

New Course

Health and Disasters

Semester -I: July – December

Coordinator	Dr Nikunj Makwana
Credits	4 Credits
Lecturers	Dr Nikunj Makwana
Level	M.A.
Host institution	Special Centre for Disaster Research (SCDR), Jawaharlal Nehru University, New Delhi
Course duration	One Semester [July - December]

Summary

This one full semester elective course provides the Master level students of Disaster Studies the basic understanding of human life and human health in the event of any emergency or disaster. Besides, it will also introduce students to the new frameworks for research and operations across the world for health in emergencies and disasters. The course will touch upon the evidences developed in the recent to emphasize on human centric disaster management. The course includes individual assignments.

Target Student Audiences

Semester - I Students of M.A.

Prerequisites

- Nil

Aims and Objectives

This course has been designed with a view to help students in developing a comprehensive understanding and knowledge of importance of integrating human health and emergencies and disasters. The main objectives of the course are: (i) to help students in understanding interactive impact of health on various aspects of disaster management; (ii) to comprehend role of health in emergencies and disasters; and (iii) to identify, formulate and handle questions relevant for disasters and health. The course provides health perspective, that will help the students to reduce disaster risks and contribute to better and more targeted health-based response following disasters.



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General Learning Outcomes:

By the end of the course, students will successfully:

- Understand the disaster risk related health issues and their impacts,
- Learn and appreciate importance of human health and much needed disaster risk reduction and planning,
- Identify and visualize health-based response following variety of disaster scenarios..

Overview of Sessions and Teaching Methods

The course will be delivered through interactive approach of discussions and learning from text books and referring the original research papers as well as review papers to understand the subject, the way it is. The interactive sessions supported by case studies, videos, external links and exercises. It also refers to the latest publications for understanding the trend in the given discipline and its applications. Whenever possible other teaching methods will be adopted and practical sessions, field trips and other organizational visits will be arranged to enhance the learning experience.

Course Workload

The table below summarizes course workload distribution:

Activities	Learning outcomes	Assessment	Estimated workload (hours)	Self-Study (hours)
In-class activities				
Lectures and Presentations	Prioritizing health services; Supporting national and local health systems - Coordination; Primary Healthcare services; Clinical Services; Health Information System Human resources; Financial management for humanitarian response; Monitoring and evaluating the systems; Evaluation of disaster Programs and Projects in health system.	Mid Semester Examination	06	06
Lectures and Presentations	Resilient Health Systems and Infrastructure; Planning Emergency Health services; Triage; Mass casualty management; Emergency medical care; Mass event with long-term major implications; Mass event of immediate, limited implication; Intermediate events causing temporary displacement; Mass event long term displacement; Managing essential drug supplies; Post-emergency phase; Hospital Safety;	Mid Semester Examination	08	08



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	Hospital Preparedness; Prehospital emergency management system.			
Lectures and Presentations	Stressors, protective factors, and mental health disorder in emergencies and disasters; General measures and psychosocial support; Risk factors and intervention strategies; Post Traumatic Stress Disorder; Psychological First Aid (PFA); Disaster Mental Health Counselling; Managing stress and well-being	Mid Semester Examination	06	06
Lectures and Presentations	Communicable diseases as public health threats; Principles of communicable disease control; General approach for setting up disease control programmes; Major disease in emergency and non-emergency settings; Diseases from the animal sector and other emerging diseases; Monitoring, evaluation and research for disease control programmes	End Semester Examination	08	08
Lectures and Presentations	Diseases related to water, sanitation and hygiene; Community involvement in disease prevention and mitigation; Improving environmental conditions; Excreta disposal; Water quantity and Water quality; Hygiene and Food safety; Vector borne diseases control; Solid waste management; Drainage Lineation; Water and sanitation in cholera outbreak response; Planning guidelines for institutions.		06	06
Lectures and Presentations	Understanding Disaster Health; Health consequences/implications of Disaster; Health Emergency and Disaster Risk Management Framework; Emergency Medical Preparedness and Response in Disasters - Delivery of emergency medical services in disasters and Hospital level disaster management;	End Semester Examination	06	06
Lectures and Presentations	Health in International DRR Frameworks, Health related vulnerability and rehabilitation,	End Semester Examination	08	08



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	Human Resources for Health in Disasters, Health and Health-system related aspects of CBRNE disasters; Nutrition and food safety, Care of Road Traffic Injuries victims; The minimum initial services package (MISP) for SRH in Emergencies and Disasters; Maternal health and safe motherhood; Infant and young child feeding in emergencies.			
Independent work				
Individual Assignments	Field Trips and Skill development work	Individual Presentations	08	08
Total			56	56

Grading

The students' performance will be based on the following:

- Quizzes/Surprise Test – 10%
- Mid Semester Examination – 30%
- End Semester Examination – 50%
- Individual Assignments – 10%

Grade	Grade Point	FGPA	Class/Division
A+	9	8.5 and above	High First Class
A	8	7.5 and above but less than 8.5	Middle First Class
A-	7	6.5 and above but less than 7.5	Lower First Class
B+	6	5.5 and above but less than 6.5	High Second Class
B	5	4.5 and above but less than 5.5	Middle Second Class
B-	4	3.5 and above but less than 4.5	Lower Second Class
C+	3		
C	2		
C-	1		
F	0		

Course Schedule: **Semester-I: July - December**

Course Assignments

The Structure of Individual Assignments will be as follows:

- Field visit report.
- Review of research articles/working paper with given objectives.

Literature

- International Federation of Red Cross and Red Crescent Societies, 1997. Handbook for Delegates.
- UNICEF. Assisting in Emergencies: A resource handbook for UNICEF field staff. Prepared by Ron Ockwell, 1986.
- The Johns Hopkins, Red Cross and Red Crescent "Public Health Guide in Emergencies" Second Edition (2008), International Federation of Red Cross and Red Crescent Societies, Switzerland
- Clements, B. W., & Casani, J. (2016). Disasters and public health: planning and response. Butterworth-Heinemann. (Book)
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- Landesman, L. Y. (2005). Public health management of disasters: the practice guide. American public health association. (Book)
- Diaz, J. O. P., Murthy, R. S., & Lakshminarayana, R. (2006). Advances in disaster mental health and psychological support. Voluntary Health Association of India Press. New Delhi India.
- Park, K. (2019). Park's textbook of preventive and social medicine (Selected Chapters e.g. 1,2,3,15)
- Pan American Health Organization. (2000). Natural disasters: protecting the public's health (Vol. 575). Pan American Health Org.
- Mainstreaming Disaster Risk Reduction into Health: Strategies, Methodologies & Tools. NIDM and UNDP. Accessible at <https://nidm.gov.in/pdf/pubs/DRR-health.pdf>
- NDMA (National Disaster Management Authority) (2007) National Disaster Management Guidelines Chemical Disasters (Industrial). Govt. of India.
- HOSPITAL DISASTER MANAGEMENT GUIDELINES DIRECTORATE OF HEALTH SERVICES, KERALA available at http://dhs.kerala.gov.in/pdf2018/hdmg_18082018.pdf
- Health Emergency and Disaster Risk Management Framework, ISBN 978-92-4-151618-1, World Health Organization 2019
- Book Chapter 'Public Health Aspects of Disaster Management' by Ashok K. Jindal, Puja Dudeja. Text Book of Public Health and Community Medicine, AFMC Pune 2009.
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- Becker, S. M. (2007). Psychosocial care for adult and child survivors of the tsunami disaster in India. Journal of child and adolescent psychiatric nursing, 20(3), 148-155.
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- Book Chapter 'Disaster Management'. Park, K. (2015). Park's textbook of preventive and social medicine.
- Khankeh, H. R., Khorasani-Zavareh, D., Johanson, E., Mohammadi, R., Ahmadi, F., & Mohammadi, R. (2011). Disaster health-related challenges and requirements: a grounded theory study in Iran. *Prehospital and disaster medicine*, 26(3), 151-158.
- Kouadio, I. K., Aljunid, S., Kamigaki, T., Hammad, K., & Oshitani, H. (2012). Infectious diseases following natural disasters: prevention and control measures. *Expert review of anti-infective therapy*, 10(1), 95-104.
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- Chandra, H., Pandey, A., Trivedi, S., Sharma, S., Bharadwaj, N., & Masih, L. (2016). Medical preparedness for natural disasters in India. (Chapter 12) *Planning for Community-based Disaster Resilience Worldwide: Learning from Case Studies in Six Continents*, 206. (Book Chapter)
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