



**Savitribai Phule Pune University
Department of Defence and Strategic Studies**

**Post Graduate Diploma In
Disaster Management and National Security
(Semester & Credit System)**

Syllabus

Website: <http://ddss.unipune.ac.in>

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Semester I

Course No	Course Title	Course Credit	Total Marks
DMNS 1.1	National Security	4	100
DMNS 1.2	Understanding Natural And Manmade Disasters	4	100
DMNS 1.3	Risk Assessments, Vulnerability & Preparedness Analysis	4	100
DMNS 1.4	Research Methodology	4	100

Semester II

Course No	Course Title	Course Credit	Total Marks
DMNS 2.1	Disaster Management, Indian Armed Forces & State Mechanism	4	100
DMNS 2.2	Disaster Management: Planning, Reconstruction And Recovery	4	100
DMNS 2.3	Post Disaster Psychological Issues	4	100
DMNS 2.4	Dissertation	4	100

Summary

Semester	Credits	Marks
Semester I	16	400
Semester II	16	400
Total	32	800

DMNS 1.1 National Security

This course focuses on the National Security in the context of Disaster Management. The purpose is to give comprehensive knowledge about changing nature of security and security discourses have change in post-cold war globalized world. Disasters are becoming the constituent unit of national security.

1. Evolution And Conceptual Framework Of Traditional And Non-Traditional Security
2. India's National Security Challenges : Internal And External
3. Disaster Security As Element Of National Security
4. India And Contemporary World In The Context Of Disaster Management
5. India's Internal & External Security Mechanism
6. India And International Agreements, Conventions
7. India And Its Neighbours: Strategic Challenges
8. India's National Security Strategy :Cyber And Web Espionage
9. Environmental security

References:

- Caballero-Anthony, Mely (2016), *An Introduction to Non-Traditional Security Studies: A Transnational Approach*, London: Sage.
- Dadwa, Shebonti Ray, Uttam Kumar Sinha (2015), *Non-Traditional Security Challenges in Asia: Approaches and Responses*, Routledge: New Delhi.
- Floyd, Rita, Richard A. Matthew (eds.) (2013), *Environmental Security: Approaches and Issues*, London: Routledge.
- Frey, Karsten (2007), *India's Nuclear Bomb and National Security*, London: Routledge.
- Ganguly, Sumit, Manjeet Pardesi (2018), *The Oxford Handbook of India's National Security*, India: Oxford University Press.
- Khare, Vijay (2005), *Dr. B.R Ambedkar and India's national Security*, New Delhi: Kilaso.
- Kirshner, Jonathan (eds.) (2006), *Globalization and National Security*, London: Routledge.
- Paranjpe, Shrikant (2013), *India's strategic culture: the Making of National Security Policy* New Delhi: Routledge.
- Silva, Eugenie de (2016), *National Security and Counterintelligence in the Era of Cyber Espionage*, US: IGI Global.
- Shaw, Rajib (eds.) (2009), *Disaster Management: Global challenges and local solutions*. Universities Press.

Websites

- The National Institute of Disaster Management (NIDM) < <http://nidm.gov.in/default.asp>>
- National Disaster Management Authority (India) < <http://www.ndma.gov.in/en/>>
- United Nations International Strategy for Disaster Reduction< <https://www.unisdr.org>>

DMNS 1.2 Understanding Natural And Manmade Disasters

This Course focuses on natural and manmade disasters; this course is divided in two Sections. First section gives comprehensive knowledge of natural disasters and its impact of human life. Second section gives comprehensive knowledge of man-made disasters its origin and impact on human life.

A) Natural Disasters

1. Understanding Natural Disasters
2. Understanding Disaster Management
3. Type Of Natural Disasters: Agricultural Related Disasters And Pest Endemic Emergency ,Drought, Flood, Cyclone, Earthquakes, Landslides Avalanches, Volcanic Eruptions, tsunami, Heat And Cold Waves And Climate Change

B) Manmade disasters

1. Understanding Man-Made Disasters
2. CBRN Disasters (Role of Armed Forces)
3. War and Peace related Disasters
4. Fire related Disasters
5. Pollution related Disasters
6. Accidents related Disasters

References

- Alexander, David (1993), *Natural Disasters*, New York: Routledge.
- Blaikie, Piers (et al.) (2003), *At risk: natural hazards, people's vulnerability and disasters*, New York: Routledge.
- Chepman, Devid M. (1999), *National Hazards*, New York: Oxford University Press.
- Greenberg, Michael I. (2006), *Encyclopaedia of Terrorist, Natural & Man-Made: Disasters*, United Kingdom: Jones and Bartlett Publishers, Inc.
- Gregory, V. Button & Mark Schreller (2016), *Contextualizing Disasters*, New York: Oxford University Press.
- Kapur, Anu (2003), *Disasters in India: Studies of Grim Reality*, New Delhi: Rawat Publication.
- Pelling, Mark (2003), *The Vulnerability Of Cities: Natural Disasters And Social Resilience*, London: Earth scan.
- Roy, Thrthankar (2012), *Natural Disasters and Indian History*, Oxford: Oxford University Press.
- Turner, B. (1978), *Man-Made Disasters*, London: Wykeham.

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- The National Institute of Disaster Management (NIDM) < <http://nidm.gov.in/default.asp>>
- National Disaster Management Authority (India) < <http://www.ndma.gov.in/en/>>
- United Nations International Strategy for Disaster Reduction< <https://www.unisdr.org>>

DMNS 1.3 Risk Assessments, Vulnerability & Preparedness Analysis

This course focuses on analysis of Risk and vulnerability. Motto is to equip student in understanding the vulnerability of particular area whether it is village, city, metropolitan area or state. Student should be able to comprehend the why, how and when (possibility) of disaster incident.

1. Hazard, Risk, Vulnerability and Disaster Preparedness: Conceptual Framework
2. Risk: Assessment & Analysis
3. Vulnerability: Natural, Social & Economical
4. Resource Analyses and Mobilisation;
5. Preparation of Disasters Management Plan: City, Institution & Relief Camp
6. Prevention, Preparedness & Mitigation of Disasters: Natural & Manmade.
7. Disaster Preparedness Plan: National, State, Districts and Community Based Disaster Preparedness Planning ;Urban and Rural Preparedness approaches
8. Risk Assessment And Reduction During Festival And Rallies
9. Risk associated with fire
10. Fire Science And Training :
 - a. Fundamental Of Fire Science
 - b. Industrial Fire And Safety
 - c. Fire Safety And Hazards Management
 - d. Environmental Safety
 - e. Safety Of People In The Event Of Fire
 - f. Fire Risk Assessment
 - g. Fire Control Technology

Reference

- Greenberg, Michael I. (2006), *Encyclopaedia of Terrorist, Natural & Man-Made: Disasters*, United Kingdom: Jones & Bartlett.
- Masellis, Michele, and S. William A. Gunn (Eds.) (2012), *The Management Of Burns And Fire Disasters: Perspectives 2000*, Netherland: Springer Science & Business Media.
- Marathe, P. P. (2006), *Concepts and practices in disaster management*, Pune: Diamond Publications.
- Moral, Roger del & Lawrence R. Walker (2007), *Environmental Disasters, Natural Recovery and Human Responses*, UK: Cambridge University Press.
- Pelling, Mark (2003), *Vulnerability of Cities: Natural Disasters and Social Resilience*, London: Earth scan.
- Parasuraman, S. (2000), *India Disaster Report towards Policy Initiative*, New York: Oxford University Press.

Shaw, Rajib (Eds.) (2009), *Disaster Management: Global challenges and local solutions*. Universities Press.

Singh, R. B. (2006), *Natural Hazards And Disaster Management: Vulnerability And Mitigation* Jaipur: Rawat publications.

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National Disaster Management Authority (India) < <http://www.ndma.gov.in/en/>>

United Nations International Strategy for Disaster Reduction < <https://www.unisdr.org>>

DMNS 1.4: Research Methodology

Objectives:

1. To acquaint the students with the basic concepts of research methodology.
2. To develop the spirit of scientific inquiry in context of social era in the students.
3. To help students understand the basic steps in social scientific research.
4. To enable the students to undertake an independent small-scale research project.

1 SCIENTIFIC RESEARCH

- 1.1. Developing ideas for research: Cultural context, personal experience, literature, internet
- 1.2. Characteristics of the scientific method
- 1.3. Goals of research
- 1.4. Types of scientific research: Pure vs. applied., descriptive vs. analytical, quantitative vs. qualitative, conceptual vs. empirical
- 1.5 Research approaches: Experimental, inferential, and simulation

2 INTRODUCTIONS TO SOCIAL SCIENCE RESEARCH

- 2.1. Nature of Social Science research and Humanities
- 2.2. History of Social Science and Branches of Social Science
- 2.3. Relevance of Social Science in understanding and solving contemporary issues
- 2.4. Interdisciplinary and Multidisciplinary approaches in Social Science.

3 BASIC RESEARCH CONCEPTS

- 3.1. To construct a research problem
- 3.2. Construction and types of Hypothesis
- 3.3. Variables
- 3.4. Ethical issues in social science research

4 METHODS AND DESIGN OF RESEARCH

- 4.1. Types of Research Design: Qualitative and Quantitative.
- 4.2. Research Design: Definition and steps of research design
- 4.3 .Types of research design

5. METHODS OF DATA COLLECTION

- 5.1. Definition and Nature of Data Collection
- 5.2. Observation
- 5.3. Questionnaires and mail surveys
- 5.4. Personal Interview and Telephonic interview
- 5.5. Surveys : Field Survey and Internet Survey
- 5.6 Case Study

REFERENCES:

- Bose, Pradeep Kumar (1995), *Research Methodology: Atrand*, New Delhi: ICSSa.
- Brayman, Alan (1988), *Quality and Quantity in Social Research*, London: Unwin Hyman.
- Goode, W.J. & P.K. Hatt (1952), *Methods in social research*, New York, US: McGraw-Hill.
- Hugues, John (1987), *The philosophy of Social Research*, London: Longman.
- Mukharjee, P. N. (2000), *Methodology in Social Research*, New Delhi: Sage.
- Olsen, Wendy (2012), *Data Collection: Key Debates and Methods in Social Research*, London: Sage.
- Punch, Keith (1986), *Introduction of Social Research*, London: Sage.
- Ranjit Kumar (2006), *Research methodology: A step-by-step guide for beginners*, N.D.: Pearson Education.

DMNS 2.1 Disaster Management , Indian Armed Forces & State

Mechanism

This course is focuses on functioning of state mechanism. In India, government is the primary respondent to disastrous situation. It is vary crucial to study the sate mechanism and its functional unit. The course will give detail information about functioning of the disasters management institution mechanism at: District, State and National Level.

1. Disaster Management Policy Framework of Government of India: Act and Its Implications
2. Disaster Management Institutional Structure: National, State and Local
3. NDMA & NDRF: Organisational, Structure, Role and Responsibility in Disaster Management
4. Incident Response System, Emergency Operation Centre and Emergency Support Functions; Role Geographical Information System in Disaster Management
5. Disaster Response: Police and Other Forces, civil societies ,Training and coordination for efficient Disaster Management Disaster Preparedness:
6. Evolution of Role Indian Armed Force in Disaster Management
7. Role, Capability & Responsibilities: Police, Para-Military Forces & Central Armed Police Forces.
8. Logistics Management and Financial Arrangements
9. Indian Armed Forces and International Disaster Management Cooperation and Coordination Mechanism
10. Role of International Agencies, Non-Governmental Organisations, Community Based Organisations, Community, and Media

Reference

- Dave, R. K. (eds.) (2007), *Disaster Management in India: Challenges and Strategies*, London: Taylor & Francis.
- Gautam, Siddhartha (et. al.) (2012), *Disaster management: Programmes and policies*, New Delhi: Vista International Publishing House.
- Ghanekar V. V. (2007), *Disaster Management Act and Management*, Pune: Institute of Rural Development and Education.
- Kirschenbaum, Alan, (eds.) (2003), *Chaos Organization And Disaster Management*, CRC Press.
- Kapucu, Naim and Kuotsai Tom Liou (eds.) (2014), *Disaster and Development: Examining Global Issues and Cases*, Switzerland: Springer.
- Minear, L. and T. Weiss, (1992), *Humanitarian Principles and Operational Dilemmas in War Zones*, *Disaster Management Training Programme*, Geneva: United Nations Development Programme.
- Pal, Indrajit and Tuhin Ghosh (2018), *Natural Hazards Management in Asia*, Sage: New Delhi.
- Shrader-Frechette, K, (1991), "Ethical Dilemmas and Radioactive Waste: A Survey of Issues", *Environmental Ethics*, 13, 327-343.

Website

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- National Disaster Management Authority (India) < <http://www.ndma.gov.in/en/>>
- United Nations International Strategy for Disaster Reduction< <https://www.unisdr.org>>
- United Nations International Strategy for Disaster Reduction<<https://www.unisdr.org/>>
- UNISDR strategic framework 2016-2021 < <http://www.unisdr.org/we/inform/publications/51557>>

DMNS2.2 Disaster Management: Planning, Reconstruction and Recovery

This course essentially focuses on Post Disaster Activities. Student will learn about Reconstruction and Recovery of people and region. Course designed to build Comprehensive approaches of student to bring normalcy in life of affected people

1. Fundamentals of Disaster Management Planning
2. Concept of Response to Disasters
 - a. Monitoring process
 - b. Evacuation procedures under different contingencies
 - c. Organizing Search and Rescue and Concepts
 - d. Organizing EOC and IRS during Response
3. Relief, Rehabilitation and Reconstruction (Compensation, Economic Restoration)
4. Role of NGOs and Community
5. Preparation of Disaster Management Plan :
6. Reconstruction and Rehabilitation.
7. Damage Assessment
8. Role of Various Agencies in Reconstruction and Rehabilitation
9. Development of Physical, Economic and Social Infrastructure
10. Community based approaches for disasters resilient response

Reference

Bissell, Rick, Steven Jensen, Shirley Feldman-Jensen (2013), *Preparedness and Response for Catastrophic Disasters*, U.S.: Taylor & Francis.

Bruce W. Clements (2009), *Disasters and Public Health: Planning and Response*, U.K.: Elsevier.

Chan, Emily Ying Yang (2017), *Public Health Humanitarian Responses to Natural Disasters*, New York: Routledge.

Coppola, Damon P. Introduction to International Disaster Management, U.K.: Elsevier.

Cuny, F. C. (1983), *Disaster and Development*, New York: Oxford University Press.

Dasgupta, Rajdeep (2007), *Disaster management and rehabilitation*, New Delhi: Mittal publications.

Fischer, Henry W. (1998), *Response to Disaster: Fact Versus Fiction & Its Perpetuation : the Sociology of disaster*, Lahman: University Press of America.

Siddhartha Gautam, K Leelakrishna Rao and N Jagannatha Murthy (2012), *Disaster management: Programmes and policies*, New Delhi: Vista International Publishing House.

Shaw, Rajib (2015), *Recovery from the Indian Ocean Tsunami: A Ten-Year Journey*, London: Springer.

Websites

The National Institute of Disaster Management (NIDM) < <http://nidm.gov.in/default.asp>>

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United Nations International Strategy for Disaster Reduction< <https://www.unisdr.org>>

DMNS 2.3 Post Disaster Psychological Issues

Psychological research has shown that disasters can cause serious mental health Problems for disaster victims. Objectives of course is to

1. To educate about post traumatic disorders
2. To aware about psychological wellbeing
3. To study coping strategies for post disaster psychological management.

1. Psychological Wellbeing
 - a. Nature And Definition Of Psychological Wellbeing
 - b. Types Of Wellbeing
 - c. Awareness Of Psychological Wellbeing
2. Stress
 - a. Nature Of Stress
 - b. Types Of Stress
 - c. Theories Of Stress
3. Psycho-Social Aspect Of Disaster Management
 - a. Nature Of Psychological And Social Response To Disaster
 - b. Trauma And Stress Related Disorders
 - c. Social Awareness About Disaster Management
4. Coping With Disaster Management
 - a. Stress Management
 - b. Treatment And Therapies
 - c. Psychological Rehabilitation And Reconstruction And Recovery

References:

- Arora, Rajesh And Preeti Arora (eds.) (2013), *Disaster Management: Medical Preparedness, Response and Homeland Security*, U.K.: CAB International.
- Gist, Richard, Bernard Lubin (1999), *Response to Disaster: Psychosocial, Community, and Ecological Approaches*, London: Routledge.
- Miller, Joshua L. (2012), *Psychsocial Capacity Building in Response to Disasters*, New York: Columbia University Press.
- Reyes, Gilbert and Gerard A. Jawabos (2006), *Handbook of International Disaster Psychology*, Praeger: U. K.
- Sarason, I.G. and Sarason, B.R. (2011), *Abnormal Psychology: The problems of maladaptive behaviour*, New Delhi: Pearson Edu.
- Ursanu, Robert J. (et. all) (2017), *Textbook of Disaster Psychiatry*, 2nd edition, U.K.: Cambridge University Press.
- Satapathy S. (2009), *Psychosocial care in Disaster management, A training of trainers manual (ToT)*, NIDM Publication.

DMNS 2.4 Dissertation

Students are advised to select their topic in consultation with their guide. Dissertation will evaluate by expert in concern field and marks will be given by the quality of research work. Dissertation may be published in Book form without permission of students. It will be the copy right and property of Department of Defence and Strategic Studies and University of Pune.

Format of Submission:

- (a) Students are required to submit TWO Copies of the dissertation, duly typed and bound.
- (b) Use A4 size paper and use Times New Roman script with 12 font size and one and a half spacing for lines.

Evaluation

1. The evaluation shall be done by the Internal Examiner (Guide) and one External Examiner from within the Department. (Evaluation done in a combined manner for 50 marks)
2. Students would have to make a presentation in the Department. (Evaluation done by the Guide and the External Examiner who evaluates the written report in a combined manner for 20 marks)
3. Evaluation: Dissertation: 80 marks. 20 Marks: Viva – Total: 100 marks.