



OFFICE OF THE REGISTRAR :: DIBRUGARH UNIVERSITY :: DIBRUGARH

Ref. No. DU/DR-A/137th AC/ Syllabus/DRRM (Audit Course)/2026/836

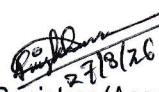
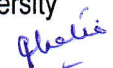
Date: 27.08.2026

NOTIFICATION

As recommended by the **Board of Studies (BoS) in Applied Geology**, the Academic Council, Dibrugarh University in its 137th meeting held on 29.06.2026 **vide Resolution No. 26** has approved the **syllabus for 2-credit Audit Course on Disaster Risk Reduction Management (DRRM)** in the **5th Semester** of Applied Geology under FYIPGP with effect from 2026-2027.

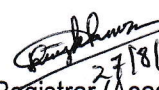
The Syllabus is attached herewith.

Issued with due approval.


27/8/26
Deputy Registrar (Academic) i/c
Dibrugarh University


Copy forwarded for kind information and necessary action to:

1. The Hon'ble Vice-Chancellor, Dibrugarh University.
2. The Deans, Dibrugarh University.
3. The Registrar, Dibrugarh University.
4. The Controller of Examinations, Dibrugarh University.
5. The Head, Department of Applied Geology, Dibrugarh University.
6. The Heads / Chairpersons of the Teaching Departments / Centre for Studies, Dibrugarh University.
7. The Joint / Deputy Controller of Examinations – 'C' / 'A' & 'B', Dibrugarh University.
8. The Senior Programmer, Dibrugarh University with a request to upload the Notification along with attached syllabi on the DU website.
9. File.


27/8/26
Deputy Registrar (Academic) i/c
Dibrugarh University


Course Title	:Disaster Risk Reduction & Management (DRRM)
Course Code	:AGA5.1
Nature of Course	:Audit Course
Total Credits	:02 credits
Distribution of Marks	:30 (End-Sem) + 20 (In-Sem.)

COURSE OBJECTIVES: This course provides a comprehensive introduction to the concepts, frameworks, and practical dimensions of Disaster Risk Reduction and Management (DRRM). It equips students with the analytical tools to understand vulnerabilities and hazards, while specifically examining institutional mechanisms, structural challenges, and community-led resilience models in India and the ecologically sensitive Northeast region.

UNITS	CONTENTS	L	T	P	Total Hours
I (15 Marks)	Introduction to Basic Concepts Defining Hazards, Disasters, Vulnerability, Risk, Capacity, and Resilience, Disaster equation Classification of Hazards: Natural (Geological – earthquakes, landslides, Hydrological – floods, droughts, Meteorological – cyclones, heatwaves), Anthropogenic (chemical, biological, Nuclear, Climate – induced risks) Disaster Management Cycle: Mitigation, Preparedness, Response, and Recovery Global Frameworks: Sendai Framework for Disaster Risk Reduction & Sustainable Development Goals (SDGs)	10	5		15
II (15 Marks)	Vulnerabilities & Risk Management in India & NE India India's Vulnerability Profile: Major disasters in India, Major Hazards in NE India: Great Assam Earthquakes of 1897 & 1950, Brahmaputra and Barak valley floods, Landslides in the NE states Institutional and Legal Regimes: Disaster Management Act, Institutional Structure (National (NDMA), State (SDMA), and District (DDMA) Disaster Management Authorities)	10	5		15

	National Policies: National Policy on Disaster Management and National Disaster Management Plan (NDMP) Role of executive forces: National (NDRF) and State (SDRF) Disaster Response Forces, Community-based Disaster Risk Management: Indigenous Knowledge Systems (IKS) in NE India for early warning and resilient livelihoods				
	Total				30

MODES OF INTERNAL ASSESSMENT

(20 Marks)

- One Internal Examination (In Sem) 10
- Others (Anyone) 10
 - Group Discussion
 - Seminar presentation on any of the relevant topics
 - Debate
 - Home Assignment

COURSE OUTCOMES (COs):

Student will be able to:

Course Outcome 1 (CO-1): Evaluate how human systems interact with natural hazards to create disaster risks, using global framework principles to design foundational mitigation strategies.

- **LO 1.1:** Differentiate between a hazard, vulnerability, and capacity by calculating comparative risk levels using the disaster risk equation.
- **LO 1.2:** Classify disasters according to their origin (geological, hydrological, meteorological, or anthropogenic) and chart their phase-by-phase progression through the Disaster Management Cycle.
- **LO 1.3:** Map local, real-world community issues directly to the four structural priorities of the global Sendai Framework for Disaster Risk Reduction.

Course Outcome 2 (CO-2): Navigate and critique India's three-tier institutional, legal, and financial disaster frameworks to determine the correct administrative channels for disaster preparedness and response.

- **LO 2.1:** Explain the statutory powers, decentralization mechanisms, and official mandates granted to authorities under the Disaster Management Acts.

- **LO 2.2:** Appraise a hypothetical or real disaster event to identify the precise administrative roles and coordination gaps between the National (NDMA), State (SDMA), and District (DDMA) levels.
- **LO 2.3:** Categorize emergency financing needs to determine whether a response initiative qualifies for funding under the NDRF, SDRF, or their respective mitigation counterparts (NDMF/SDMF).

Course Outcome 3 (CO-3): Formulate localized, community-based disaster resilience plans that address the unique geo-climatic fragility, recurring hazards, and socio-ecological vulnerabilities of Northeast India.

- **LO 3.1:** Analyze how the tectonic settings and transboundary river systems of Northeast India drive the region's high frequency of earthquakes, flash floods, and riverbank erosion.
- **LO 3.2:** Diagnose the structural and environmental risks of rapid urbanization and infrastructure development in the fragile hill terrains of states like Mizoram, Sikkim, and Meghalaya.
- **LO 3.3:** Integrate indigenous knowledge systems—such as traditional *Chang ghar* (stilt-house) architecture—with modern Community-Based Disaster Risk Management (CBDRM) models to design localized early warning and response strategies.

Cognitive Map of Course Outcomes with Bloom's Taxonomy

Knowledge Dimension	Remember	Understand	Apply	Analyze	Evaluate	Create
Factual Knowledge	CO01, CO02,	CO02, CO03	CO03			
Conceptual Knowledge		CO01, CO02, CO03	CO03	CO01, CO02, CO03	CO03	
Procedural Knowledge		CO02	CO02	CO03		
Metacognitive Knowledge						

Mapping of Course Outcomes to Program Outcomes:

CO/PO	PO1	PO2	PO3	PO4	PO5	PO6
CO1	S	M	M	S	S	M

CO2	S	M	M	S	S	M
CO3	S	M	M	S	S	M

Where, S=Strong Correlation and M=Medium Correlation

SUGGESTED READINGS

1. **NDMA (Government of India):** *National Disaster Management Plan*. New Delhi.
2. **Coppola, D. P. (2015):** *Introduction to International Disaster Management*. Butterworth-Heinemann.
3. **Singh, R. B. (Ed.) (2006):** *Natural Hazards and Disaster Management: Vulnerability and Mitigation*. Rawat Publications.
4. **Taori, K. (2005):** *Disaster Management through Panchayati Raj*. Concept Publishing Company.