

Interdisciplinary II

DM-DRM-352

Disaster Risk Management

Cr. H. 3

Course Learning Objectives

Upon Successful completion of this course, the student will be able to:

- **UNDERSTAND** the concept of risk management, risk assessment, and risk planning.

COURSE OUTLINE

- 1 Introduction to Disaster Risk Management**
 - Meaning and scope of disaster risk management
 - Paradigm shift in disaster risk management
 - HFA and Post HFA framework
 - SDGs, Sendai framework (2015-2030) and Paris agreement
 - Development in International protocols
- 2 Components of Risk and Risk Assessment**
 - Hazard Assessment
 - Vulnerability Assessment
 - Capacity analysis
 - Risk Assessment
 - Multi-Hazard Vulnerability and Risk Assessment
 - Perception and Attitude Assessment
- 3 Resilience Assessment**
 - Concepts and approaches
 - Adaptation and Resilience
 - Linkage between hazards, vulnerability and resilience
 - Resilience Frameworks
- 4 Disaster Risk Management**
 - Approaches to Risk Management
 - Structural Risk Reduction Strategies
 - Non-Structural Risk Reduction Strategies including Risk Transfer, Insurance and Risk Financing

Teaching Methodology

- Lecturing
- Written Assignments
- Documentaries
- Interactive Sessions

Assessment Criteria:

1st Term (25%) Assignments/Quizzes and Presentations

Mid Term (35%) Written (Long Questions, Short Questions, MCQs)

Final Term (40%) Written (Long Questions, Short Questions, MCQs)

Textbooks:

1. Wisner, B., P. Blaikie, T. Cannon, and I. Davis. (2004). "At Risk: Natural Hazards, People's Vulnerability and Disasters (2nd Ed.)." Rutledge, London, UK.
2. Shaw R, **Rahman A**, Surjan A, Parvin GA. 2016. Urban Disasters and Resilience in Asia. Elsevier, New York.
3. Rahman A, Khan AN, Shaw R. 2015. Disaster Risk Reduction Approaches in Pakistan. Springer, Tokyo
5. UNISDR. (2009). Global Assessment Report on Disaster Risk Reduction, United Nations International Strategy for Disaster Reduction.
6. Comprehensive Risk Assessment for Natural Hazards. World Meteorological Organization 2006.
7. P.A. Burrough (1986), Principles of Geographical Information Systems for Land Resources Assessment, Oxford Science Publications.
8. W. N. Carter (1999) Disaster Management: Disaster Manager's Handbook, Manila: Asian Development Bank.