis of hydrographs			
August 2026	3/8/2026	9/8/2026	1	Preparation and interpretation of water level contour maps (flow-nets)			
			1	Preparation and interpretation of water level contour maps (flow-nets)			
	10/8/2026	16/8/2026	1	Preparation and interpretation of water level contour maps (flow-nets)			
	17/8/2026	23/8/2026	1	Preparation and interpretation of water level contour maps (flow-nets)			
	24/8/2026	30/8/2026	1	Graphical representation of chemical quality data and water classification.			
September 2026	31/8/2026	6/9/2026	1	Graphical representation of chemical quality data			

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				and water classification.
	7/9/2026	13/9/2026	1	Graphical representation of chemical quality data and water classification.
	14/9/2026	20/9/2026	1	Graphical representation of chemical quality data and water classification.
	21/9/2026	27/9/2026	1	Graphical representation of chemical quality data and water classification.
	28/9/2026	4/10/2026	1	Graphical representation of chemical quality data and water classification.
	5/10/2026	11/10/2026	1	Graphical representation of chemical quality data and water classification.
October 2026	12/10/2026	14/10/2026	1	Revision

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

