

Syllabus for Multidisciplinary Course
Centre for Disaster Risk Reduction

Multidisciplinary Course
(FYUGP 1st Semester)

Basket	Course Code	Course Title	Credits	L	T	P	S
Science	CDRR100MD	Understanding Natural Disasters	03	3	0	0	0
Course Objectives: This course introduces students to natural disasters, their causes and impacts. The course aims to provide a comprehensive understanding of the key concepts related to disasters and underlying principles of natural disasters and how scientific knowledge can be harnessed to enhance disaster resilience. Through the combination of lectures, theoretical discussions, & case studies, students will gain a comprehensive understanding of how to identify, investigate, monitor, and reduce the risk of potential disasters in the neighbourhood.							
Course Outcomes: <ul style="list-style-type: none"> • Key concepts related to disasters, • Nature, origin, and types of natural disasters, • Causes and effects of various types of natural disasters, 							
Course Contents							
Unit-I: Fundamentals of Disasters Key Concepts – Disaster, Hazard, Vulnerability, Risk, and Capacity; Types of Natural Disasters – Geological & Hydro-meteorological Disasters							
Unit-II: Geological Disasters Geological Disasters – Origin and Effects; Earthquakes, Landslides, Volcanoes, & Tsunamis							
Unit-III: Hydro-meteorological Disasters Hydro-meteorological Disasters – Origin and Effects; Floods, Flash-floods, Glacier Lake Outburst Floods (GLOFs), Droughts, Cyclones, Snow Avalanches							

Suggested Reading:

1. "Natural disasters" by Alexander D., 2018; Routledge.
2. "Understanding Disasters" https://nidm.gov.in/PDF/Disaster_about.pdf
3. "Geological Hazards and Hydro-meteorological Hazards" www.nidm.gov.in
4. "Natural Hazards & Disaster Management Vulnerability and Mitigation" by R.B. Singh, 2012; Rawat Publications.
5. Earthquake & Natural Disasters; Manik Kar. Motilal Banarsidass Publishers Private Limited.
6. "An introduction to disaster management" by S. Vaidyanathan.
7. Other resources shall be shared during the course