

POST GRADUATE DIPLOMA PROGRAMME

DISASTER MANAGEMENT (PGDDM)

Applicable to the Candidates from 2022-2023 Onwards

OVERVIEW OF THE PROGRAMME

This programme will serve to train professionals who are able to critically and holistically evaluate the dynamics, processes and systems that come into play during disasters and skill fullyplan, intervene and evaluate disaster management activities. These professionals will, thus, contribute to making India aware of its vulnerabilities and engender a culture of prevention, preparedness and safety.

PROGRAMME OBJECTIVES

- Prepare students to think about the causes of the disasters and the vulnerability, analyse models of disasters, planning for different groups.
- Prepare the students for disaster communication during and after disasters.
- Prepare students for emergency planning and services, crisis communication and intervention, relief groups, infectious disease management, and risk analysis.
- Equip students with the most updated theories, knowledge and skills to make themcompetent disaster management worker in their working environment
- Prepare the students committed to make significant contributions to the field of professional approach to disaster management.

PROGRAMME OUTCOMES

Critical Thinking: Acquire, condense and critically evaluate scholarly arguments, the assumptions behind them, and their theoretical and empirical components.

Problem Solving: Acquire the ability to define a problem, generate alternate solution, evaluate and select an alternative and implement follow up on the solution.

Effective Communication: Listen, read, comprehend, speak and write clearly and effectively in person and through electronic media in English/regional language/language of the discipline and exhibit sound domain knowledge including theories, concepts and terminologies.

Self-directed and Life-long Learning: Acquire the ability to engage in independent and life-long learning in the broadest context of socio- technological changes. Integrate academic knowledge with practical skills and transfer such knowledge/skills to other domains of one's life and work.

Responsible Citizenship: Demonstrate empathetic social concern, and the ability to act with an informed awareness of issues. Learners understand and respect diversity and difference, devoid of any prejudice by gender, age, caste, religion or nationality. Learners promote sustainable development practices.

Scientific Temper: Inculcate scientific temper among students which would lead to creation of new knowledge.

Ethics: Understand different value systems including one's own, as also the moral dimensions of actions, and accept responsibility for it.

PROGRAMME SPECIFIC OUTCOMES (PGDDM)

The programme endeavours to produce thinking, feeling and acting professionals. It hopes to enhance the knowledge, analytical ability, emotional acumen and practice skills of the student. Upon successful completion of the **Post graduate diploma programme in Disaster Management (PGDDM)** the students are able to:

1. **Disaster Management Basics:** Acquire a comprehensive understanding of disasters and the field of disaster management.
2. **Analysis for Disaster Management:** Understand, analyse and evaluate the relationship of disasters with development, vulnerability, environment, socio-political and economic factors.
3. **Disaster Management Specific Skills:** Transform into leaders who are socially committed, emotionally balanced, competent, creative and contributing disaster management professionals.

Sem	Course Code	Title of the Paper	Credit per course	Inst. Hrs/ Wk	Exam Hours	Marks CIA U.E		Total
I	PGDDM1	Introduction to Disasters and Disaster Management	4	6	3	25	75	100
	PGDDM2	Disaster Vulnerability and Risk Assessment	4	6	3	25	75	100
	PGDDM3	Social Hazards and Environmental Hazards	4	6	3	25	75	100
	PGDDM4	Research Methodology	4	6	3	25	75	100
	PGDDM5	First-Aid and Psycho-Social Care for Disaster Survivors	2	3	3	100	-	100
II		Total	18					
	PGDDM6	Pandemic, Preparedness and Response	4	6	3	25	75	100
	PGDDM7	Disaster Health Management	4	6	3	25	75	100
	PGDDM8	Disaster Resilience Building and Self-Care Skills for Disaster Workers	4	6	3	25	75	100
	PGDDM9	Disaster Vulnerability and Sustainable Management	4	6	3	25	75	100
	PGDDM10	Geo-Informatics and Application in Disasters	2	3	3	25	75	100
	PGDDM11	Research Project Work Dissertation Viva Voce	4			75 25		100
		Total	22		-	-		
		Grand total	40					1100

PGDDM1- INTRODUCTION TO DISASTERS AND DISASTER MANAGEMENT

Course Aim:

The aim of the course is Understand the nature and impact of disasters, globally and in India. Describe the concepts, terminologies, developments and prospects in the field of Disaster Management. Analyze and evaluate the policy and administrative processes involved in Disaster Management

Course outcome: at the end of the course the students would be able to :

CO1	Understand the introduction of disasters , classification ,and it's impacts	L1; L2
CO2	Understand the disaster management Relief, Recovery Management.	L2; L3: L4
CO3	Analyze the disaster policy national & international	L3; L5
CO4	Disaster administration process and plan evaluation	L2; L4
CO5	Disaster risk mitigation process and management bodies.	L4; L6
L1-Remember ; L2- Understand; L3- Apply; L4-Analyze; L5- Evaluate; L6 create		

Pedagogical Methods Adopted:

Lectures, Blended Learning, Flipped Learning, Online Learning, PPT, Discussion, Small Group Exercises, Brain Storming, Assignment, Seminar, Invited Talks / Guest Lectures / Webinars/ Experiential Learning, Participative Learning, Simulated Learning, Peer Group Learning, Facilitated Learning, etc.

COURSE CONTENT

UNIT – I: Introduction to Disasters

Disasters: Concepts, and definitions (Hazard, Vulnerability, Risk, Disaster) -
Classification: Natural (Geological, Meteorological, Hydrological, Climatological,

Biological, Extra-terrestrial) - Man-made- Technological (Industrial and Transport Accidents) - Miscellaneous Accidents and Terrorism - Impacts (including social, economic, political, environmental, health, psychosocial, etc.) - Differential impacts: caste, class, gender, age, location, disability - Global trends in disasters: urban disasters, pandemics, complex emergencies, climate change. Disaster profile of India.

UNIT – II: Introduction to Disaster Management

Definitions - History and Relevance - Resilience Building - Disaster cycle: Risk Management- Risk identification, risk reduction (planning, prevention, mitigation, preparedness), risk transfer - Crisis Management- Response (Search and Rescue), Relief, Recovery and Reconstruction - Multi-disciplinary character of Disaster Management.

UNIT – III: Disaster Policy

The International Decade for Natural Disaster Reduction - Yokohama Declaration - United Nations International Strategy for Disaster Risk Reduction (UNISDR) - Hyogo Framework for Action (HFA) - Sendai Framework and Action Plan - IDRL Guidelines - Sphere standards - Disaster Policy (National Policy on Disaster Management) - Disaster Management Act 2005. National Disaster Management Plan 2019.

UNIT – IV: Disaster Administration

- United Nations and its Disaster Management Mechanism - UNDP, UNDRR, WHO - Disaster Administration in India: Disaster Management Authority at National, State and District levels
- Allied governmental bodies, institutions and mechanisms/resources for Disaster Management
 - State and National Disaster Mitigation Funds - Gaps in Disaster Policy and

Administration.

UNIT – V: Approaches to Disaster Risk Reduction

Roles and responsibilities of different stakeholders - Community, Panchayati Raj Institutions/Urban Local Bodies (PRIs/ULBs) - State and Centre - Task forces and Emergency response teams - Warning Systems and allied Disaster Management bodies - Media, Fire Services, Para-military, Armed forces - Health Department, Communication, Insurance, Civil Society - International NGOs, National and Local NGOs - Volunteers and youth groups.

References

1. Alexander, D. (2000). Introduction in 'Confronting Catastrophe', Oxford University Press.
2. Andharia, J. (2008). Vulnerability in Disaster Discourse, JTCDM, Tata Institute of Social Sciences Working Paper no. 8.
3. Blaikie, P., Cannon, T., Davis, I., Wisner, B. (1997). At Risk Natural Hazards, Peoples' Vulnerability and Disasters. Routledge.
4. Carter, N. (1991). Disaster Management: A Disaster Manager's Handbook. Manila Philippines: Asian Development Bank
5. Damon, Coppola P. (2007). Introduction to International Disaster
6. Management. Cuny, F. 1983. Development and Disasters. Oxford Press.
7. GoI. 2005. Disaster Management Act. New Delhi: Government of India (GoI)
7. GoI. 2009. National Disaster Management Policy. New Delhi: Government of India (GoI)
8. IFRC. (2005). World Disaster Report: Focus on Information in Disaster, pp. 182-225 Indian Journal of Social Work 2002. Special Issue on Psychosocial Aspects of Disasters, Volume 63, Issue 2, April.
9. Kapur, Anu. (2010). Vulnerable India: A Geographical Study of Disasters. New Delhi: IIA Sand Sage Publishers.

10. Kapur, Anu et. al. (2005). Disasters in India Studies of grim reality. Jaipur: Rawat Publishers. NDMA. (2019). National Disaster Management Plan, NDMA: New Delhi.
11. NDMA. (2019). National Disaster Management Plan, NDMA: New Delhi
12. S. Parasuraman and Unnikrishnan. (2013). India Disasters Report, Volume 1 & 2. OUP.
13. UNISDR. (2002). Natural Disasters and Sustainable Development: Understanding the links between Development, Environment and Natural Disasters, Background Paper No. 5.

Mapping with programme outcomes										
COS	Programme outcomes					Programme specific outcomes				
	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	2	2	3	3	3	3	3	2	3	2
CO2	3	3	3	3	3	3	3	3	3	2
CO3	2	3	2	3	2	2	3	2	3	1
CO4	3	1	2	2	3	1	3	2	2	3
CO5	2	3	2	3	2	3	1	2	3	2

1-Low, 2-Medium, 3-Strong

PGDDM2 - DISASTER VULNERABILITY AND RISKASSESSMENT

Course Aim:

The aim of the course is to understand the concepts of various Risk Concepts and Risk Assessment. To learn techniques and process Risk Assessment and Reduction. To study The Strategic Planning for Vulnerability Reduction. To study the policies and approaches related to Risk Assessment.

Course outcome: at the end of the course the students would be able to :

CO1	Introduction to Risk Evaluation; Fundamentals and methodologies for risk analysis, assessment, evaluation and Management	L1;L2
CO2	Role of science and technology in Disaster Risk Reduction –Strategies of Risk reduction, International Mobilization of Risk Reduction.	L2;L3
CO3	Vulnerability in terms of social factors and economic factors – Vulnerability to shanty settlements;	L4; L5
CO4	Training in Crisis Management, Systematic management and strategic planning for vulnerability reduction.	L5; L4
CO5	National and International disaster recovery policies and programs –Institutional Framework and Policies	L6
L1-Remember ; L2- Understand; L3- Apply; L4-Analyze; L5- Evaluate; L6 create		

Pedagogical Methods Adopted:

Lectures, Blended Learning, Flipped Learning, Online Learning, PPT, Discussion, Small Group Exercises, Brain Storming, Assignment , Seminar , Invited Talks / Guest Lectures / Webinars / Experiential Learning , Participative Learning , Simulated Learning , Peer Group Learning , Facilitated Learning, etc.

COURSE CONTENT

UNIT – I: Introduction to Risk Concepts

Risk Concepts – Elements of Risk – Perception of Risk – Acceptable Risk – Introduction to Risk Evaluation; Fundamentals and methodologies for risk analysis, assessment, evaluation and management – Definitions and Overview of risk and dangers – Assessment of risks for different disaster types, extreme event and environmental health risk, carcinogenic materials and environment.

UNIT – II: Risk Assessment and Reduction

Risk analysis techniques – Process of Risk Assessment – Analytical systems for risk assessment, natural hazard/risk assessment – Understanding climate risk - Mapping of risk assessment – Decision making for risk reduction – Problems in Risk Assessment – Participatory risk assessment – Rationale for people's participation – Role of civil society organizations – Impact of globalization – Activities and roles for the community action Risk reduction – Participatory risk assessment methods; Requirements in Risk assessment – Risk Reduction – Mainstreaming “Risk” – Role of science and technology in Disaster Risk Reduction – Strategies of Risk reduction, International Mobilization of Risk Reduction.

UNIT – III: Hazard Vulnerability

Observation and perception of vulnerability – Vulnerability Identification – Vulnerability types and dimensions – Vulnerability in terms of social factors and economic factors – Vulnerability to shanty settlements; Vulnerability in the city – Risk in Urban areas – Issues in urban planning – Initiatives for risk reduction in India.

UNIT – IV: Strategic Planning for Vulnerability Reduction

Data model for collection of information – Risk assessment applications for disaster mitigation and management problems – Training in Crisis Management – Physical

and Social infrastructure for vulnerability reduction – Interactive areas of vulnerability reduction and policy making – Hazard resistant designs and construction – Systematic management and strategic planning for vulnerability reduction.

UNIT – V: Policies and Approaches

Prevention and response mechanism – Emergency Management teams – National and International disaster recovery policies and programs – Institutional Framework and Policies.

REFERENCES;

1. Petak, W. J. and Atkisson, A. A. (2010), “Natural Hazard Risk Assessment and Public Policy: Anticipating and Unexpected”. Springer New York.
2. Wilson, R. and Crouch, A. C. (1987), “Risk assessment and comparisons: An Introduction” CRC Press Pvt. Ltd.
3. Blaikie, Piers et al. (1994). At risk: Natural hazards, people's vulnerability, and disasters. New York: Routledge
4. Cohen, C. and Werker, E. The Political Economy of “Natural” Disasters Charles Cohen Eric Werker. Working Paper 08-040. Harvard Business School. Retrieved from: <https://www.hbs.edu/faculty/Publication%20Files/08-040.pdf>
5. Freeman, H. M. (1989), “Standard Handbook of Hazardous Waste treatment and Disposal”, Tata McGraw Hill, New York.

Mapping with programme outcomes										
COS	Programme outcomes					Programme specific outcomes				
	P O 1	P O2	PO3	PO4	PO5	PSO 1	PSO 2	PSO3	PSO4	PSO5
CO1	2	2	3	3	3	3	3	2	3	2
CO2	3	3	3	3	3	3	3	3	3	2
CO3	2	3	2	3	2	2	3	2	3	1
CO4	3	1	2	2	3	1	3	2	2	3
CO5	2	3	2	3	2	3	1	2	3	2

1-Low, 2-Medium, 3-Strong

PGDDM3 - SOCIAL HAZARDS AND ENVIRONMENTAL HAZARDS

Course Aim:

The aim of the course is to learn about the basic concepts and meaning of Social Hazards and Environmental Hazards, to differentiate the Social Hazards and Environmental Hazards., focus on the various types of Social Hazards and Environmental Hazards, to focus on the Man-Made Disasters of Environment.

Course outcome: at the end of the course the students would be able to :

CO1	Concept of social hazard, water scarcity and sanitation	L1; L2
CO2	Understand the concepts related with poverty and gender	L2; L3
CO3	Understand the concepts of environmental hazards	L4
CO4	Classification of environmental hazards, glacial lake outburst floods.	L5
CO5	Role of GIS and remote sensing in surveillance, monitoring, risk assessment, estimation of losses and planning.	L6
L1-Remember; L2- Understand; L3- Apply; L4-Analyze; L5- Evaluate; L6 create		

Pedagogical Methods Adopted:

Lectures, Blended Learning, Flipped Learning, Online Learning, PPT, Discussion, Small Group Exercises, Brain Storming, Assignment, Seminar, Invited Talks / Guest Lectures / Webinars/ Experiential Learning, Participative Learning, Simulated Learning, Peer Group Learning, Facilitated Learning, etc.

COURSE CONTENT

UNIT – I: Introduction to Social Hazards

Concept and Meaning of Social Hazard - Force Migration, Development Induced Displacement – Capturing the enormity of the problem and the historical negligence – The impact on disadvantaged group and tribal population; Globalization, development and the impact on traditional water sources – Water scarcity and Sanitation: An incomplete paradigm in public health.

UNIT – II: Poverty and Gender

Conceptualizing poverty – Social, Political, Economic and Cultural forms of deprivations – The obscene inequalities between the rich and the poor and its reproduction – Ill health and diseases, random urbanization and slums, human trafficking etc. Gender: Social construction of gender and its public and private life – Gender specific impacts of both development and underdevelopment – Self-Help group, Women Empowerment programs: A radical approach.

UNIT – III: Introduction to Environment Hazards

Concept of Hazard, Disaster, Risk, Vulnerability, Exposure and Response – Distinction between natural hazards and anthropogenic environmental disturbances, Hybrid Hazards.

UNIT – IV: Environmental Hazards

Classification, Causes and Distribution – Geological Hazards: Earthquakes – a plate tectonic perspective and seismic zonation; Volcanoes – types and geographical distribution; Mass movement; Hydrological Hazards: Floods, Droughts, Water Contamination; Arsenic problem; Tsunami; Cyclones and Hurricanes; Cryosphere –

distribution, melting of snow, ice and ice- sheets, avalanches, Glacial Lake Outburst Floods (GLOF); Atmospheric/Climate Hazards: Extreme weather events, Cloud-bursts, Landslides; Lake or Dam break/breach; Global Climate change driven environmental hazards.

UNIT – V: Man-made Hazards

Biophysical Hazards: Frost Hazards in agriculture, epidemics, wildfires; Technological Hazards: Nature and significance; Modelling of Hazards: Hill slopes and landslides; Disasters and Hazard Management: Human and ecological impacts - Risk and vulnerability analysis – Role of GIS and remote sensing in surveillance, monitoring, risk assessment, estimation of losses and planning.

Reference:

1. Dreze, Jean, Amartya Sen and Athar Hussain. 1993. *Political Economy of Hunger*, New Delhi: Oxford University Press.
2. Bogumil, Terminski. 2015. *Development Induced Displacement and Resettlement: causes, consequences and socio-legal context*, Stuttgart, Germany: Ibidem Press.
3. Das, Madhuparna. 2011. *Water Scarcity and Gender Dynamics in a Slum in Delhi*, in *Indian Anthropologist*, Vol. 41, No. 2, pp. 91-98.
4. Downing, Theodore E. 2002. *Avoiding New Poverty: Mining-Induced Displacement And Resettlement*, International Institute for Environment and Development.
5. Falenda, Sudan K. 2009. *Encyclopedia of Environment and Development*, Serials Publication: New Delhi.

6. Gilbert, Alan and Josef Guglar. 1982. *Cities, Poverty and Development: Urbanization in the Third World*, New York, Delhi: Oxford University Press.
7. Gowdy, John and Aneel Salman. 2008. "Climate Change and Economic Development: A Pragmatic Approach", *The Pakistan Development Review*, Vol. 46, No. 4.
8. Held, David, Charles Roger and Eva-Maria Nag. 2013. *Climate Governance in the Developing World*, Cambridge: Polity.
9. Human Development Report. 2006. *Beyond scarcity: Power, Poverty and the Global Water Crisis*, New York: UNDP.
10. Jindra, Michael. 2014. "The Dilemma of Equality and Diversity", in *Current Anthropology*,
 12. Vol. 55, No. 3. 316-334.
13. Liping, Sun. 2009. "Societal Transition New Issues in the Field of the Sociology of Development", in *Polish Sociological Review*, No. 167, 329-349.
14. Mehta, Lyla. 2003. "Contexts and Constructions of Water Scarcity", *Economic and Political Weekly*, Vol. 38, No. 48, pp. 5066-5072.
15. Mohanty, Bidyut. 1993. *Urbanization in Developing Countries Basic Services and community Participation*, Institute of Social Science, Concept Publishing House.
16. Pieterse, Jan Nederveen. 1996. "The Development of Development Theory: Towards Critical Globalism", in *Review of International Political Economy*, Vol. 3, No. 4, pp. 541-564.

17. Shearer, Allan W. and David A. Mouat. 2009. "The Uncertainties of Regional Development and Their Possible Effects on Natural Resources Management", in Shearer et al. (ed), *Land Scenarios: The Environmental Consequences of Development*. London: CRC Press, 17-27.
18. Sinha, D. Sureshwar. 1999. "Parched earth and dying cities", *India International Centre Quarterly*, Vol. 26, No. 2, pp. 65-74.
19. Stein, M. 1998. "The Three Gorges: The unexamined toll of development-induced displacement". *Forced Migration Review*, Vol. 1:7-9.
20. Stillwaggon, Eileen. 1998. *Stunted Lives, Stagnant Economies: Poverty, Disease and Underdevelopment*, Rutgers University Press.
21. Streeten, Paul. 1970. "An Institutional Critique of Development Concepts", in *European Journal of Sociology*, Vol. 11, No. 1, 69-80.
22. Tanner, Tom and Leo Horn-Phathanothai. 2013. *Climate change and development*, London: Routledge.
23. Thanawala, Kishor. 1992. "Poverty and Development: Economics and Reality", *Review of Social Economy*, Vol. 50, No. 3. 258-268.
24. Yunus, Muhammad. 2008. *Creating a World without Poverty*, New York: Public Affairs.

Suggested Readings

25. Allen, S.K., Linsbauer, A., Randhawa, S.S., Huggel, C., Rana, P. and Kumari, A. 2016. Glacial lake outburst flood risk in Himachal Pradesh, India: an integrative and anticipatory approach considering current and future threats. *Natural Hazards*, 84: 1741-1763.

26. Barry, R. and Gan, T.Y. 2011. The Global Cryosphere: Past, Present And Future. Cambridge University Press.
27. Bartak, R., Page, D., Sandhu, C., Grischek, T., Saini, B., Mehrotra, I., Jain, C.K. and Ghosh,
28. N.C. 2015. Application of risk-based assessment and management to riverbank filtration sites in India. *Journal of Water and Health*, **13**: 174-189.
29. Bell, F.G. 2003. Geological Hazards: Their Assessment, Avoidance and Mitigation. CRC Press.
30. Bilham, R. 2004. Earthquakes in India and the Himalaya: tectonics, geodesy and history.
31. *Annals of GEOPHYSICS*, 47(2-3).
32. Blaikie, P., Cannon, T., Davis, I. and Wisner, B. 2014. At Risk: Natural Hazards, People's Vulnerability and Disasters. Routledge.
33. Burton, I. 1993. The Environment as Hazard. Guilford Press.
34. Margottini, C. and Casale, R. 2004. Natural disasters and sustainable development. Environmental Science Series, Springer.
35. Hewitt, K. 1997. Regions of Risk, Longman Press.
36. Henry J.G. and Heinke, G.W. 2004, Environmental Science and engineering, Pearson education, Delhi, India.
37. Shroder, J. & Wyss, M. (eds). 2014. Earthquake Hazard, Risk and Disasters (1st Edition). Elsevier.

38. Smith, K. 2003. Environmental Hazards: Assessing Risk and Reducing Disaster. Routledge.
39. Watts, M. 2017. On the poverty of theory: natural hazards research in context. In Environment (pp. 57-88), Routledge.

Mapping with programme outcomes										
COS	Programme outcomes					Programme specific outcomes				
	P O 1	P O2	PO3	PO4	PO5	PSO 1	PSO 2	PSO3	PSO4	PSO5
CO1	2	2	3	3	3	3	3	2	3	2
CO2	3	3	3	3	3	3	3	3	3	2
CO3	2	3	2	3	2	2	3	2	3	1
CO4	3	1	2	2	3	1	3	2	2	3
CO5	2	3	2	3	2	3	1	2	3	2

1-Low, 2-Medium, 3-Strong

PGDDM4 - RESEARCH METHODOLOGY

Course Aim:

The aim of the course is to learn the meaning and definition of research . To know the social research and its importance, to realize the important concept relating to Quantitative Research methods to realize the important concept relating to qualitative research methods to understand the sources and methods of data collection, to study the application of computer in social work research with special reference to SPSS and Interpretation of study findings

Course outcome: at the end of the course the students would be able to:

CO1	Concept and definition of science and scientific inquiry	L1;L2
CO2	Problem identification, selection of topic	L2 :L3
CO3	Analyze a research design	L3; L4
CO4	Understand and evaluate sampling concept	L2; L5
CO5	Create a research report	L6
L1-Remember; L2- Understand; L3- Apply; L4-Analyze; L5- Evaluate; L6 create		

Pedagogical Methods Adopted:

Lectures, Blended Learning, Flipped Learning, Online Learning, PPT, Discussion, Small Group Exercises, Brain Storming, Assignment, Seminar, Invited Talks / Guest Lectures / Webinars/ Experiential Learning, Participative Learning, Simulated Learning, Peer Group Learning, Facilitated Learning, etc.

COUSE CONTENT

UNIT – I: Social Work Research

Concept, definition and objectives - Differentiate social research and social work research - Scientific enquiry - Scope and nature - basic elements of scientific method - Research paradigms: quantitative and qualitative - Philosophical dimensions of research - Epistemological and Ontological considerations.

UNIT – II: Quantitative Research Methods

Basic Steps in quantitative research: Concepts, theoretical and operational definition, role of theory in research, variables and measurement. Hypothesis- definition, types, sources and significance. Review of literature: importance and methods. Quantitative Research Designs: cross sectional, longitudinal, comparative, evaluative, action research, experimental. Quasi- experimental design. Single subject designs in social work, group design. Sampling: Concepts, types, sampling frame and logic. Methods and tools of Data Collection: Structured Interview, Self-completion Questionnaire, Structured Observation. Reliability and validity of tools. Data Analysis- procedure, tools and software. Advantages and disadvantages.

UNIT – III: Qualitative Research Methods

The Process of Qualitative Research. Qualitative Research Designs: Narrative, Case Study, Ethnography, Phenomenology, Grounded Theory, Hermeneutics. Methods of data collection: Observation, life histories, in-depth/unstructured interviews, group interviews and focus group discussions, case studies. Analysis of Qualitative Data: procedure, types (Thematic analysis, Content Analysis), tools and CAQDAS. Advantages and disadvantages.

UNIT – IV: Statistics for Social Work

Introduction- Scope and Limitations – Measures of Central Tendency – Descriptive statistics: Averages, Dispersion, Skewness and Kurtosis (only concept and

applications, No calculations)- Inferential Statistics: Testing of Hypothesis: Chi-square test, Student's t test, ANOVA- Correlation and Regression-Factor Analysis. (Concept and application only, no calculations).

UNIT – V: Writing and Publication

Major components of a research report, Report Writing: Format – Style – Content - Qualities of a good research report – Communicability – Appendix, Bibliography, Footnotes, etc. – Rules of Report Writing - applications of APA format. Writing an article for publication. Dissemination of Study. Formulation of research proposal meaning and major steps of a research proposal -ethical considerations in research.

Reference:

- i. Anderson, J., Poole, M. E., & Durston, B. H. (1970). Thesis and assignment writing. J. Wiley and Sons Australasia.
- ii. Denzin, N.K and Lincoln, Y.S. (2000), Hand Book of Qualitative Research, Sage, Thousand Oaks. 3. Festinger, L. E., & Katz, D. E. (1953). Research methods in the behavioral sciences.
- iii. 4. Field, A. (2013). Discovering statistics using IBM SPSS statistics. Sage, London. Good & Hatt, 1952 Methods in Social Research, Mc. Graw Hill, New York. 5. Gupta, S. P (1992) Elementary Statistical methods Sultan Chand & sons, New Delhi.
- iv. Guthrie, G. (2010). Basic research methods: An entry to social science research. SAGE Publications India.

- v. Klaus Krippendorff (1980) Content Analysis: An Introduction to its methodology, Sage, Beverly Hills.
- vi. Kothari, C.R. (1992) Research Methodology, Willey Eastern Ltd, New Delhi. Laldas, D.K (2000) Practice of Social Research, Rawat, Jaipur.
- vii. Misra R.P. 1988 Research Methodology - A Handbook, Concept Publishing Morgan, David, L., (1996) „Focus Group“, Annual Review of sociology,
- viii. Nachmias & Nachmias (1981) Research methods in the Social Sciences; St. Martin's press, New York.
- ix. Ramachandran, P. (1993) Survey Research for Social Work: A Primer, TISS, Bombay
- x. Richard, G., et al, (2003) Scaling Procedure –Issues and applications, Sage, Thousand
- xi. Rubin & Bobbie (1993) Research Methods for Social Work, Brooks/Cole Publishing Company, California
- xii. Schutt, Russel, K, (1995) Investigating Social world, Sage, London
- xiii. Singleton, Royce, J.R., et al. (1986) Approaches to Social Research., Oxford University Press, New Delhi.
- xiv. Slife, Brent, D., and Richard N. Williams (1995), What's Behind the Research: Discovering Hidden Assumptions in the Behavioral Sciences, Sage, Thousand Oaks.

- xv. Wilkinson & Bandarkar (1984) Methodology and Techniques of Social Research, Himalaya, Bombay
- xvi. Young, Pauline V & Calvin F. Schmid (1979), Scientific Social Surveys and Research, Prentice Hall, New Delhi.

Mapping with programme outcomes										
COS	Programme outcomes					Programme specific				
	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	2	2	3	3	3	3	3	2	3	2
CO2	3	3	3	3	3	3	3	3	3	2
CO3	2	3	2	3	2	2	3	2	3	1
CO4	3	1	2	2	3	1	3	2	2	3
CO5	2	3	2	3	2	3	1	2	3	2

1-Low, 2-Medium, 3-Strong

<p align="center">PGDDM5 - FIRST-AID AND PSYCHO-SOCIAL CARE FOR DISASTER SURVIVORS</p>

Course Aim:

The aim of the course is Understand the concept of First-Aid during disasters, Evaluate situations where First-Aid is required. Become competent in basic First-Aid, understand the Psychological First-Aid. To apply the process of Rehabilitation

Course outcome: at the end of the course the students would be able to :

CO1	Concept and aims of first-aid, Significance of first-aid ,Types and Levels , Principles of first-aid	L1; L2
CO2	Disaster Specific Safety Guidelines	L2; L3: L4
CO3	Emergencies problems and First aid	L3; L6
CO4	Automated External Defibrillator (AED). Ventilation. Clearing Air- way obstruction. Using the Fire extinguisher.	L2; L4
CO5	Types of Crisis. Types of Rehabilitation and Process involved in rehabilitation. Robert's 7-stage crisis intervention model.	L3; L4;L5
L1-Remember; L2- Understand; L3- Apply; L4-Analyze; L5- Evaluate; L6 create		

Pedagogical Methods Adopted:

Lectures, Blended Learning, Flipped Learning, Online Learning, PPT, Discussion, Exercises, Brain Storming, Assignment, Seminar, Invited Talks / Guest Lectures /Webinars/ Experiential Learning, Participative Learning, Simulated Learning, Peer Group Learning, Facilitated Learning,etc.

COUSE CONTENT

UNIT – I: Introduction to First-Aid

Concept and aims of first-aid – Significance of first-aid – Types and Levels – Principles of first-aid – Emergency Medical Responder and Roles; First-Aid Assessment and Supplies: Recognizing Emergencies – Assessing the situation – Make independent decisions – Disaster Kit – Home First Aid Kit – Travel First Aid Kit – Organizing Shelter – Check lists – Safety Tools – DRAB and ABCD of first- aid.

UNIT – II: Disaster Specific Safety Guidelines

Avalanches, Landslides and Mud-flow. Earthquakes, Fires, Floods, Hazardous Materials. Epidemics. Others. Life-stock safety and Management during disasters.

UNIT – III: Emergencies and What to do

The ABC Bites and Stings. Breathing. Bleeding. Fractures. Burns. Choking. Cold and Heat related illnesses. Convulsions and Seizures. Cardiac Problems. Dizziness and Fainting. Eye and Ear injuries. Head, neck and spine injuries. Infectious diseases. Poison. Shock. Stroke and Tooth injuries. Drowning, Dizziness and Fainting.

UNIT – IV: Tools and Techniques for First Aid

Concept of Basic Life Support. Bandaging, Slings and Binders. Checking Pulse. Cardiopulmonary resuscitation (CPR). Automated External Defibrillator (AED). Ventilation. Clearing Air-way obstruction. Using the Fire extinguisher.

UNIT – V: Psychological First-Aid (PFA), Crisis Intervention and Rehabilitation

Concepts of Psychological First-Aid, Crisis intervention and Rehabilitation. Identifying people who require PFA. Steps in PFA. Do's and Don'ts in PFA. Types of Crisis. Types of Rehabilitation and Process involved in rehabilitation. Robert's 7-stage crisis intervention model.

REFERENCES

1. American Academy of Orthopaedic Surgeons (AAOS), American College of Emergency Physicians (ACEP), Alton L. Thygeson. (2011). First Aid, CPR, and AED Essentials. United States: Jones & Bartlett Learning.
2. American Red Cross. (2008). A Family Guide to First Aid and Emergency Preparedness. United States: Staywell.
3. Bowman, W. D., Backer, H. D., Paton, B. C. (2005). Wilderness First Aid: Emergency Care for Remote Locations. United States: Jones and Bartlett Publishers.
4. Bradley, A. T. (2011). The Disaster Preparedness Handbook: A Guide for Families. United States: Skyhorse Publishing.
5. Imel, J. S. (2020). Urban and Disaster Emergency First Aid Made Easy. (n.p.): Udtwfa, LLC.
6. Jefferson's County Sheriff's Office. (2018). Jefferson County Family Emergency Preparedness Handbook. Oregon: Jefferson's County Sheriff's Office. Retrieved from: https://www.jeffco.net/sites/default/files/fileattachments/public_safety/page/5629/preparedness_handbook.pdf
7. Kline, C., Brouhard, R. (2014). Disaster Preparedness: Ready Your Family and Home—Before Disaster Strikes. United Kingdom: DK Publishing.

8. Liebsch, J., Liebsch, B. (2006). It's a Disaster! ... and what are You Gonna Do about It? A Disaster Preparedness, Prevention & Basic First Aid Manual. United States: Fedhealth.
9. Sawyer, J., Huertas, G. (2018). Animal Management and Welfare in Natural Disasters. United Kingdom: Taylor & Francis.
10. Staywell. (2012). Responding to Emergencies: Comprehensive First Aid/ CPR/ AED. United States: American National Red Cross.
12. Roberts, A.R. (2000). Crisis Intervention Handbook- Assessment, Treatment and Research. Oxford University Press
13. WHO. (2013). Psychological First Aid- Facilitator's manual for orienting field workers. WHO.

Mapping with programme outcomes										
COS	Programme outcomes					Programme specific				
	P O 1	P O2	PO3	PO4	PO5	PSO 1	PSO 2	PSO3	PSO4	PSO5
CO1	2	2	3	3	3	3	3	2	3	2
CO2	3	3	3	3	3	3	3	3	3	2
CO3	2	3	2	3	2	2	3	2	3	1
CO4	3	1	2	2	3	1	3	2	2	3
CO5	2	3	2	3	2	3	1	2	3	2

1-Low, 2-Medium, 3-Strong

PGDDM6 - PANDEMIC, PREPAREDNESS AND RESPONSE

Course Aim:

The aim of the course is to explain Emerging and Re-Emerging Diseases. To understand the Outbreak Investigation and Disease Surveillance. To know the Pandemic Diseases. To develop the Pandemic Preparedness for the people.

Course outcome: at the end of the course the students would be able to :

CO1	Overview of most common emerging and Re-emerging diseases	L1; L2
CO2	Principles and methods of investigations Food, Water, Air, Vectorborne outbreaks.	L2; L3:
CO3	Application Big data and Artificial Intelligence as early warning systems.	L4
CO4	WHO Pandemic Stages – International Health Regulations	L5
CO5	Public Health Emergencies of International Concern.	L6
L1-Remember; L2- Understand; L3- Apply; L4-Analyze; L5- Evaluate; L6 create		

Pedagogical Methods Adopted:

Lectures, Blended Learning, Flipped Learning, Online Learning, PPT, Discussion, Small Group Exercises, Brain Storming, Assignment, Seminar, Invited Talks / Guest Lectures /Webinars/ Experiential Learning, Participative Learning, Simulated Learning, Peer Group Learning, Facilitated Learning, etc.

COUSE CONTENT

UNIT – I: Emerging and Re-Emerging Diseases

Emerging diseases – Re-emerging diseases – Factors that favour emergence of new diseases – Zoonotic diseases – Overview of most common emerging and Re- emerging diseases – Epidemic and Pandemic.

UNIT – II: Outbreak Investigation

Definition of Outbreak – Criteria for establishing outbreak – steps of Outbreak infection – Prevention of outbreaks – Trigger alerts – Principles and methods of investigations Food, Water, Air, Vector borne outbreaks.

UNIT – III: Disease Surveillance

Concept of surveillance – Types of surveillance – Surveillance design – IDSP – Surveillance – Surveillance Evaluation – Components of Surveillance system – EWARS – Indicator based surveillance – Event based surveillance system – Application Big data and Artificial Intelligence as early warning systems.

UNIT – IV: Pandemic Disease

Influenza epidemiology – How diseases become Pandemics – Impact of Pandemic to global security and economics – WHO Pandemic Stages – International Health Regulations.

UNIT – V: Pandemic Preparedness

Developing Early Warning systems – Rapid response teams – Capacity Building – Importance of Training – Rumor Reporting – Public Health Emergencies of International Concern.

Books

1. Principles of Epidemiology in Public Health Practice Third Edition. An Introduction to Applied Epidemiology and Biostatistics 2012. Third Edition.

References

- i. WHO. International Health Regulations (2005 & 2007) Integrated Disease Surveillance Programme <http://idsp.nic.in/index.php>
- ii. WHO Pandemic Preparedness and Response http://www.who.int/csr/disease/swineflu/guidance/pandemic_preparedness/en/
- iii. Epidemic and Pandemic Preparedness and Response, International Red Cross, 2015

Mapping with programme outcomes										
COS	Programme outcomes					Programme specific				
	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	2	2	3	3	3	3	3	2	3	2
CO2	3	3	3	3	3	3	3	3	3	2
CO3	2	3	2	3	2	2	3	2	3	1
CO4	3	1	2	2	3	1	3	2	2	3
CO5	2	3	2	3	2	3	1	2	3	2

1-Low, 2-Medium, 3-Strong

PGDDM7 - DISASTER HEALTHMANAGEMENT

Course Aim:

The aim of the course is Understand the different components of Disaster Health Management. Become a integral part of Hospitals and Medical Teams in preparing for and intervening during disasters. Understanding the various mental health conditions during disorders.

Course outcome: at the end of the course the students would be able to :

CO1	- Disaster Health System in India- PHC, CHC, NHM.	L1; L2
CO2	Medical Equipment and Supplies during Disasters.	L2; L3
CO3	Disaster Hospital Planning Preparing the Hospital emergency Plan - Disaster Management Committee	L3 ; L4
CO4	Team work in Disaster Health - Incident Command System - Members of the team: Advanced clinicians (nurse practitioners/physician assistants	L5
CO5	Integrating Mental Health with Preparedness Mental Health System during Disasters	L6
L1-Remember; L2- Understand; L3- Apply; L4-Analyze; L5- Evaluate; L6 create		

Pedagogical Methods Adopted:

Lectures, Blended Learning, Flipped Learning, Online Learning, PPT, Discussion, Small Group Exercises, Brain Storming, Assignment, Seminar, Invited Talks / Guest Lectures /Webinars/ Experiential Learning, Participative Learning, Simulated Learning, Peer Group Learning, Facilitated Learning, etc.

COUSE CONTENT

UNIT – I: Introduction to Disaster Health Management

Public Health issues during Disasters - Various definitions in disaster health management (DHM) - Planning for Disaster health management throughout the Cycle - Decision making and Participation - Community Health Groups - Access to Medical resources and supplies - Identification and Training of Disaster Health Volunteers - Disaster Health System in India- PHC, CHC, NHM.

UNIT – II: Phases of Disaster Health Response

Notification - Search and Rescue – Triage - Medical Care of Disaster Victims - Disaster Communications - Record keeping - Transportation and Evacuation - Debriefing/ Critical Incident Stress Debriefing (CISD) – Recovery - Rapid Assessment of emergency Health Care needs - Medical Care of Mass Gatherings - Medical surge - Surge capacity - Risk Assessment Self-protection contaminated area and decontaminated area - ICT and Health Communication Community Awareness and Volunteer Training - Medical Equipment and Supplies during Disasters.

UNIT – III: Disaster Hospital Planning

Preparing the Hospital emergency Plan - Disaster Management Committee - Centre command structure - The jobs card - Plan activation of different areas of the hospital - Disaster beds/ how to increase bed capacity in emergencies - Planning of public information and liaison - Planning for security - Logistic planning (i. Communications planning ii. Transportation planning iii. Store planning iv. Personnel planning v. financial planning) - Operations Planning (Essential Medical and non-medical staff education. Triage. Activation of nursing staff. Activation of ancillary services. Activation of support services) - Phase of staff education and training. Disaster activation and Post disaster de-briefing.

UNIT – IV: Disaster Medical Teams (DMT)

Team work in Disaster Health - Incident Command System - Members of the team: Advanced clinicians (nurse practitioners/physician assistants), medical officers, registered nurses, respiratory therapists, paramedics, pharmacists, pharmacy technicians, emergency medical technicians, safety specialists, logistical specialists, information technologists, communication and administrative specialists, Medical Social Workers, Hospital workers, Healthcare workers, Humanitarian aid workers, public health workers, Health profession students, Volunteers - Role of different Team members and the role of Disaster Health Social Worker.

UNIT – V: Mental Health Conditions during Disasters

Psychological and Behavioural responses during Disorders – Distress and Health Risk Behaviours – Serious Mental Illnesses – PTSD – Alcoholism – Personality Issues and Grief – Well-being and Disasters – Factors affecting well-being post- disaster – Social Support – Social Networks and Environment Friendly Practices – Integrating Mental Health with Preparedness – Mental Health System during Disasters – Need Assessment.

References

- i. Afolabi, M.O. (2018). Public Health Disasters: A Global Ethical Framework. Germany: Springer International Publishing.
- ii. Beder, J. (2013). Hospital Social Work: The Interface of Medicine and Caring. (n.p.): Taylor & Francis.
- iii. Cooper, C. (2014). Wellbeing: A Complete Reference Guide, Interventions and Policies to Enhance Wellbeing. Germany: Wiley.

- iv. Daniel Kollek. (2013). Disaster Preparedness for Health Care Facilities. United Kingdom: People's Medical Publishing House-USA.
- v. Garces Carranza, C. M. (2019). Hospital Social Work Interventions. United States: Goldtouch Press, LLC.
- vi. Ibrahim Arziman. (2015). Field Organization and Disaster Medical Assistance Teams. Turkish Journal of Emergency Medicine. Volume 15, Supplement 1, October 2015
- vii. Institute of Medicine. 2013. Engaging the Public in Critical Disaster Planning and Decision Making: Workshop Summary. Washington, DC: The National Academies Press. <https://doi.org/10.17226/18396>.
- viii. Kadushin, G., Egan, M. (2012). Social Work Practice in Community-Based Health Care. (n.p.): Taylor & Francis.
- ix. Ministry of Home Affairs. (n.d.) Guidelines for hospital emergency preparedness planning: Ground DRM Programme (2002–2008). New Delhi: Ministry of Home Affairs, Government of India.
- x. Nelson C, Lurie N, Wasserman J, Zakowski S. Conceptualizing and defining public health emergency preparedness. Am J Public Health. 2007; 97 Suppl 1: S9-11. DOI: AJP.H.2007.114496 [pii].
- xi. Pathak, S. H. (1961). Medical Social Work in India. India: Delhi School of Social Work. Reilly, M. J., & Markenson, D. S. (2011). Health care emergency management: Principles and practice. Jones & Bartlett Publishers.

- xii. hoaf KI, Rottman SJ. Public health impact of disasters. AustralianJournal of Emergency Management. 2000;15(3): 58-63.
- xiii. Ugarte etal.(n.d.).Planning and triage in the disaster scenario
https://www.aap.org/enus/Documents/disasters_dpac_PEDsModule3.pdf.

Mapping with programme outcomes										
COS	Programme outcomes outcomes					Programme specific				
	P O 1	P O2	PO3	PO4	PO5	PSO 1	PSO 2	PSO3	PSO4	PSO5
CO1	2	2	3	3	3	3	3	2	3	2
CO2	3	3	3	3	3	3	3	3	3	2
CO3	2	3	2	3	2	2	3	2	3	1
CO4	3	1	2	2	3	1	3	2	2	3
CO5	2	3	2	3	2	3	1	2	3	2

1-Low, 2-Medium, 3-Strong

<p align="center">PGDDM8- RESILIENCE BUILDING FOR DISASTER SURVIVORS AND SELF-CARESKILLS FOR DISASTER WORKERS</p>
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Course Aim:

The aim of the course is to understand the disaster response and communication in crisis, develop system relevant occupation and communication flow chart to direct the intervention. To create the social media communication models to effectively address the disasters. Diagnose personal trauma and under Take initiatives for healing. Develop Life Skills and Safety Skills for disaster managementpractice.

.Course outcome: at the end of the course the students would be able to :

CO1	Role of Communication in Disasters, Types of communication in case of disasters (radio, satellite phones, video conferencing, electronics devices	L1; L2
CO2	, Humanitarian Logistics Management. Relief and recovery activities:	L2; L3:
CO3	Disaster recovery policy processes. Capturing Local Knowledge to inform recovery programmes. Recovering cultural heritage	L5
CO4	WHO Life Skills- Problem solving, critical thinking, effective communication skills, decision-making, creative thinking,	L4
CO5	Trauma, Mal-adaptive behaviour and Self- Healing: Trauma and its causes. Identifying the effects of Trauma	L6
L1-Remember; L2- Understand; L3- Apply; L4-Analyze; L5- Evaluate; L6 create		

Pedagogical Methods Adopted:

Lectures, Blended Learning, Flipped Learning, Online Learning, PPT, Discussion, Small GroupExercises, Brain Storming, Assignment, Seminar, Invited Talks / Guest Lectures /Webinars/ Experiential Learning, Participative Learning, Simulated Learning, Peer Group Learning, Facilitated Learning, etc.

COUSE CONTENT

UNIT – I: Disaster Communication

Disaster Communication- Role of Communication in Disasters, Types of communication in case of disasters (radio, satellite phones, video conferencing, electronics devices Role of Communication in Disasters, Types of communication in case of disasters (radio, satellite phones, video conferencing, electronics devices). Information and Disasters- Role of Information from disaster affected community, Disaster management Information System, Organizing and effective dissemination of information, feedback for improving information. Media and Disasters: Media representations of disasters, impact of media coverage, social media, Public Communication and handling of media, role of media in disaster mitigation. Capturing Local Knowledge, Information, Education, Communication, and Training.

UNIT – II: Disaster Response

Concept, Significance, Components. Disaster Response Plan, activation and coordination. Resource Management- Financial, Medical, equipment, communication, Human, transportation, Food and essential commodity (Identification, Procuring, Propositioning and deployment). System Relevant Occupation: Critical Infrastructure management, Evacuation, search and rescue services, Humanitarian Logistics Management. Relief and recovery activities: Communication, Camp management, WASH (water supply, sanitation and hygiene promotion), Community Health, Emergency support functions, Need and damage assessment.

UNIT – III: Disaster Recovery and Reconstruction

Concepts of Recovery and Reconstruction. Phases of Disaster Recovery. Information for Recovery- Post-disaster Review. Logistics for Recovery. Individual Disaster Recovery. Resettlement as recovery. Disaster recovery policy processes. Capturing Local Knowledge to inform recovery programmes. Recovering cultural heritage.

UNIT – IV: Life and Safety Skills Training

WHO Life Skills- Problem solving, critical thinking, effective communication skills, decision- making, creative thinking, interpersonal relationship skills, self- awareness, empathy, and coping with stress and emotions. Safety Skills- WASH

UNIT – V: Self-Care, Trauma, Mal-adaptive behaviour and Self-Healing

Self-Care: Achieving Balance. Time Management. Health- Nutrition and Exercise. Managing Relationships. Meditation and Mindfulness; **Trauma, Mal-adaptive behaviour and Self- Healing:** Trauma and its causes. Identifying the effects of Trauma. Finding the roots of Trauma. Working with Trauma and Maladaptive Behaviour.

REFERENCES:

1. .Arefian, F. F. (2018). Organising Post-Disaster Reconstruction Processes.
2. .SpringerChowdhry, P. D. (2000). Social Welfare Administration, Atma Ram Sons., Delhi,
3. Erlene-Grise Owens, Justin Miller, Mindy Eaves. 2016. The A-to-Z Self-Care Handbook for Social Workers and Other Helping Professionals. New Social Worker Press.
4. Fischhoff, B (1995). Risk perception and communication unplugged: Twenty years of Process. Risk Analysis, 15(2):137-145, <http://www.soc.iastate.edu/Sapp/Fischhoff.pdf>

5. Goel, S.L., Jain R.K. (2002). Social Welfare Administration: Theory and Practice, Vol. 1 and New Delhi: Deep & Deep Publications.
6. Koontz, Harold and Heinz Weihrich. (2000). Essentials of Management. New Delhi: TataMcGraw-Hill Publishing Company Limited.
7. Lindell, M., Prater, C., and Perry, R. (2006). Fundamentals of Emergency Management, Chapters 4-Risk perception and Communication.
<http://training.fema.gov/EMIWeb/edu/fem.asp>
8. Longstaff, P.H. and Yang, Sung-Un. (2008). Communication management and trust: Their role in building resilience to surprises such as natural disasters, pandemic flu, and terrorism. Ecology and Society 13(1),
<http://www.ibcperu.org/doc/isis/8551.pdf>
9. March, A. and Kornakova, M. (2017). Urban Planning for Disaster Recovery. Butterworth Heinemann
10. Miller, D.S. and Rivera, J. D. (2011). Community Disaster Recovery and Resiliency: Exploring Global Opportunities and Challenges. Boca Raton, FL: CRC Press, Taylor & Francis
11. Paton, D. and Johnston, D. (2006). Disaster resilience: An integrated Approach. Charles C Thomas Pub Ltd.
12. Paul Spicker (2008). Social policy themes and approaches: Policy Press, Bristol, UK. Paulo Coelho. 1988. The Alchemist. Harper Collins Publishers.
13. Robin Sharma. 1997. The Monk who sold his Ferrari. Jaico Publishing House.
14. Reidar, D. (2004). Evaluating Development Programmes and Projects. Second Edition., Sage Publications

15. Rodriguez, H. W. Diaz, J.M. Santos and B. E. Aguirre. (2007). Chapter 29: Communicating Risk and Uncertainty: Science, Technology, and Disasters at the Crossroads in H. Rodriguez, E.L.
16. Quarantelli and R.R. Dynes (Eds). Handbook of Disaster Research. New York, NY: Springer. Menon, V. C. (2015). Managing Humanitarian Logistics, New Delhi: Springer
17. SaraKay Smullens. 2015. Burnout and Self-Care in Social Work: A Guidebook for Students and Those in Mental Health and Related Professions. NASW Press
18. Thomas M. Skovholt and Michele Trotter-Mathison. 2011. The Resilient Practitioner: Burnout Prevention and Self Care Strategies for Counselors, Therapists, Teachers and Health Professionals. Routledge.

Mapping with programme outcomes										
COS	Programme outcomes					Programme specific				
	P O 1	P O2	PO3	PO4	PO5	PSO 1	PSO 2	PSO3	PSO4	PSO5
CO1	2	2	3	3	3	3	3	2	3	2
CO2	3	3	3	3	3	3	3	3	3	2
CO3	2	3	2	3	2	2	3	2	3	1
CO4	3	1	2	2	3	1	3	2	2	3
CO5	2	3	2	3	2	3	1	2	3	2

1-Low, 2-Medium, 3-Strong

PGDDM9 - DISASTER VULNERABILITY AND SUSTAINABLE DEVELOPMENT

Course Aim:

The aim of the course is Recognize how social structures (such as race, class, gender etc.) generates disaster vulnerability and privilege. Theorize how changes in society could result in better disaster risk reduction. Apply critical thinking and social analysis skills to disastersituations.

.Course outcome: at the end of the course the students would be able to :

CO1	Disaster Vulnerability- Concept and Dimensions- Geographical, Social, Economic, Cultural, Technological	L1; L2
CO2	Empowerment and Strength-based approaches - Integration of theories and perspectives.	L2; L3
CO3	Role of political development in mitigating effects of disasters	L4
CO4	Community Participation: Concept and Degrees - Culture and Disasters: Relevance of indigenous knowledge, appropriate technology and local resources	L4; L5
CO5	Relationship between sustainable development and disasters.	L5; L6
L1-Remember; L2- Understand; L3- Apply; L4-Analyze; L5- Evaluate; L6 create		

Pedagogical Methods Adopted:

Lectures, Blended Learning, Flipped Learning, Online Learning, PPT, Discussion, Small Group Exercises, Brain Storming, Assignment, Seminar, Invited Talks / Guest Lectures /Webinars/ Experiential Learning, Participative Learning, Simulated Learning, Peer Group Learning, Facilitated Learning, etc.

COUSE CONTENT

UNIT – I: Social Vulnerability

Disaster Vulnerability- Concept and Dimensions- Geographical, Social, Economic, Cultural, Technological - Social Structure - Cleavage of Caste, Class, Gender, race and ethnicity, Refugees, Migrants, Children and Women, aged, unorganized Labour, Persons with Disability - Changing society to reduce social vulnerability - Professionals' social position and resulting vulnerability and privilege.

UNIT – II: Social Theories of Disasters

Sociological Analysis and Critical Thinking about disasters - Theories and perspectives - Conflict theory - Development theory - Risk and Uncertainty Theories (Ulrich Beck and Giddens) - Feminist theories; Social Work Theories - The systems theory - Person-in- environment - Empowerment and Strength-based approaches - Integration of theories and perspectives.

UNIT – III: Political Economy of Disasters

Economic impacts of disasters - long and short-term - The Schumpeterian model and arguments against it - Economic Assessment post-disaster quantification approaches and challenges - Factors affecting vulnerability and promoting resilience - Government dynamics in the face of disasters - political effect, bailout effect, racket effect, desperation effect - Government spending on disasters - Preventive spending and Palliative spending - Role of political development in mitigating effects of disasters - The politics of international aid.

UNIT – IV: Community Participation

Community Power: power structure - sources of power Weberian pluralist theory - Community Leadership: Concept and types - Community Participation: Concept and Degrees - Culture and Disasters: Relevance of indigenous knowledge, appropriate technology and local resources - Social Capital and Social Networks.

UNIT – V: Disasters and Sustainable Development

Definition and Meaning of Sustainable Development - The Sustainable Development Goals - Indicators and Measures of Development - Hyogo and Sendai Frameworks and Disasters - Impact of Development projects such as dams, embankments, changes in Land-use etc. - Climate Change Adaptation - Prevention of Disasters - Relationship between sustainable development and disasters.

References:

1. Blaikie, Piers et al. (1994). At risk: Natural hazards, people's vulnerability, and disasters. New York: Routledge.
2. Cohen, C. and Werker, E. The Political Economy of “Natural” Disasters Charles Cohen Eric Werker. Working Paper 08-040. Harvard Business School. Retrieved from: <https://www.hbs.edu/faculty/Publication%20Files/08-040.pdf>
3. Dominelli, Lena et al., (eds.) (2019). The Routledge Handbook of Green Social Work. London: Routledge.
4. Fisher, Henry W. (1998). Response to Disaster: Fact Versus Fiction & Its Perpetuation: The Sociology of Disasters. New York: University Press of America, Inc.
5. Gupta Anil K, Sreeja S. Nair. (2011). Environmental Knowledge for Disaster Risk Management. New Delhi: NIDM.
6. Joseph, Jacquleen. (2013). Measuring Vulnerability to Natural Hazards: A Macro Framework, Disasters, 37(2), 185-200.

7. Parasuraman, S., and Acharya, N. (2000). Analysing forms of vulnerability in a disaster. *The Indian Journal of Social Work*, 61(4).
8. Pelling Mark. (2003). *The Vulnerability of Cities: Natural Disaster and Social Resilience*. London: Earthscan Publishers.
9. Pretty, J. N., Guijt, I., Scoones, I., & Thompson, J. (1995). *A trainers' guide to participatory learning and action*. IIED Training Materials Series No. 1. London: IIED.
10. *The World Summit on Sustainable Development 2002: A UK Progress Report, Third Report of Session 2004-05, Report, Together with Appendix and Formal Minutes*. (2005). United Kingdom: Stationery Office.
11. Tierney, Kathleen. (2014). *The Social Roots of Risk: Producing Disasters, Promoting Resilience*. Stanford University Press.
12. Tierney, K. (2019). *Disasters: A Sociological Approach*. United Kingdom: Wiley.

Mapping with programme outcomes										
COS	Programme outcomes					Programme specific outcomes				
	P O 1	P O2	PO3	PO4	PO5	PSO 1	PSO 2	PSO3	PSO4	PSO5
CO1	2	2	3	3	3	3	3	2	3	2
CO2	3	3	3	3	3	3	3	3	3	2
CO3	2	3	2	3	2	2	3	2	3	1
CO4	3	1	2	2	3	1	3	2	2	3
CO5	2	3	2	3	2	3	1	2	3	2

1-Low, 2-Medium, 3-Strong

PGDDM10 - GEO-INFORMATICS AND ITS APPLICATIONS IN DISASTERS

COURSE AIM:

The aim of the course is Understand the basics of Geo-Informatics and its application. Apply Multiple Hazard vulnerability mapping by using Geo-Informatics. Create models of Geo-Informatics applications in Disaster Management.

.Course outcome: at the end of the course the students would be able to :

CO1	Geo-Informatics in Land Resource: Remote sensing in mapping soil degradation, impact of surface mining on land resources, forest resources	L1; L2
CO2	Geo Informatics in Water Resources Remote sensing in hydro-geomorphologic interpretation for ground water exploration	L2; L3
CO3	Application in Urban Planning: Mapping urban land-use - transportation network - Utility- Facility mapping - urban sprawl	L3; L4
CO4	Understand Application in Geo-Technical Engineering.	L5
CO5	Understand the Application in Environmental Management	L6
L1-Remember; L2- Understand; L3- Apply; L4-Analyze; L5- Evaluate; L6 create		

Pedagogical Methods Adopted:

Lectures, Blended Learning, Flipped Learning, Online Learning, PPT, Discussion, Small Group Exercises, Brain Storming, Assignment, Seminar, Invited Talks / Guest Lectures / Webinars/ Experiential Learning, Participative Learning, Simulated Learning, Peer Group Learning, Facilitated Learning, etc.

COUSE CONTENT:

UNIT – I: Introduction to Geo-informatics and its Land Resource

Applications of Geo information in Disaster Management: Scope, Examples & Advancements - **Geo-Informatics in Land Resource:** Remote sensing in mapping soil degradation, impact of surface mining on land resources, forest resources.

UNIT – II: Geo Informatics in Water Resources

Remote sensing in hydro-geomorphological interpretation for ground water exploration - water quality monitoring - reservoir sedimentation - snow cover mapping and modelling approaches.

UNIT – III: Geo-Informatics in Disaster Management

Mapping and modelling Landslide hazards, floods, Cyclones Forest fire and drought - Application in Urban Planning: Mapping urban land-use - transportation network - Utility- Facility mapping - urban sprawl - site selection for urban development - Urban Information System.

UNIT – IV: Application in Geo-Technical Engineering

Slope stability and drainage network analysis - Digital Terrain Modelling - Geoinformatics in Dam site selection, Highways, and Tunnel Alignment studies.

UNIT – V: Application in Environmental Management

Selection of disposal sites for industrial and municipal wastes - solid waste management - Environmental Impact Assessment (EIA).

REFERENCES

1. Jenson, J.R. (2000). Remote Sensing of the environment – An Earth Resource Perspective. New York: Prentice Hall Inc.
2. Lillisand, T. M. and Keifer. R. W. (1994). Remote Sensing and Image interpretation. Third Edition. New York: John Willey and Sons.
3. P.S. Roy. (2000). Natural Disaster and their Mitigation. India: Indian Institute of Remote Sensing (IIRS).
4. Schultz, G. A. and Engman, E. T. (2000). Remote Sensing in Hydrology and Water Management. Germany: Springer-Verlag, Berlin.
5. Spatial Technologies for Natural Hazard Management. (2000). Proceedings of ISRS National Symposium, Nov. 21-22, IIT, Kanpur

Mapping with programme outcomes										
COS	Programme outcomes					Programme specific outcomes				
	P O 1	P O2	PO3	PO4	PO5	PSO 1	PSO 2	PSO3	PSO4	PSO5
CO1	2	2	3	3	3	3	3	2	3	2
CO2	3	3	3	3	3	3	3	3	3	2
CO3	2	3	2	3	2	2	3	2	3	1
CO4	3	1	2	2	3	1	3	2	2	3
CO5	2	3	2	3	2	3	1	2	3	2

1-Low, 2-Medium, 3-Strong

RESEARCH PROJECT WORK	
Semester: 2	No. of Credits: 4
Course No: 11	Course Code: PGDDM11

Description

A learner should prepare and submit dissertation, under the guidance of a faculty. The learner is to engage meaningfully in the process of problem formulation, review of literature related to the study, preparing the research proposal, choosing an appropriate research strategy and developing instruments of data collection, collecting the data, processing, analyzing and interpreting the data and preparing the research report.

The length of the research report may be between 60-75 pages and not exceeding 100 pages

Objectives

- To enhance research attitude among the students.
- To enhance the students to find out the problem and equips them to carry out research in a scientific manner.
- To provide them complete knowledge about research methodology and reporting.
- To enable the students to learn the operational functions, analysis of data and interpretation of results.

Assessment/Evaluation & Viva Voce

1. PROJECT REPORT EVALUATION (Both Internal & External)

External – 100 Marks

- | | | | |
|-----|-----------------------|---|----|
| i. | Plan of the project | - | 15 |
| ii. | Execution of the plan | - | 45 |

Methodology, Data / Organisation of Materials /Hypothesis, Testing etc and presentation of the report

iii.	Individual Initiative	-	15
iv.	Viva Voce	-	25

TOTAL **- 100 marks**

References

1. Anderson, J., Poole, M. E., & Durston, B. H. (1970). Thesis and assignment writing. J.Wileyand Sons, Australasia.19
2. American Psychological Association. (2019). Publication Manual of the American Psychological Association, Sixth Edition in <https://www.apastyle.org/manual/index>