

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: SY B.Sc.

Division:

Academic year: 2025- 2026

Semester: III

Total Lectures: 12

Course Objectives:

1. Describe the occurrence and movement of freshwater on Earth. CL2
2. 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 lecture s allotted	Topic, Subtopic to be covered	Learning outcome	ICT Tools	Reference books
July 2025	June 30, 2025	July 06, 2025	2	Introduction			Davis, S.N. and De Weist, R.J.M. (1966).

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July 07, 2025 to	July 13, 2025	2	Subsurface water and groundwater			Hydrogeology , John Wiley & Sons Inc., N.Y. 2. Fetter, C.W. (2001). Applied Hydrogeology , Prentice Hall Inc., N.J., U.S.A.
July 14, 2025 to	July 20, 2025	2	Rock properties affecting groundwater: porosity, permeability and hydraulic conductivity; vertical distribution of groundwater, saturated and unsaturated zones.			
July 21, 2025 to	July 27, 2025	2	Types of geologic formations: Aquifer, aquitard, aquiclude, aquifuge, types of aquifers: unconfined, confined,			
July 28, 2025 to	August 03, 2025	2	Types of geologic formations: Aquifer, aquitard, aquiclude, aquifuge, types of aquifers: unconfined, confined,			
August 04, 2025	August 10, 2025	2	Types of geologic formations: Aquifer, aquitard, aquiclude, aquifuge, types of aquifers: unconfined, confined,			

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

