

Semester Lecture Plan

Name of the college: Government College of Arts, Science & Commerce, Sanquelim Goa							
Name of Faculty: Mr. Stephen Fernandes			Subject: Natural Hazards and Disaster Risk Reduction (MINOR)				
Paper code: GOS111			Program/Course: F.Y.B.Sc			Division:	
Academic year: 2025- 2026			Semester: I			Total Lectures: 30	
Course Objectives: The Course aims to: - Provide an understanding of the definitions and concepts related to natural hazards and disaster risk reduction. - Introduce disaster risk reduction strategies and frameworks used to mitigate and prevent the impacts of natural hazards. - Develop knowledge and skills in identifying natural hazards and conducting hazard and risk assessments. - Understand vulnerability assessment and mapping techniques to identify areas at risk							
Student Learning Outcome: - Define and explain key concepts related to natural hazards and disaster risk reduction. - Understand the frameworks and strategies used in disaster risk reduction to mitigate and prevent the impacts of natural hazards. - Identify natural hazards and conduct hazard and risk assessments using appropriate methodologies. - Apply principles of emergency planning and management in the context of disaster risk reduction and develop strategies for capacity building and training to enhance preparedness and response capabilities.							
Month	Lectures From: To:		No. of lectures allotted	Topic, Subtopic to be covered	Exercises/ Assignment	ICT Tools	Reference books
June	23/06/2025	28/06/2025	02	Introduction to Natural Hazards and Disaster Risk Reduction	Describe the concepts related to Disaster, Hazrds etc	Power point presentation, White Board	Environmental Sciences by S.C. Santra, Environmental Geography by H.M. Saxena

June	30/06/2025	05/07/2025	02	Definitions and concepts	Describe the concepts related to Disaster, Hazrds etc	Power point presentation, White Board	Environmental Sciences by S.C. Santra, Environmental Geography by H.M. Saxena
July	07/07/2025	12/07/2025	02	Classification of natural hazards	Classify various natural hazards in India	Power point presentation, White Board Youtube Videos	Environmental Sciences by S.C. Santra, Environmental Geography by H.M. Saxena
July	14/07/2025	19/07/2025	02	Historical and contemporary examples of natural disasters	List out the disasters happened in 2025 in India	Power point presentation, White Board	Environmental Sciences by S.C. Santra, Environmental Geography by H.M. Saxena
July	21/07/2025	26/07/2025	02	The economic, social, and environmental impact of disasters	Case study of impacts Himalayan cloud burst on economy and environment	Power point presentation, White Board	Environmental Sciences by S.C. Santra, Environmental Geography by H.M. Saxena
July	28/07/2025	02/08/2025	02	The economic, social, and environmental impact of disasters	Case study of impacts Himalayan cloud burst on Society	Power point presentation, White Board	Environmental Sciences by S.C. Santra, Environmental Geography by H.M. Saxena
August	04/08/2025	09/08/2025	02	Overview of disaster risk reduction strategies	Suggest various steps in disaster management	Power point presentation, White Board	Environmental Sciences by S.C. Santra, Environmental Geography by H.M. Saxena
August	11/08/2025	16/08/2025	01	Disaster risk reduction frameworks	Discuss effectiveness of risk reduction on	Power point presentation, White Board	Environmental Sciences by S.C. Santra, Environmental Geography by H.M. Saxena

					management of disasters		
August	18/08/2025	25/08/2025	02	Understanding Hazards and Risk Assessment	Define the concept of Hazard and risk	Power point presentation, White Board	Environmental Sciences by S.C. Santra, Environmental Geography by H.M. Saxena
September	01/09/2025	06/09/2025	02	Identification of natural hazards	Identify the hazards in the state of Goa	Power point presentation, White Board	Environmental Sciences by S.C. Santra, Environmental Geography by H.M. Saxena
September	08/09/2025	13/09/2025	02	Exposure and loss assessment	Case study of Cloud burst and landslide and loss assessment	Power point presentation, White Board	Environmental Sciences by S.C. Santra, Environmental Geography by H.M. Saxena
September	15/09/2025	20/09/2025	02	Vulnerability assessment and mapping	Mapping of hazards/Disasters in Goa	Power point presentation, White Board	Environmental Sciences by S.C. Santra, Environmental Geography by H.M. Saxena
September	22/09/2025	27/09/2025	02	Hazard mitigation	Suggest mitigation measures to reduce natural hazards	Power point presentation, White Board	Environmental Sciences by S.C. Santra, Environmental Geography by H.M. Saxena
October	29/09/2025	04/10/2025	01	Hazard prevention strategies	Suggest mitigation measures to reduce natural hazards	Power point presentation, White Board	Environmental Sciences by S.C. Santra, Environmental Geography by H.M. Saxena
October	06/10/2025	11/10/2025	02	Overview of Pre-disaster Measures	Case study on Mitigation strategies for reducing effects of disasters	Power point presentation, White Board	Environmental Sciences by S.C. Santra, Environmental Geography by H.M. Saxena

October	13/10/2025	18/10/2025	02	Revision	Question Paper Discussion	Power point presentation, White Board	Environmental Sciences by S.C. Santra, Environmental Geography by H.M. Saxena
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Assessment Rubrics

Component	Max Marks
ISA 1	10
ISA 2	10
ISA 3	10
Semester End Exam	80