

UNIVERSITY OF DELHI

CNC-II/093/1/Misc./2025/6

Dated: 13.05.2025

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NOTIFICATION

Sub: Amendment to Ordinance V

Following addition be made to Appendix-II-A to the Ordinance V (2-A) of the Ordinances of the University;

Add the following:

The syllabus of a Discipline Specific Core (DSC) Course -DSC 18 paper titled "Disaster Management – Project based study, running under the Department of Geography under Faculty of Social Science, based on Undergraduate Curriculum Framework-2022, has been revised and the same is notified herewith for the information of all concerned as detailed below:

DISCIPLINE SPECIFIC CORE COURSE

DSC - 18: DISASTER MANAGEMENT (Project-based Study)

Course Title &Code	Total Credits	Duration (Hrs per Week)			Eligibility Criteria	Prerequisite
		Lecture	Tutorial	Practical/ Practice		
DISASTER MANAGEMENT: Project-based Study	4	1	0	3	Class 12 th pass	NIL

Learning Objectives:

- Understanding the basic concepts related to disaster management.
- Detailed analysis about the different types of disasters in India.
- Evaluating multiple dimensions of disaster management through field based study.

Learning Outcomes:

After completion of the course, students will be able to –

- Describe the different types disasters occurring at different scales in India.
- Demonstrate understanding about human responses to different kinds of disasters in India.
- Trace a disasterscape, identify the risk areas and suggest ways for better preparedness for such disaster in future.

Syllabus

Unit 1: Introduction: (8 hrs)

Theory (4hrs)

- Concept of Hazard, Disaster, Risk, Vulnerability, Capacity and Resilience
- Classification of Disasters, Causes and Impact of Disaster
- Disaster Management Cycle: Prevention and Mitigation, Preparedness, Response, and Recovery ; Component of Disaster Management Plan

Lab Based Practice/ Field Based Practical (4 hrs)

- Role of Remote Sensing and GIS in Disaster Studies (Demonstration Based Lab Activity)

Unit 2: Disaster Vulnerability of India: (12 hrs)

Theory (4 hrs)

- Disaster Profiles of India (Earthquake, Flood, Drought, Cyclone, Landslide, Extreme Events : Heat and Cold Wave, Fire): Geographical Region and State Specific

Lab Based Practice/ Field Based Practical (8 Hrs)

- Identify one local and/or regional hazard or disaster and prepare it's disaster management plan
or
- One Day Workshop on First Aid and Stress Management or
- Video Demonstrations of Early Warning Systems for hazard and disaster
Developing Strategies to create and disseminate awareness on safety practices during disaster ✓

Unit 3: Institutional Setup for Disaster Management (12 hrs)

Theory (4 hrs)

- International: Yokohama Strategy, Hyogo Framework, Sendai Framework
- National: Disaster Management Act 2005, PM 10 Point Agenda on Disaster Risk Reduction (DRR), NDMA, NIDM, NGO's and Civil Society
- Community Based Disaster Management: Concept and Framework, Indigenous Knowledge and Practices
- Disaster Finances: Response Funds, Financial Aid, Compensations and

Disaster Insurance.

Lab Based Practice/ Field Based Practical (8 hrs)

- Field Visit to NDMA/ NIDM/IMD/ National Centre for Seismology or
- Mapping Community Based Disaster Management (Strategies or Practices) within institutional premises or neighbourhood

Unit 4: Data Assessment and Analysis: (13 hrs)

Theory (3 hrs)

- Data Procurement - Primary and Secondary: Survey and Questionnaire Method, Literature Review, Disaster Report Evaluation, Open Data Sources, Open-Source Maps and Images
- Data Analysis – Hazard Assessment (Hazard Mapping, Transect Walk) Risk Analysis (Risk Matrix, Risk Index) Vulnerability Assessment: Physical or Social or Environmental or Composite Indicator Based Vulnerability Assessment.

Lab Based Practice/ Field Based Practical (10 hrs)

- IMD and Bhuvan Portal-Demonstration
- Computer Based Cartographic Representation/ Use of any analysis method/ Charts/ Diagram

Unit 5: Project Report: (60 hrs)

One Field Based Case Study of any disaster to assess perspective on components of Disaster Management/ Phases of Disaster Management: Pre disaster, During disaster, Post disaster depending on place and/or community specific issues related to it.

The Field Report can be either outside or within National Capital Region (NCR)

Teaching Plan

Theory/ Lectures (L)	15 Hrs (1 credit)
Lab Based Practice/ Practical	30 Hrs (1credit)
Field Excursion/ Study	60 Hrs (2 credit)
Total hours	90 Hours

The Examination hours and marks distribution will be as per University Norms.

Essential Readings

- Srivastava, P. K., Singh, S. K., Mohanty, U. C., & Murty, T. (2020). *Techniques for Disaster Risk Management and Mitigation. Techniques for Disaster Risk Management and Mitigation* (pp. 1–328). Wiley.
- Government of India. (2011). *Disaster Management in India*. Delhi, India: Ministry of Home Affairs.
- Kapur, A. (2010). *Vulnerable India: A Geographical Study of Disasters*. Delhi, India: Sage Publication.

Suggested Readings

- Taherdoost, H.; Madanchian, M. (2023) Multi-Criteria Decision Making (MCDM) Methods and Concepts. *Encyclopedia* 3,: 77–87.
<https://doi.org/10.3390/encyclopedia3010006>
- Mishra, P.K.; Tripathi, S.; Abdelrahman, K.; Tiwari, A.; Fnais, M.S. (2023) Integrated Flood Hazard Vulnerability Modeling of Neluwa (Sri Lanka) Using Analytical Hierarchy Process and Geospatial Techniques. *Water* 15, 1212.
<https://doi.org/10.3390/w15061212>
- Pathak, G. K. (2021) *Apda Prabandhan* (Hindi), Rajesh Publications, New Delhi.
- Pandey, R.K. (2020). *Disaster Management in India*. Sage Text, India
- Government of India. (2008). *Vulnerability Atlas of India*. New Delhi, India: Building Materials & Technology Promotion Council, Ministry of Urban Development, Government of India.
- Ram kumar, M. (2009). *Geological Hazards: Causes, Consequences and Methods of Containment*. New Delhi, India: New India Publishing Agency.
- Singh, S. (2014) *Apda Prabandhan* (Hindi), Pwalika Publications, Allahabad.
- Modh, S. (2010). *Managing Natural Disaster: Hydrological, Marine and Geological Disasters*. Delhi, India: Macmillan.

- Bhuvan Portal: Disaster Management Support

Services - <https://bhuvan->

[appl.nrsc.gov.in/bhuvandisaster/#forestfire](https://bhuvan-appl.nrsc.gov.in/bhuvandisaster/#forestfire)

- IMD: https://mausam.imd.gov.in/ind_latest/contents/station

wis e-nowcast- warning.php#

- Singh, J. (2007) Disaster Management, I.K. International Publishing House, New Delhi.

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