

Fundamentals of Disaster Management (Core)

Code	Credit Hours
DME-801	3 – 0

Course Description:

The course aims to give students a basic understanding of various aspects pertaining to all phases of disaster management with particular focus on terminologies, rules, principles, concepts, organizations, and protocols at regional, national, and international levels.

Course Content:

Topics	Learning Outcomes
Introduction to Disaster Management	Scope and objectives of Disaster Management, Basic concepts and terminologies in Disaster Management, Importance of Management in disasters, Principles of Disaster Management, The Management system in disasters, Strategic planning, Contingency planning, Forward planning, Contingency planning, Global disaster risk profile, National disaster risk profile
Concepts and Terms in Disaster Management	Disaster types (Primary and secondary disasters, Global disaster risk situations, Natural disasters, Human-made disasters), Dynamics of disaster management (international, national and local context), Disasters and ethics, Elements of disaster Management (Risk and risk perception, Vulnerability and progression of vulnerability, Risk Management [Hazard, vulnerability and capacity assessment, etc.], Loss Management, Preparedness, Control of events, Resource Management, Emerging trends in disaster Management, Introduction to community based disaster Management, Institutional framework to disaster Management), Social and behavioral dimensions of disasters
Disaster Management Cycle	Disaster management cycle (pre-, during, and post disaster phases)
DM and Development Goals	Disaster Management models, Relation between disaster and development, Introduction to MDGs, Kyoto protocol, Hyogo Framework for Action (HFA), SDGs, and SFDRR and their progress in Pakistan, National Disaster Management System in Pakistan
Disasters Management Institutions in Pakistan	National Disaster Management Act and Policies, National Disaster Management Authority (NDMA), Provincial Disaster Management Authorities (PDMAs)
Disaster Risk	An overview of disaster risk assessment, Hazard environment

Assessment and Disaster Risk Reduction Measures / Planning	and assessment techniques, Vulnerability assessment techniques, Capacity assessment techniques, Use of new techniques (GIS, GPS and Remote Sensing), Disaster Risk Assessment, Risk assessment scenario, Disaster risk reduction planning and consideration, Disaster risk reduction measures including structural and nonstructural measures for Flood, Drought, Earthquake, Landslide, Cyclone, Tsunami
Tools and Methods of Disaster Management	Disaster models and disaster management models, Prevention and mitigation tools (Stakeholders and stakeholder analysis, Hazard mitigation, vulnerability reduction and capacity building plans, Hazard scenario development and action planning, Structural and nonstructural mitigation, Economic diversification, Political intervention, Public awareness), Preparedness tools (Planning the response, Establishing organizational structures for each phase of the disaster, Establishing objectives, priorities, and goals, Assessing resources, Establishment of end-to-end early warning system), Tools of Post-Disaster Management (Emergency response Management [Emergency operation center, information management, equipment and layout, Incident command system, Search and rescue, Medical first aid, Evacuation management, Disaster assessment, Damage and Loss estimation techniques, IDP / Refugee camp planning and management, Emergency Services departments and its progress in Pakistan], Policies and procedures, Codes and standards, Enabling legislations), Additional tools for disaster Management (Mapping, GIS and Remote Sensing, Information Management, Monitoring and evaluation, Safety and security)
Cross cutting themes in Disaster Management	Community based disaster risk management, Mainstreaming gender into DRR, Monitoring and evaluation, public awareness, Risk transfer (Insurance etc.), Public safety and security, multi-team management during disaster, Role of media in DRM, Climate Change Adaptation (CCA) in DRM

Textbooks:

No textbook for this course. The course will be based on different reference books, reports, and conference and journal publications.

Reference Material:

1. "Disaster Risk Management in Asia, a primer", ADPC publication
2. "At Risk: Natural Hazards, People's Vulnerability and Disaster", by Ben Wisner, Piers Blaikie, Terry Cannon and Ian Davis
3. ISDR Case Studies including: Bldg Disaster Resilient Communities (2007); Gender Perspective: Working Together for Disaster Risk Reduction (2007)
4. "The Vulnerability of Cities, Natural Disasters and Social Resilience" by Mark Pelling (2003)
5. Policy document by NDMA, Pakistan
6. Disaster Risk Management, available at www.ndma.gov.pk

7. Disaster and Development, by F.C. Cunny (1996)

Pre-requisite: None

Assessment System

Quizzes	15%
Assignments	10%
Mid-Semester Exam	25%
Term Project/Paper	10%
End Semester Exam	40%