MASTER OF SOCIAL WORK IN DISASTER MANAGEMENT

MSW DISASTER MANAGEMENT

SYLLABUS



UNIVERSITY OF KERALA

MASTER OF SOCIAL WORK IN DISASTER MANAGEMENT (MSW DISASTER MANAGEMENT)

1. INTRODUCTION

Globally there has been a rise in the incidence of disasters. The lives of large number of people are being impacted by the tragic effects of disasters and governments are incurring irretrievable losses annually. The need for abilities across topics, disciplines and methods is especially important for preventing and mitigating disasters. Most disaster mitigation and vulnerability processes are political, social and economic requiring interventions from social sciences. A 'Master of Social Work in Disaster Management' degree superimposes multi-disciplinary knowledge of the Social Sciences and the expertise of the social worker onto the disaster management field. The 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 skilfully plan, 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.

Trained professionals in Disaster Management are employed in Government and private sectors, nationally and internationally. Some avenues for employment are emergency planning and services, crisis communication and intervention, relief groups, infectious disease management, risk analysis, law enforcement department, local authorities, reinsurance, business continuity, security management, emergency logistics, civil defence, petroleum, chemical and mining industry and humanitarian management.

2. HIGHLIGHTS OF THE PROGRAMME

Loyola's MSW Disaster Management programme combines the Jesuit vision of excellence and the Ignatian motto of moulding men and women for others.

Goal of the Programme

Moulding informed, balanced and skillful professionals who contribute actively to the field of Disaster management practice.

Thrust areas of the curriculum

- Practice with Vulnerable groups
- ✤ Kerala Model of Disaster Management
- Psychological First Aid and Emotional Hygiene
- Local Self Government and Decentralised planning for DM
- Community Based Disaster Risk Reduction

Pedagogical strategies

- ✤ Theory-practice interface
- Outcome based education
- ✤ Competency-based training
- Analytical thinking
- ✤ Intensive Field Work
- ✤ Safety Life Skills Training
- Embedded mentoring
- Self-Care and Professionalism
- Disaster Drills

Knowledge base of the professionals:

- Disaster Management
- Theories and Models of Disasters
- Disaster Administration
- Science and Technology for Disasters
- Working with multiple-stakeholders

Attributes of the professionals:

- Self-awareness
- Motivation and Crisis Leadership
- Ten Life-Skills
- Multiple Intelligence
- ✤ Ingenuity
- Hardiness in the face of disasters
- Presence of mind during crisis
- Empathy and genuineness

Skills of the Professionals:

- Safety Skills: Swimming, driving, using safety apparatus, first-aid.
- Disaster Analysis: Thinking about the causes of disasters and the vulnerability, analysing models of disasters, planning for different groups.
- Disaster Communication during and after disasters
- Setting-based Disaster Intervention Skills, i.e., skills for practice in Individual, Group, Community and Organization settings.
- Phase-based Disaster Intervention skills, i.e. skills required for Disaster Prevention, Mitigation, Rescue, Relief, Recovery, Rehabilitation and Reconstruction.
- ✤ Trauma Counselling
- Technology for disasters

3. PROGRAMME OUTCOMES (POs)

The University of Kerala has identified a set of POs that are to be achieved by its constituent departments and colleges.

PO 1 Critical Thinking: Acquire, condense and critically evaluate scholarly arguments, the assumptions behind them, and their theoretical and empirical components.

PO 2 Problem Solving: Acquire the ability to define a problem, generate alternate solution, evaluate and select an alternative and implement follow up on the solution.

PO3 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.

PO 4 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.

PO 5 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.

PO 6 Scientific Temper: Inculcate scientific temper among students which would lead to creation of new knowledge.

PO 7 Ethics: Understand different value systems including one's own, as also the moral dimensions of actions, and accept responsibility for it.

4. PROGRAMME SPECIFIC OUTCOMES (PSOs)

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. Hence, the programme professes to equip students to achieve the following outcomes:

PSO 1- Social Work Practice for Disaster Management: Apply Social Work values, principles and methods in the field of disaster management.

PSO 2- Disaster Management Basics: Acquire a comprehensive understanding of disasters and the field of disaster management.

PSO 3- Analysis for Disaster Management: Understand, analyse and evaluate the relationship of disasters with development, vulnerability, environment, socio-political and economic factors.

PSO 4- Disaster Management Specific Skills: Transform into leaders who are socially committed, emotionally balanced, competent, creative and contributing disaster management professionals.

There are 18 courses offered under the programme. Based on the programme specific outcomes PSOs), the courses have been divided into 4 thematic areas, namely Social Work Practice, Disaster Management Basics, Analysis for Disaster Management and Social Work and Disaster Management Skills. Please note that, thematic division of courses does not imply that course outcomes (COs) are mapped under the corresponding PSOs.

Social Work Practice	1. Introduction to Social Work					
(6 papers):	Working with Communities- Community based Disaster Risk					
	Reduction (CBDRR)					
	3. Working with Vulnerable Groups					
	4. Working with Individuals- Psychological First-Aid (PFA) and Rehabilitation					
	5. Administration of Human Service Organizations (HSOs)- Disaster					
	Resilience Building					
	6. Social Work Research and Statistics					
Disaster Management	7. Introduction to Disasters and Disaster Management					
Basics (1 paper)						
Analysis for Disaster	8. Disaster Vulnerability and Sustainable Development					
Management (2 Papers)	9. Disaster Management Models					
Social Work and	10. Self-Care Skills for Disaster Social Workers					
Disaster Management	. Project Management for Disaster Management					
Skills (9 papers)	12. Counselling for Trauma Victims					

	Disaster Health (6 papers)	Technologies for Disaster			
		Management (6 papers)			
13.	A1. Medical Information for	B1. ICT for Disaster Management			
	Disaster Health Practice				
14.	A2 Montal Haalth and	B2. Geographical Information			
	A2. Mental fieduli allu Disasters	Systems (GIS) in Disaster			
	Disasters	Management			
15.	A3. Post-Traumatic Stress	B3. Science and Technology for			
	Disorder (PTSD) and	Risk Assessment, Prevention and			
	Cognitive Behavioural	Preparedness			
	Therapy (CBT)				
16.	A4. Disaster Health	B4. Digital Image Processing and			
	Management	Image Analysis			
17.	A5. Post-Traumatic Stress	B5. GIS and GPS Technologies In			
	Disorder (PTSD) and	Disasters			
	Therapy with Children				
18.	A6 First Aid for Disastors	B6. Geo-Informatics and			
	AU. PHSI-AIU IOI DISASIEIS	Applications in Disasters			

5. STUDENT ELIGIBILITY AND QUALIFICATIONS

Student Strength	Qualifications:			
25 (Twenty-Five)	 Under-graduate 			
	Any Stream			
	 Minimum 40% Marks 			

6. SCHEME OF COURSE

Scheme has been set for a 16-week semester; 1 Credit = 16 hours

Field Work is a compulsory component of the program.

Instruction and Field Work Hours

Total Hours (Instruction and Field Work)	2608 hours
Total Credits	163 Credits
Total Instructional Hours	1328 hours
Semesters 1-2: 5 papers/semester (4 hours/week/paper)	83 Credits
Semesters 3-4: 4 papers/semester (5 hours/week/paper)	
Semester 4 includes Dissertation (48 hours)	
Transacted by way of classroom lectures, guided reading sessions, assignment	
writings, seminars, group discussions, tutorials, role-play, case studies, field	
trips, field surveys, field action and computer classes.	

Total Field Work Hours	1280 hours
Field Work happens in 4 semesters; All semesters have concurrent fields work	80 Credits
and Semester 2 and 4 has Block Placements.	
Comprehensive Viva in Semester 4	

7. DETAILED SCHEME OF THE PROGRAMME

S -	Sh		Hrc/	Instr.	E\A//	ESA	Intorna	Extern	Total	
Se m	Sub. Cod	Title of Paper	Sem	Hrs/ Week	Week	hrs	l Marks	al Marks	Marks	Credits
Ι	1.1.	Introduction to Social Work	64	4		3	25	75	100	4
	1.2.	Introduction to Disasters and Disaster Management	64	4		3	25	75	100	4
	1.3.	Working with Communities- Community based Disaster Risk Reduction (CBDRR)	64	4		3	25	75	100	4
	1.4.	Working with Vulnerable Groups	64	4		3	25	75	100	4
	1.5.	Working with Individuals- Psychological first-aid (PFA) and Rehabilitation	64	4		3	25	75	100	4
	FW 1	Field Practicum: Concurrent FW (@7 hours X 2 Days/week)	224		14		100		100	14
		TOTAL	544	20	14	15	225	375	600	34
II	2.1.	Disaster Management Models	64	4		3	25	75	100	4
	2.2.	Disaster Vulnerability and Sustainable Development	64	4		3	25	75	100	4
	2.3.	Social Work Research and Statistics	64	4		3	25	75	100	4
	2.4.	Administration of Human Service Organizations (HSOs)- Disaster Resilience Building	64	4		3	25	75	100	4
	2.5.	Self-Care Skills for Disaster Social Workers	64	4		3	25	75	100	4
	FW 2	Field Practicum: Concurrent FW (@7 hours X 2 Days/week) & Block Field Work (@8 hours X 24 days)	416		14		100		100	26
		TOTAL	736	20	14	15	225	375	600	46
III	3.1	Project Management for Disasters	80	5		3	25	75	100	5
	3.2.	A1. Medical Information for Disaster Health Practice; B1. ICT for Disaster Management	80	5		3	25	75	100	5
	3.3.	A2. Mental Health and Disasters; B2. Geographical Information Systems in Disaster Management	80	5		3	25	75	100	5
	3.4.	A3. Disaster Health Management; B3. Science and Technology for Risk Assessment, Prevention and Preparedness	80	5		3	25	75	100	5
	FW 3	Field Practicum: Concurrent FW (@7 hours X 2 Days/week)	224		14		100		100	14
		TOTAL	544	20	14	12	200	300	500	34
IV	4.1	Counselling for Trauma Victims	80	5		3	25	75	100	5
	4.2.	 A4.; Post-Traumatic Stress Disorder (PTSD) and Cognitive Behavioural Therapy (CBT); B4. Digital Image Processing and Image Analysis 	80	5		3	25	75	100	5
	4.3	A5. Post-Traumatic Stress Disorder (PTSD) and Therapy with Children;	80	5		3	25	75	100	5

	B5. GIS and GPS Technologies In Disasters								
4.4.	A6. First-aid for Disasters; B6. Geo-Informatics and Applications in Disasters	80	5		3	25	75	100	5
FW 4	Field Practicum: Concurrent Field Work (@7 hours X 2 Days/week) & Block Field Work (@8 hours X 24 days)	416		14		100		100	26
	Dissertation	48					100	100	3
	Comprehensive Viva Voce						100	100	
	TOTAL	784	20	14	12	200	500	700	49
	GRAND TOTAL	2608	80	56	54	850	1550	2400	163

8. COURSE OVERVIEW

Course Structure

The Post-graduate course leading to the award of the "Master of Social Work (M.S.W.) in Disaster Management" offered by the University of Kerala, is a program spread over four semesters. The academic work is a package of the following components:

- Nineteen Common Papers including Dissertation
- Concurrent Field Work: The components of concurrent field work include (1) Bridge Course (2) Exposure Visits, (3) Concurrent Fieldwork Internships, (3) Specialized agency exposure, (4) Addon Certificate Courses (specialized skill-oriented short-term courses of prestigious institutions), (5) Walk with Experts, (6) Rural live-in camp, (7) Street Theatre Workshop, (8) PRA camp, (9) Other Programmes/Projects- contributing to/participating in programmes/conferences/seminars/workshops, (10) a viva voce at the end of each semester to evaluate fieldwork and comprehension
- Two Block Field Work Internships
- Comprehensive Viva Voce

Teaching Hours and Transaction

Considering that professional development requires personal reflection, the program will have a total of **2608** hours of instruction and field work. The instructional hours will be transacted by way of classroom lectures, guided reading sessions, assignment writings, seminars, group discussions, tutorials, role-play, case studies, field trips, field surveys, field action and computer classes. The instructional content is transacted by way of 4 papers each in the first and second semesters and 5 papers each in the third and fourth semesters. Semester IV also requires the learner to submit a Dissertation/Project and attend a comprehensive viva-voce. All semesters will feature concurrent fieldwork internships transacted concurrently, 14 hours per instructional week on Thursdays & Saturdays or Fridays and Saturdays. Semesters 2 and 4 will have Block field work internships. An

internship requires placement of students in an organization requiring a mandate of 24 days of internship, covering 192 hours.

Evaluation

Evaluation of each paper shall be done in parts, viz., Continuous Assessment (CA) and End Semester Assessment (ESA). The distribution of marks shall be 25 marks for CA and 75 for ESA (University Examinations at the end of each semester). There shall be no continuous assessment for Dissertation/ Project. The allocation of marks for Continuous Assessment (CA) shall be in the following proportion.

CA Components	Marks
a. Assignment	10
b. Seminar	5
c. Tests	10
TOTAL	25

Each student shall be required to do an assignment for each paper; a maximum 10 marks shall be awarded for the assignment. There shall be two class tests during a semester; marks of tests shall be awarded on the basis of the marks secured for the best among the 2 tests; a maximum 10 marks shall be awarded for the test. Students shall be required to present a seminar on a selected topic in each paper. The evaluation of the seminar will be done on the basis of presentation, content of the seminar paper and participation in discussion; a maximum of 5 marks shall be awarded.

The Dissertation/Project work shall not be less than 50 typed (font in 12 point, in Times New Roman-spaced at 1.5point) pages in standard thesis format showing evidence of the ability of the candidate to design a study, collect relevant materials, analyse it using appropriate tools of research and to present an analytical assessment of the problem. Two copies of the dissertation duly certified by the supervising Teacher and countersigned by the Principal, where the course is held, shall be submitted to the University before the commencement of the End Semester Examination (ESA) at the end of the Fourth Semester. The Dissertation/Project shall be awarded a maximum of 100 marks, of which 20% shall be allotted to viva-voce examination, which shall be conducted along with the comprehensive viva.

Pass requirement shall be 40% marks for ESA for each paper and an aggregate minimum of 50% marks including CA for all the papers put together during a semester. The marks for project work and viva-voce will be carried over.

The Evaluation of Fieldwork Internship in all the four semesters shall be internal. The total marks for each semester shall be 100. During the first semester the field work shall include exposure visits to various agencies giving specific social work and social welfare services in addition to the regular fieldwork internship. During the Second Semester the students shall be placed in agencies and communities and shall undergo supervised training in basic methods of social work.

During the third and fourth semesters the students shall be exposed to and placed in institutions, agencies and communities practicing specialized services in the areas of their specialized studies Students shall put in 14 hours of field work per week excluding the time taken for travel but including report writing time. The student shall be assessed on the basis of the following:

a. Regularity and punctuality in reporting for work

b. Quality and content of work done

c. The quality of the reports and the punctuality in submitting the report

d. Participation in group conferences and contribution

e. Diligence shown in seeking individual guidance from the supervisor (individual conference) and reflecting and bringing about personal development

f. Keenness shown in undertaking the practical work, as well as the extra efforts and initiatives being made, to bring in qualitative difference to the work under supervision

g. Special assignments undertaken on behalf of the client and/or agency, and

h. A viva-voce at the end of the semester, to ascertain the grasp of the theories in practice and application of the host of methods of social work, the principles, and stages of social work intervention.

Assessment during the Block Field Placement during the Second and Third Semesters will be on similar grounds; however, coming to the evaluation 50% of the marks may be awarded on the basis of the recommendations of the agency personnel where the social work trainee (student) has been placed.

9. DETAILED SYLLABUS WITH COURSE OBJECTIVES

SEMESTER I

1.1. INTRODUCTION TO SOCIAL WORK

- **CO 1:** Understand the concepts and the evolution of professional social work.
- CO 2: Discuss the philosophical base of social work profession.
- CO 3: Apply the core competencies and professional attributes of social work in practice.
 - I. Social Work: Definition, meaning, purpose, goals and objectives; assumptions and functions of Social Work - basic and ancillary methods of Social Work - scientific basis of Social Work - knowledge, tools, techniques, skills, and abilities of a Professional Social Work Practitioner - principles of Social Work - Concepts: Social Service, Social Welfare, Social Security, Social Reform, and Social Action.
 - II. History of Social Work: History of Social Work in UK and USA. Religious charity -Statutes of Edward, Henry, and Elizabeth - Elizabethan Poor Law - Charity Organisation Society (COS) - Settlement House Movement - Poor Law Commissions and Beveridge Report - Professional development of Social Work- Development of Social Work Education; Social Work in Ancient India - Contribution of Social Reformers, Social Reform Movements, and Organisations - Development of Social Work from charity to Professional Social Work. Current trends.
 - III. The Philosophico-ideological bases of Social Work: Philosophical bases of Social Work - moral and religious values in Social Work philosophy -Christian, Hindu, Islam, Buddhist traditions - ideologies: Liberalism, Humanism, Socialism, Communism, Democracy; Gandhian Philosophy of Social Work
 - IV. Disaster Management and other Avenues of Social Work Practice: Fields of Social Work Practice. International Social Work. Voluntarism. Definition and characteristics of a profession - Social Work as profession; professional role of Social Work Practitioner -Development of Social Work Education in India.
 - V. **Core competencies and attributes of a Disaster Management professional:** Holistic view of the human person acceptance of people as they are objectivity non-judgmental and non-exertive attitude ability to relate to and work with different people -

emotional maturity - self-awareness and conscious use of self - adherence to the Code of Ethics - identification with the profession - Core Competencies and Cultural Competencies of a social work practitioner envisioned by NASW/CSWE.

- Cox David and Manohar Pawar (2006). International Social Work: Issues, Strategies and Programs. New Delhi: Vistaar Publications.
- Desai, Murli (2010). Ideologies and Social Work Historical and Contemporary Analyses. Hyderabad: Rawat Publication.
- DiNitto, Diana M. and Aaron McNeece, C. (2008). Social Work Issues and Opportunities in a challenging profession (3rd edition). Chicago: Lyceum Books.
- Dubois, Brenda and Miley, Karla Krogsrud. (2002). Social Work- An Empowering Profession. Boston: Allyn and Bacon.
- Hepworth, Dean, H (2010). Direct Social Work Practice-Theory and skills (8th edition). New York: Brooks/Cole.
- Karla Krogsrud Miley, Michael O'Melia, Brenda DuBois. (2013). Generalist Social Work Practice: An Empowering Approach.
- Misra, P.D. (1994). Social Work: Philosophy and Methods, New Delhi: Inter-India Publications.
- Zastrow H. Charles. (2017). Introduction to Social work and Social Welfare. United States: Brooks/Cole Publishing
- Zastrow H. Charles. (2009). The Practice of Social Work. United States: Brooks/Cole publishing company.
- Zastrow, C. (2016). Generalist Social Work Practice: A Worktext. United States: Oxford University Press, Incorporated.

1.2. INTRODUCTION TO DISASTERS AND DISASTER MANAGEMENT

CO 1: Understand the nature and impact of disasters, globally and in India.

CO 2: Describe the concepts, terminologies, developments and prospects in the field of Disaster Management.

CO3: Analyse and evaluate the policy and administrative processes involved in Disaster Management.

- I. Disasters: Concepts, and definitions (Hazard, Vulnerability, Risk, Disaster). Classification: Natural (Geological, Meteorological, Hydrological, Climatological, Biological, Extra-terrestrial) and Man-made- Technological (Industrial and Transport Accidents), Miscellaneous Accidents and Terrorism. Impacts (including social, economic, political, environmental, health, psychosocial, etc.). Differential impacts- in terms of caste, class, gender, age, location, disability. Global trends in disasters-urban disasters, pandemics, complex emergencies, climate change. Disaster profile of India.
- II. 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 ad Rescue), Relief, Recovery and Reconstruction. Multi-disciplinary character of DM.
- III. Disaster Policy: <u>The International Decade for Natural Disaster Reduction</u>, Yokhama Declaration, United Nations International Strategy for Disaster Risk Reduction (UNISDR), Hyogo Framework for Action (HFA); Sendai Frame work and Action Plan. IDRL Guidelines, Sphere standards; Disaster Policy (National Policy on Disaster Management), Disaster Management Act 2005. National Disaster Management Plan 2019.
 - 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.
 - V. Stakeholders: 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.

- Alexander, D. (2000). Introduction in 'Confronting Catastrophe', Oxford University Press,
- Andharia, J. (2008). Vulnerability in Disaster Discourse, JTCDM, Tata Institute of Social Sciences Working Paper no. 8.
- Blaikie, P., Cannon, T., Davis, I., Wisner, B. (1997). At Risk Natural Hazards, Peoples' Vulnerability and Disasters. Routledge.
- Carter, N. (1991). Disaster Management: A Disaster Manager's Handbook. Manila Philippines: Asian Development Bank
- Damon, Coppola P. (2007). Introduction to International Disaster Management.
- Cuny, F. 1983. Development and Disasters. Oxford University Press.
- GoI. 2005. Disaster Management Act. New Delhi: Government of India (GoI)
- GoI. 2009. National Disaster Management Policy. New Delhi: Government of India (GoI)
- 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, Volume63, Issue 2, April.
- Kapur, Anu. (2010). Vulnerable India: A Geographical Study of Disasters. New Delhi: IIAS and Sage Publishers.
- Kapur, Anu et. al. (2005). Disasters in India Studies of grim reality. Jaipur: Rawat Publishers.
- NDMA. (2019). National Disaster Management Plan, NDMA: New Delhi
- S. Parasuraman and Unnikrishnan. (2013). India Disasters Report, Volume 1 & 2. OUP.
- UNISDR. (2002). Natural Disasters and Sustainable Development: Understanding the links between Development, Environment and Natural Disasters, Background Paper No. 5.

1.3. WORKING WITH COMMUNITIES- COMMUNITY BASED DISASTER RISK REDUCTION (CBDRR)

CO 1: Understand the concepts and historical evolution of community practice and social action as methods of social work.

CO 2: Recognize various phases and models of Community Practice, especially with respect to disasters.

CO 3: Apply the principles and skills of community practice to Community based Disaster Risk Reduction

- I. Community Organisation: Community: Definition and Types- Rural, Urban, Tribal, Maritime. Community Practice (Community organization and Social action): Definition, Goals, Components- Community groups within community- Individual- Worker-Agency; History; Principles of Community Organization and Social Action; Community organisation as a social work process; Role and Skills of Community Organizer; Differentiating Community Organisation and Community Development.
- II. Phases and Models of Community Practice: Phases: Study-analysis-assessmentdiscussion-organisation-action-evaluation-modification and continuation. Models of Community Organisation- Jack Rothman's 3 Models: Locality Development, Social Planning and Social Action; Mary Weil's Eight models.
- III. Social Action: Definition, Meaning, Objectives, Principles. Methods, strategies and skills for social action. Social action for social reform and social development. Social Action movements- Swadeshi (1905), Save Silent Valley (1973), Chipko Movement (1973), Narmada Bachao Andolan (1978), Anti-Corruption Movement (2011). Role of social worker in Social action. Social Action Groups.
- IV. Community Based Disaster Risk Reduction (CBDRR): Meaning and Definition. Mainstreaming disaster risk reduction in development. CBDRR in Kerala. Steps in preparing CBDRR- Awareness generation and Community Organization; Risk and Vulnerability Assessments- Participatory Capacity and Vulnerability Assessment (PCVA) and Participatory Disaster Risk Assessment (PDRA); Planning for prevention, preparedness and mitigation at the local level; Networking and Collaborations; Components of the Community-based Disaster Management Plan
- V. **CBDRR Committees and Task-Forces:** Local disaster Management Committeesmembership and roles. Task-force- meaning, membership, responsibilities and types.

Task force training: knowledge, skills and resources required for each team- early warning and dissemination team, evacuation, search and rescue team, medical and first-aid team, water and sanitation team, relief and coordination team, carcass disposal team, trauma counselling team, damage and loss assessment team. Disaster Drills; Ensuring Sustainability; Success stories.

- ADPC (2000), "Community Based Disaster Management (CBDM): Trainer's Guide, Module 4: Disaster Management". Asian Disaster Preparedness Center (ADPC). Bangkok, Thailand.
- Community Based Disaster Risk Reduction. (2012). United Kingdom: Emerald Group Publishing Limited.
- Gamble, D. N., and Weil, M. (2010). Community Practice Skills: Local to Global Perspectives. New York: Columbia University Press.
- Hardcastle, D., Powers, P. and Wenocur, S. (2011). Community Practice: Theories and Skills for Social Workers. New York: Oxford University Press.
- Kerala State Emergency Operations Centre (SEOC). 2019. Orangebook of Disaster Management-Kerala. Kerala State Disaster Management Authority Department of Disaster Management, Govt. of Kerala. Retrieved from: https://sdma.kerala.gov.in/wp-content/uploads/2019/08/Orange-Book-of-Disaster-Management-1-2019.pdf
- Kothari, M. (2006). Development and Social Action. New Delhi: Rawat Publications
- Krist-Ashman, K.K., and, Hull, G.H. (2001). Generalist Practice with Organizations and Communities. Belmont, USA: Brooks/Cole.
- Marcus, O. (2005), "A Conceptual Framework for Risk Reduction". World Conference of Disaster Reduction, Kobe, Japan, 18-22 January 2005.
- Mayers, K. N. (1993), Total Contingency Planning for Disasters: Managing Risk, Minimizing Loss, Ensuring Business Continuity. John Wiley and Sons, New York
- NDMA. (2019). National Disaster Management Plan, NDMA: New Delhi
- Ross, M. (1955). Community Organization: Theory, Principles and Practice. London: Harper and Row: London
- Siddiqui, H.Y. (1984). Social Work and Social Action. New Delhi: Harnam Publications

- Sphere Association. 2018. The Sphere Handbook: Humanitarian Charter and Minimum Standards in Humanitarian Response. Switzerland: Sphere
- UNDRR. (2019). Words into Action: Local Disaster Risk Reduction and Resilience Strategies. Switzerland: United Nations Office for Disaster Risk Reduction (UNDRR)

1.4. WORKING WITH VULNERABLE GROUPS

CO1: Understand the concepts and historical evolution of social work practice with groups

CO2: Recognize the phases of social group work and analyse the dynamics of group processes during these phases.

CO3: Apply the principles, models, skills and techniques of social group work practice vulnerable groups

- I. Social Group Work: Concept of group and types of groups. Definition, objectives and characteristic of group work. Impact of group experience on the individual. History of Social Group Work, Principles of group work. Scope of group work.
- II. Social Group Work Process: Phases of the group work process- Intake, study, goalsetting, intervention, evaluation. Stages of Group Development - goal-setting, group norm, problem solving, decision making, conflict resolution. Programme as a tool, principles of programme planning, programme media, programme development process.
- III. Social Group Work Dynamics and Models: Social Dynamics of Groups- group size, member resources, structure, leadership, roles, norms, cohesiveness, processes, teams. Group Work Models- Social Goals Model, Remedial and Reciprocal Model. Kurt Lewin's Models.
- IV. Social Group Work recording: Principles of Recording. Types of Recording-Summary, Descriptive, Process, Problem-oriented and Summative. Formats for Group Work Recording.
- Working with Vulnerable Groups: Types of Vulnerable Groups- Women, Children, Disabled, Elderly, Migrants, Informal Workers, Other Socially Disadvantaged Groups.
 Special needs of different groups and group work with these groups.

REFERENCES

- Capuzzi, David; Gross, Douglas R; Stauffer, Mark D (2010). Introduction to Group work. Jaipur: Rawat publications.
- Crawford, K., Price, M. and Price, B. (2015). Groupwork Practice for Social Workers. New Delhi: Sage
- Fatout, M. (2017). Models for Change in Social Group Work. United Kingdom: Taylor & Francis.
- Konopka, Gisela (1963). Social Group Work, A Helping Process, New York, Prentice Hall, Inc.
- Lassner, J. (2013). Social Group Work: Competence and Values in Practice. United States: Taylor & Francis.
- Napier, Gershenfeld. (2005). Group Theory and Experience. AITBS Publications.
- Siddiqui, H Y (2008). Group Work: Theories and Practices. Jaipur: Rawat publication.
- Toseland, R.W. and Rivas, R.F. (2009). Introduction to Group work practice. New York: Pearson/Allyan and Bacon.
- Trecker, H B. (1990) Social Group Work Practice. New York: Women's Press.
- Trecker, H.B. (1972). Social Group Work: Principles and Practice. Associated Pub. House
- Weil, M., Chau, K. L., Southerland, D. (2019). Theory and Practice in Social Group Work: Creative Connections. United Kingdom: Taylor & Francis.

1.5. WORKING WITH INDIVIDUALS- PSYCHOLOGICAL FIRST-AID (PFA) AND REHABILITATION

CO1: Understand the concepts and historical evolution of social work practice with individuals/case work

CO2: Recognize the phases of social case work and

CO3: Apply the principles, skills and techniques of social case work practice to the psychological first-aid, crisis intervention and rehabilitation

I. Social Case Work: Definition, nature, objectives, relevance, scope - relation of Social Case Work to other methods of Social Work - historical development of Social Case

Work - Principles and components of Social Case Work and ethical issues in the practice of Social Case Work. Client-Worker Relationship: Definition, use and characteristics. Transference and Counter – Transference and their use in diagnosis and treatment.

- II. Phases of Case Work Process: 1. Engagement 2. Exploration 3. Planning: Assessment: Multidimensionality of assessment-critical role of assessment various components of assessment- different systems of assessment – intra-personal, interpersonal and environmental systems, family system and social support systems; Tools for Exploration and Assessment: Interviewing, supportive techniques, home visits, collateral contacts and referrals. Goal setting and formulation of contract 4. Intervention: Implementation and Goal Attainment 5. Evaluation 6. Disengagement/Termination.
- III. Settings and Skills: Skills and techniques in helping process in case work: Settings of Case Work. Client-Worker Relationship: Definition, use and characteristics. Transference and Counter –Transference and their use in diagnosis and treatment. Support, Clarification, Interpretation, Suggestion, Developing insight, Identification, Resource Utilization, Environmental Modification, Counselling.
- IV. Recording in Social Case Work: Recording: use, structure and content Methods of recording: Verbatim, narrative, condensed, analytical and summary records supervision.
- V. Psychological First-Aid (PFA), Crisis Intervention and Rehabilitation: Concepts of Psychological Firs-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

Gordon, G. (1965). Principles of Social Case Recording. London: Colombia University Press

- Guy Winch. (2013). Emotional First aid. Australia: Exisle Publications
- Hamilton, G. (1964). Theory and practice and Practice of Social Casework. London: Colombia University Press
- Hepworth et al. (2010). Theory and Skills in social work. California: Brooks/Cole, Cengage Learning
- Lester, Miles. (2011). Social Rehabilitation: Theory and Practice. Clanrye International.

- Mathew, G. (1992). An Introduction to Social Case Work. Mumbai: Tata Institute of Social Sciences,
- Munson, C.E. (1979). Social Work Supervision. London: Collier Macmillan Publishers.

Perlman, H.H. (1957). Social Casework: A Problem-Solving Process. London: University Chicago

- Perlman, H.H. 1957. Social Casework: A Problem-Solving Process. Chicago: The University of Chicago Press
- Roberts, A.R. (2000). Crisis Intervention Handbook- Assessment, Treatment and Research. Oxford University Press

WHO. (2013). Psychological First Aid- Facilitator's manual for orienting field workers. WHO

SEMESTER II

2.1. DISASTER MANAGEMENT MODELS

- CO 1: Understand how governments respond to disasters globally
- CO 2: Identify international best practices and pitfalls in the area of Disaster Management
- CO 3: Appraise the disaster Management capabilities of India and the state of Kerala
- I. **Disaster Management Models:** Uses of Disaster Models. Kelly's Circular Model. The Crunch Model. The Pressure and Release Model. Access Model. Other Models.
- II. International Disaster Management Experience: International disaster management efforts during Spanish Flu (1918), Tsunamis (2004) and COVID (2019). The Cuban Model of Hurricane Risk Management, Japan's Emergency Management and response System. Bangladesh multi-hazard risk reduction Model. Critical analysis of International disaster management experience- identifying gaps and best practices.
- III. National Disaster Management Experience: Bengal Famine (1943). Bhopal Gas Disaster (1984), Surat Plague (1994), Orissa Super-cyclone (1999), Gujarat Earth Quake (2001), South India Tsunami (2004). Bihar floods. Landslides in North-East Himalayas. Heat Waves in Rajasthan, Andhra Pradesh and Telangana. Cold Waves in Rajasthan and Uttar Pradesh. Critical analysis of National experience- identifying gaps and best practices.

- IV. Kerala Disaster Management Experience: Landslides. Coastal Floods. Sabarimala Stampede. NIPAH (2018). Kerala Floods (2018). COVID (2019). The three pillars of the Kerala Model of Resilience: Education, Health and Local Governance. Best Practices: KILA Training Programme, School Safety, Social Volunteer Force, State Multi-purpose shelters, Community Kitchen and Youth Volunteerism. Critical analysis of Kerala experience.
- V. International NGOs and best practices: Red Cross, Sphere, Oxfam, World Relief, Caritas, CBM International. Critical analysis of NGO experience.

- Aguirre, B.E. (2005). Cuba's Disaster Management Model: Should It Be Emulated? International Journal of Mass Emergencies and Disasters November 2005, Vol. 23, No. 3, pp. 55-71. Retrieved from: http://www.ijmed.org/articles/316/download/
- Blaikie P., Cannon T., Davis I. and Wisner B. (1994), At Risk: Natural Hazards, People's Vulnerability and Disasters. Routledge, London.
- Samuel, J., and Abraham George, A. (eds.). (2019). Towards disaster risk reduction in Kerala: Experiences, Perspectives and Way Forward, Plan International.
- Joseph, Jacquleen et al. (2018). Leadership for Disaster Resilience- Learning from the current practices in India. Mumbai: TISS & IIHS
- Kelly, C. (1998). "Simplifying Disasters: Developing a model for Complex Non-linear Events".
 Proceedings of International Conference on Disaster Management: Crisis and Opportunity: Hazard Management and Disaster Preparedness in Australasia and the Pacific Region, Cairns, Queensland, Australia, pp. 25-28, 1-4 November, 1998
- Kumar, S. (2008). Best Practices and Case Studies on Disaster Management: The Maharashtra Experience. Mumbai: Relief & Rehabilitation, Govt of Maharashtra
- Moore, M. et al. (2007). Models of Relief: Learning from Exemplary Practices in International Disaster Management. Working Paper- 514. RAND Center for Domestic and International Health Security
- Thummarukudy, M and Peter, B. (Eds.). (2019). Leaving no one behind: Lessons from the Kerala Disasters. Kerala: Mathrubhumi Books

- Srivastava, N., et al. (2016). Effects of Various Disaster Management Approaches: An Evidence Summary. London: EPPI-Centre, Social Science Research Unit, UCL Institute of Education, University College London.
- Santha, S. D. and Bhuvaneswari, S. (2009). A Malady amidst Chaos: A Study on the Population Vulnerability to the Chikungunya Epidemic in Kerala. Loyola Journal of Social Sciences, 23(2):111-129.
- Santha, S. D. (2015). Early Warning Systems among the Coastal Fishing Communities in Kerala: A Governmentality Perspective. Indian Journal of Social Work, 76(2): 199-222.
- Santha, S. D. (2020). Climate Change and Adaptive Innovation: A Model for Social Work Practice. London: Routledge.
- Santha, S. D. and Ratheeshkumar K. S. (2010). Population Vulnerability and Disaster Risk Reduction: A Situation Analysis among the Landslide affected Communities in Kerala, India. Jamba: Journal of Disaster Risk Studies, 3(1): 367-380.
- Reddy, S. (Ed.) (2019). The Asian Tsunami and Post-Disaster Aid. New Delhi: Springer.
- United Nations. (2006). NGOs & Disaster Risk Reduction: A Preliminary Review of Initiatives and Progress Made. Background Paper for a Consultative Meeting on A "Global Network of NGOs for Community Resilience to Disasters". Geneva: United Nations.

2.2. DISASTER VULNERABILITY AND SUSATAINABLE DEVELOPMENT

CO 1: Recognize how social structures (such as race, class, gender etc.) generates disaster vulnerability and privilege

- CO 2: Theorize how changes in society could result in better disaster risk reduction.
- CO 3: Apply critical thinking and social analysis skills to disaster situations
 - 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.

- II. Social Theories of Disasters: Sociological Analysis and Critical Thinking about disasters. Theories and perspectives- Conflict theory, Development theory, Risk and Uncertainty Theories (Ulrich Back and Giddens), Feminist theories. Social Work Theories- The systems theory, Person-in-environment, Empowerment and Strength-based approaches. Integration of theories and perspectives.
- III. Political Economy of Disasters: Economic impacts of disasters- long and short-term. The Schumpeterian model and arguments against it. Economic Assessment post-disasterquantification 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.
- IV. Community Participation: Community Power: power structure-sources of powerweberian 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.
- 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.

- Blaikie, Piers et al. (1994). At risk: Natural hazards, people's vulnerability, and disasters. New York: Routledge
- 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
- Dominelli, Lena et al., (eds.) (2019). The Routledge Handbook of Green Social Work. London: Routledge.

- Fisher, Henry W. (1998). Response to Disaster: Fact Versus Fiction & Its Perpetuation: The Sociology of Disasters. New York: University Press of America, Inc.
- Gupta Anil K, Sreeja S. Nair. (2011). Environmental Knowledge for Disaster Risk Management. New Delhi: NIDM
- Joseph, Jacquleen. (2013). Measuring Vulnerability to Natural Hazards: A Macro Framework, Disasters, 37(2), 185-200.
- Parasuraman, S., and Acharya, N. (2000). Analysing forms of vulnerability in a disaster. The Indian Journal of Social Work, 61(4)
- Pelling Mark. (2003). The Vulnerability of Cities: Natural Disaster and Social Resilience. London: Earthscan Publishers
- 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.
- 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.
- Tierney, Kathleen. (2014). The Social Roots of Risk: Producing Disasters, Promoting Resilience. Stanford University Press
- Tierney, K. (2019). Disasters: A Sociological Approach. United Kingdom: Wiley.

2.3. SOCIAL WORK RESEARCH AND STATISTICS

CO 1: Develop an understanding of research and appreciate its significance in Social Work

CO 2: Develop skills in the selection and formulation of research problem, reviewing literature, preparing a proposal and preparing a tool for data collection.

CO3: Evaluate various research designs and discuss their strengths and weaknesses.

CO4: Illustrate the various statistical tools relevant to social work research

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.

- 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.
- 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, indepth/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.
- IV. Statistics for Social Work: Introduction- Scope and Limitations- 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).
- 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.

REFERENCES:

Alan Bryman, (2012) Social Research Methods. New York: Oxford University Press.

Babbie, Earl; Wagner, Willian E and Zaino, Jeanne (2018). Adventures in Social research using SPSS. Sage publishers.

- Cramer Duncan, (1999). Fundamental Statistics for Social Research: Step-by-Step Calculations and Computer Techniques using SPSS for Windows, New York: Routledge.
- Creswell, John W. and Creswell, J. David (2017). Research Designs: Qualitative, Quantitative and Mixed Approaches, Sage publishers.
- Darin, Weinberg. (2002). Qualitative Research methods, UK: Blackwell publishing
- Gupta, SC (2018). Fundamentals of Statistics. New Delhi: Himalaya Publishing House.
- Lal Das DC (2017). Practice of Social Research: Social Work Perspective. Jaipur: Rawat Publications
- Meier, Patrick. Digital Humanitarians How Big Data is Changing the Face of Humanitarian Response. NY: CRC Press.
- Mikkelsen B. (2005). Methods for Development Work and Research. A new guide for practitioners, Sage.
- Rubin, A. & Babbie, E. (2005). Research Methods for Social Work. California: Brooks/Cole Publishing Company.
- Sirkin, R Mark. (2007). Statistics for Social Sciences, Sage Publishers

The Handbook of Social Work Research Methods. (2010). United Kingdom: SAGE Publications.

2.4. ADMINISTRATION OF HUMAN SERVICE ORGANIZATIONS (HSOs)-DISASTER RESILIENCE BUILDING

CO1: Understand the roles and duties involved in administering and managing Social Welfare Organizations

CO 2: To understand the disaster response and communication in crisis

CO 3: To develop system relevant occupation and communication flow chart to direct the intervention

CO 4: To create social media communication models to effectively address the disasters

I. Social Welfare Administration: Social Welfare Administration and Social Work Administration. Social Work Administration as a method. Tasks of Social Work Administrator. Principles of Social Work Administration. Human Service Organizationsconcept, types and their functions. Social Welfare Administration in India.

- II. Skills for Social Welfare Administration: Administrative Functions (Planning, Organising, Staffing, Directing, Co-ordinating, Reporting and Budgeting); Personnel, Finance and Office Management functions. Using MS Office: Word, Excel and Power point. Registration of NGOs.
- III. 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.
- IV. Disaster Communication: Disaster Communication- 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.
- V. 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.

REFERENCES:

Arefian, F. F. (2018). Organising Post-Disaster Reconstruction Processes. Springer

Chowdhry, P. D. (2000). Social Welfare Administration, Atma Ram Sons., Delhi,

Fischoff, B (1995). Risk perception and communication unplugged: Twenty years of Process. Risk Analysis, 15(2):137-145, <u>http://www.soc.iastate.edu/Sapp/Fischhoff.pdf</u>

- Goel, S.L., Jain R.K. (2002). Social Welfare Administration: Theory and Practice, Vol. 1 and 2. New Delhi: Deep & Deep Publications.
- Koontz, Harold and Heinz Weihrich. (2000). Essentials of Management. New Delhi: Tata McGraw-Hill Publishing Company Limited.
- Lindell, M., Prater, C., and Perry, R. (2006). Fundamentals of Emergency Management, Chapters 4. —Risk Perception and Communication. <u>http://training.fema.gov/EMIWeb/edu/fem.asp</u>
- 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), <u>http://www.ibcperu.org/doc/isis/8551.pdf</u>
- March, A. and Kornakova, M. (2017). Urban Planning for Disaster Recovery. Butterworth-Heinemann
- 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
- Paton, D. and Johnston, D. (2006). Disaster resilience: An integrated Approach. Charles C Thomas Pub Ltd.
- Paul Spicker (2008). Social policy themes and approaches: Policy Press, Bristol, UK.
- Reidar, D. (2004). Evaluating Development Programmes and Projects. Second Edition., Sage Publications
- 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. Quarantelli and R.R. Dynes (Eds). Handbook of Disaster Research. New York, NY: Springer.

Menon, V. C. (2015). Managing Humanitarian Logistics, New Delhi: Springer

2.5. SELF-CARE SKILLS FOR THE DISASTER SOCIAL WORKERS

- CO1: Initiate self-reflection to discover strengths and weaknesses
- CO 2: Plan and work towards personal and professional development
- CO 3: Diagnose personal trauma and undertake initiatives for healing
- CO 4: Develop Life Skills and Safety Skills for disaster Management practice

- I. Self-Reflection: Meaning. Dimensions of Self- Physical, mental, emotional, social, spiritual. Personal Values and beliefs. Philosophy of Life and Meaning of Happiness.
- II. Personal and Professional Self Development: Attributes of a mentally healthy individual. Attributes of a professional. Planning for Personal and Professional development.
- III. 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
- IV. Self-Care: Achieving Balance. Time Management. Health- Nutrition and Exercise. Managing Relationships. Meditation and Mindfulness.
- V. 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.

- Erlene-Grise Owens, Justin Miller, Mindy Eaves. 2016. <u>The A-to-Z Self-Care Handbook for Social</u> <u>Workers and Other Helping Professionals</u>. New Social Worker Press.
- Jasmin Lee Cori. 2008. Healing from Trauma: A Survivor's Guide to Understanding Your Symptoms and Reclaiming Your Life. Da Capo Lifelong Books
- Laura Van Dermoot Lipsky. 2009. <u>Trauma Stewardship: An Everyday Guide to Caring for Self</u> <u>While Caring for Others</u>. Berrett-Koehler Publishers
- Laurence Heller and Aline Lapierre. 2012. Healing Developmental Trauma, How Early Trauma Affects Self-Regulation, Self-Image, and the Capacity for Relationship. North Atlantic Books
- Loretta Pyles. 2018. <u>Healing Justice: Holistic Self-Care for Change Makers</u>. Oxford University Press
- Melanie Greenberg. 2017. The Stress Proof Brain. New Harbinger Publications
- Param Pujya Dadashri. 2003. The Science of Karma. Ahmedabad: Mr. Ajit C. Patel Mahavideh Foundation
- Paulo Coelho. 1988. The Alchemist. Harper Collins Publishers.
- Robin Sharma. 1997. The Monk who sold his Ferrari. Jaico Publishing House.

SaraKay Smullens. 2015. <u>Burnout and Self-Care in Social Work: A Guidebook for Students and</u> Those in Mental Health and Related Professions. NASW Press

Swami Vivekanada. 1973. Karma Yoga. Deutschland: Jazzybee Verlag Jurgen Beck

Thomas M. Skovholt and Michele Trotter-Mathison. 2011. <u>The Resilient Practitioner: Burnout</u> <u>Prevention and Self Care Strategies for Counselors, Therapists, Teachers and Health</u> Professionals. Routledge.

SEMESTER III

3.1. PROJECT MANAGEMENT FOR DISATER MANAGEMENT

CO1: Understand the concept of Project Management

CO2: Discuss the issues faced during the course of in project cycle and how to overcome them

CO3: Prepare project proposals in the Disaster Management setting

- I. Fundamental Elements of Project Management: Definition, Relevance, Scope and. Types of Projects, Relationship of Project, Program, Portfolio, And Operations Management: the Project Life Cycle, the ILO Framework and the role of the Project Manager. Post Disaster Rebuild Methodology (PDRM), Project Disaster.
- II. Project Initiation: Project Identification-essential guiding principles, Participatory Disaster Appraisal (PDA), Values Guiding Project Management: Justice, Care, Solidarity, a Project Charter, Components of project charter, Identifying Stakeholders
- III. Project Planning: Project Selection and the Organization: Organisational planningstrategic planning, operational planning and project planning: vision, mission, goal, objectives, activities and SWOT Analysis: Results-based management (RBM) - Log Frame Approach (LFA) – Components of LFA and LFA Matrices, Creating Work Breakdown Structure (WBS) and Budgeting
- IV. Project Execution, Monitoring, Controlling and Closure: Activities Scheduling, Net-Working-Critical Path Method (CPM), Project Evaluation and Review Technique (PERT), Purpose of Monitoring and Evaluation – Components of a good Monitoring and Evaluation System – Tools for Monitoring and Evaluation
- V. **Project Proposal Writing for Disaster Settings:** Need and importance of Project Proposal, Components of Good Proposal, Identifying potential problems in Disaster

Management setting and preparation of proposals- Community based Disaster Risk Reduction project, Camp Management Project, Rehabilitation Project.

REFERENCES

- A Guide to the Project Management Body of Knowledge (PMBOK[®] Guide, (2017), Sixth edition. Project Management Institute.
- Brunt, C. (2017). Human Resource Management in International NGOs: Exploring Strategy, Practice and Policy. UK: Palgrave Macmillan.
- Curlee, W. & Fleischer F. (2005 Sept). The humanitarian side of project management. PMI Global Congress 2005, Toronto, Canada.
- Dale, Reidar 2003 The logical framework: an easy escape, a straitjacket, or a useful planning tool? Development in Practice 13 (1): 57-70
- Devaux, A. Torero, M, Donovan, J., Horton, D (2016) Innovation for inclusive value-chain development: Successes and challenges, IFPRC, Accessible at https://www.ifpri.org/publication/innovation-inclusivevalue-chain-development-successes-and-challenges
- DFID. (2003). Tools for Development: A handbook for those engaged in development activity. Accessible at <u>http://www.managingforimpact.org/resource/tools-development-handbook-those-engageddevelopment-activity</u>

https://www.projectmanager.com

- ILO (2010) Project Design Manual: A step-by-step tool to Support the Development of cooperatives and other Forms of self-help organisations. Accessible at https://www.ilo.org/wcmsp5/groups/public/--- ed_emp/---emp_ent/--- coop/documents/instructionalmaterial/wcms_159819.pdf
- Natarajan, T., W.Elsner, and S. Fullwiler. Institutional Analysis and Praxis: The Social Fabric Matrix Approach
- Prennushi, G., G. Rubio, and K. Subbarao. 2000. "Monitoring and Evaluation." In Sourcebook for Poverty Reduction Strategies. Washington, D.C.: World Bank.
- Project Management Institute. (2005). Project management methodology for post disaster reconstruction (2005 ed.) Newtown Square, PA: Project Management Institute.

- Rapp, R.R. 2011. Disaster Recovery Project Management: Bringing Order from Chaos (Purdue Handbooks in Building Construction). Purdue University Press.
- Roy, Sam M. (2002). Project Planning and Management: Focussing on Proposal Writing. A Pradesh: CHAI.
- UNDP, 2002. Handbook on Planning, Monitoring and Evaluation for Development Results. UNDP. http://web.undp.org/evaluation/handbook/
- Warnes, Joseph, C.E. (2018). Workable Project Management Procedures for Disaster Reconstruction. Publisher: Christian Faith Publishing, Inc.

SPECIALIZATION A: DISASTER HEALTH

3.2.A. MEDICAL INFORMATION FOR DISASTER HEALTH PRACTICE

- CO 1: Understand the concept of Emergency medical services
- CO 2: List and describe common medical terms and procedures.
- CO 3: Understand the common medical problems handled during disaster
- CO 4: Analyse the role of Disaster Health Social Worker in times of disasters
- I. Emergency Medical Services (EMS) Systems: The field of Disaster Medicine. EMS Systems and Process, components. The Emergency First Responder (EMR). The social workers and the field of EMS. Medical, Legal and Ethical Issues. Documentation.
- II. Medical Concepts: Health. Indicators of Health. Human Body and the Organ Systems. Departments in a hospital. Mortality, Incidence, Prevalence. Basic Medical and surgical procedures (life support, Intubation, anaesthesia, decontamination, puncture and cannulation etc.), tests (MRI, ECO etc.) and equipment (Catheter, Pacemaker etc.).
- III. Medical Interventions: Casualty Prediction and Disaster Plan Activation based on Type and Severity Disaster. CBRNE. Medical Response and the CO-S-TR Model framework. Incident Command System. Pre-hospital medical management of victims. Medical Care for large mass gatherings. Triaging medical & psychosocial. Identification of valuable groups. Patient Assessment. Identification of hospitals and other medical facilities to offer efficient disastrous medical service. Safe patient transportation –Vehicle extrication and Special Rescue. Incident Management. EMR Life Support Kit.

- IV. Medical Conditions: Disaster-specific (Crush syndrome, Burns etc.) or group-specific (Pediatric, geriatric etc.) conditions. Common Symptoms presented. Types of emergencies. Specific aspects of emergency medicine.
- V. Epidemiological Study of Disaster: Principles of Disaster Epidemiology, Rapid Health Assessment, Rapid health needs assessment. Outbreak Investigation. Environment health hygiene and sanitation issues during disasters, Preventive and prophylactic measures including Measles immunization, ORS, water, supply, chemoprophylaxis, food fortification, food supplements, MISP-Reproductive Health Care.

REFERENCES

- Chapleau, W. (2015). Emergency First Responder, Second Edition + Rapid First Responder, Second Edition. United States: Jones & Bartlett Learning, LLC.
- Ciottone et al. (2015). Ciottone's Disaster Medicine E-Book. United States: Elsevier Health Sciences.
- David E. Hogan, Jonathan L. Burstein. 2007. Disaster Medicine. (2007). United Kingdom: Lippincott Williams & Wilkins.
- Emily Ying Yang Chan, Rajib Shaw. 2020. Public Health and Disasters
- Grafft, J. A., Grafft, K. K. (2020). Essentials for The Emergency Medical Responder, 2nd Edition. (n.p.): Customized Safety Training, LLC.
- Guidelines for Competency Based Training Programme in DNB Emergency Medicine. NBE: National Board of Examination. Accessed from: https://nbe.edu.in/mainpdf/curriculum/EMERGENCY-MEDICINE.pdf
- Jan de Boer, Marcel Dubouloz. (2020). Handbook of Disaster Medicine. (2020). United States: CRC Press.
- Park, K. (2017). Park's Textbook of Preventive and Social Medicine. India: Bhanot Publishers.
- Pollak, A. N., Schottke, D. (2010). Emergency Medical Responder: Your First Response in Emergency Care. United States: Jones & Bartlett Learning.
- Roberts, M. J. (2007). Mass Medical Care with Scarce Resources: A Community Planning Guide. United States: Agency for Healthcare Research and Quality.

3.3.A. MENTAL HEALTH AND DISASTERS

- CO1: Understanding the concept of mental health and mental health disorders
- CO 2: Collect Case History and administer Mental Status Examination
- CO 3: Apply the principles of Mental health interventions to the field of Disaster Management.
 - I. Mental Health During Disasters: Definition of Mental Health. Characteristics of a Mentally Healthy person. Well-being and Disasters- Definition of well-being. Happiness. Tools to measure well-being and happiness. Factors affecting well-being post-disaster. Social Support, Social Networks and Environment Friendly Practices. Integrating Mental Health with Preparedness. Mental Health Systems during Disasters. Need Assessment.
 - II. Classification of Disorders: Concepts of Normalcy. Mental Disorders- Etiology and Factors influencing Prognosis (Predisposing, Precipitating, Perpetuating, Protecting, Present) The purpose of Classification. Introduction to ICD-11 and DSM-10, Psychiatric Disorders and their symptoms.
 - III. Psychiatric Evaluation and Treatment: The field of Disaster Psychiatry. Symptomatology, Case History taking, Mental Status Examination. Psychopharmacology, Psychotherapy and Alternative Treatments.
 - IV. Mental Health Conditions during Disasters: Psychological and Behavioural responses during Disorders, Distress and Health Risk Behaviours, Serious Mental illnesses, PTSD, Alcoholism, Personality Issues, Grief
 - V. Psychiatric Social Work: Concept, Objectives. History. Roles and Duties. Psychiatric Team. Settings: Child and Adolescents, Suicide Prevention, Geriatric Interventions. Other Settings of Psychiatric Social Work. Cultural Sensitivity.

- Yuval Neria, Sandro Galea, Fran H. Norris. (2009). Mental Health and Disasters. United Kingdom: Cambridge University Press.
- Wee, D. F., Myers, D. G. (2005). Disaster Mental Health Services: A Primer for Practitioners. United Kingdom: Brunner-Routledge.
- Cozza, S. J. (2014). Disaster and Trauma, An Issue of Child and Adolescent Psychiatric Clinics of North America, E-Book. United Kingdom: Elsevier Health Sciences.
- Stoddard, F. J. (2012). Disaster Psychiatry: Readiness, Evaluation, and Treatment. United States: American Psychiatric Publishing.

- Oriol, W. E., Nordboe, D. (1999). Psychosocial Issues for Older Adults in Disasters. United States: U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Center for Mental Health Services.
- Chan, E. Y. Y. (2017). Public Health Humanitarian Responses to Natural Disasters. United Kingdom: Taylor & Francis.
- Barlow, D. (2008). Clinical Handbook of Psychological Disorders. New York: Guilford
- WHO International Classification of Disorders- 11
- Sekar, K., Parthasarathy, R. and Muralidhar, D. (2007). Handbook of Psychiatric Social Work. Bangalore: NIMHANS
- Nirmala, B.P. (2014). Handbook of Psychiatric Rehabilitation Services. Bangalore: NIMHANS
- Corcoran, J. and Walsh, J. (2013). Mental Health in Social Work: A Casebook on Diagnosis and Strengths Based Assessment. New York: Pearson
- McQuistion et al. (2012). Handbook of Community Psychiatry. New York: Springer
- Ahuja, N. (2011). A Short Textbook of Psychiatry. New Delhi: Jaypee
- Jacquleen, Joseph (2016) Disaster Mental Health vs. Psychosocial Well Being: The Need for a True Paradigm Change, Austin Journal of Emergency and Critical Care Medicine, 3 (2), 1–3, 2016. [ISSN: 2380-0879]
- A.P. Francis, P. La Rosa, L. Sankaran, and S.P. Rajeev (Eds.), Social Work Practice in Mental Health: Cross-Cultural Perspectives, New Delhi: Allied Publishers, 2015.

3.4.A. DISASTER HEALTH MANAGEMENT

CO1: Understand the different components of Disaster Health Management

CO2: Become an integral part of Hospitals and Medical Teams in preparing for and intervening during disasters

CO3: Analyse the role of Medical Social Worker in a Disaster

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.

- 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.
- III. Disaster Hospital Planning: Preparing the Hospital emergency Plan- Disaster Management Committee. Centre command structure. The jobs cards. 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.
- 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.
- V. Role of Disaster Health Management Social Worker: Medical and Health Social Work- Concept, meaning and Objectives. Practice Settings of Medical Social Workers. Roles of Medical Social Worker. Challenges faced in Medical Social Work. Disasters and Medical Social Worker- Knowledge, Values and Skills.

REFERENCES

Afolabi, M.O. (2018). Public Health Disasters: A Global Ethical Framework. Germany: Springer International Publishing.

- Beder, J. (2013). Hospital Social Work: The Interface of Medicine and Caring. (n.p.): Taylor & Francis.
- Cooper, C. (2014). Wellbeing: A Complete Reference Guide, Interventions and Policies to Enhance Wellbeing. Germany: Wiley.
- Daniel Kollek. (2013). Disaster Preparedness for Health Care Facilities. United Kingdom: People's Medical Publishing House-USA.
- Garces Carranza, C. M. (2019). Hospital Social Work Interventions. United States: Goldtouch Press, LLC.
- Ibrahim Arziman. (2015). Field Organization and Disaster Medical Assistance Teams. Turkish Journal of Emergency Medicine. Volume 15, Supplement 1, October 2015
- 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.
- Kadushin, G., Egan, M. (2012). Social Work Practice in Community-Based Health Care. (n.p.): Taylor & Francis.
- 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.
- 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: AJPH.2007.114496 [pii].
- 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.
- Shoaf KI, Rottman SJ. Public health impact of disasters. Australian Journal of Emergency Management. 2000;15(3): 58-63.
- Spitzer, W. J., Allen, D. K. M. (2015). Social Work Practice in Healthcare: Advanced Approaches and Emerging Trends. United States: SAGE Publications.
- Ugarte et al. (n.d.). Planning and triage in the disaster scenario. https://www.aap.org/enus/Documents/disasters_dpac_PEDsModule3.pdf

SPECIALIZATION B: TECNOLOGIES FOR DISASTER MANAGEMENT

3.2.B. ICT FOR DISASTER MANAGEMENT

- CO 1: Understand the recent ICT technologies in the field of Disaster Management
- CO 2: Apply ICT technologies in the field of Disaster Management
- CO 3: Create indigenous models of ICT technologies in the field of Disaster Management
- I. Introduction to Computers: Computer, Basic Organization of Computers, Classification of Computers, Hardware, Software, Computer Languages, Computer Memory, Types of Memory (Primary and Secondary), Secondary Storage Devices, I/O Devices, Application software, Software Package, Operating Systems, Database Management System, Data Warehousing and Data Mining
- II. Information Communication Technology (ICT): Concept and Relevance of ICT. Business Data Processing- Data storage hierarchy, methods of organizing data, file management. Data Communications and Computer Networks- Elements of Communication Systems, Data transmission modes, speed, media; Digital and Analog data transmission, Switching techniques, Routing Techniques, Network topologies, Network Types, Communication protocols, wireless networks, Internet, multimedia
- III. Information Processing: Definition, difference between Data and Information, Relevance of Information to Decision Making, Source and Types of Information, Quality of Information, Value of information, Data Collection methods, Assessing Information Needs, Management Information Systems, Decision-Making Concept-Models of Decision Making
- IV. Advanced Information Communication Technology: Tsunami and Cyclone Early Warning System, Forest Resource Information System, GIS, Remote Sensing, Digital Image Processing, emergency communication System, Bluetooth and Wireless communication, Satellite Phones and Radio.
- V. Disaster Management Information Sources: Forecasting & Warning- Indian meteorological department, tsunami warning centre, pacific disaster centre, central water commission, INCOES; Resources: UNISDR, USAID, SAHANA, Red Cross, Indian disaster resource network; Other: National disaster management authority, National Institute of disaster management, National Geophysical Research Institute, National disaster response force, State and district disaster management centre.

REFERENCES

- Abraham Silberschatz and Henry Korth, Sudarshan. Database System Concepts (2019). VIIth Edition New York: TataMcGraw-Hill.
- Bunde, Armin, Jürgen Kropp and Hans Joachim Schellnhuber (2002). The Science of Disasters: Climate Disruptions, Heart Attacks, and Market Crashes. New York: Springer.
- Dekker, Sidney (2019). Foundations of Safety Science: A Century of Understanding Accidents and Disasters. New York: Routledge.
- Jain, Raj K. (2000). Fundamentals of Programming. New Delhi: S.Chand & Company LTD.
- Navathe, Elmasri and, Addison-Wesley (2019). Fundamentals of Data base Systems. New Delhi: S.Chand & Company LTD.
- Nayak, Shailesh and Sisi Zlatanova (2008). Remote Sensing and GIS Technologies for Monitoring and Prediction of Disasters. New York: Springer.
- Rao, Peddada Jagadeeswara, Kakani Nageswara Rao and Sumiko KuboP. K. Sinha (2019). Proceedings of International Conference on Remote Sensing for Disaster Management. New York: Springer.
- Sanderson, Robert (2008). Introduction to Remote Sensing. Mexico: New Mexico State University

3.3.B. SCIENCE AND TECHNOLOGY FOR RISK ASSESSMENT, PREVENTION AND PREPAREDNESS

CO 1: Understand the tools and technologies that can help us complete hazard, vulnerability, and risk assessments

CO 2: Apply GIS and modelling approaches to risk assessments

CO 3: Analyse the structural and non-structural aspects of prevention and preparedness from a science and technology perspective.

 Science and Technology for Prevention: Concept of prevention, Structural and nonstructural measures. Actors in Science and Technology for Disaster Regulations and other Governance Elements, Knowledge Management, Education, and Evaluation, Land-use planning, Structural measures Ecosystem-based approaches to DRR and adaptation offer many additional benefits.

- II. Science and Technology for Early Warning and Preparedness: Risk Communication and Public Awareness, Early Warning Systems (EWS), Landslide Monitoring Sensors, Community-Based Early Warning Systems, Data Preparedness, Seven Cardinal Rules of Risk Communication, Gender in Early Warning Systems.
- III. Science and Technology for Disaster Response and Emergency Relief: Real Time Loss and Victim Estimates, QLARM allows estimating, ICT Innovations for Emergency Response, Social Media and Artificial Intelligence for Emergency Response, GIS for Emergency Response, OpenStreetMap, Search and Rescue Robotics.
- IV. Science and Technology for Post-Disaster Recovery and Reconstruction: Unmanned Aerial Vehicles (UAVs) for Emergency and Reconstruction, Build Back Better: Shelters, Conceptual Seismic Design of Buildings, Low Cost and Low-Tech Disaster-Proof Shelters, Seismic Resistant Retrofitting for Buildings.
- V. Science and Technology for Resilience and Sustainable Development: Geoethics, Gender and Disaster Risk Reduction, Sustainable Technology: Missing Map, Risk as an Engine for Sustainable Development.

- Aitsi-Selmi, A., V. Murray, Ch. Wannous, Ch. Dickinson, D. Johnston, A. Kawasaki, A. Stevance, and T. Yeung (2016). Reflections on a Science and Technology Agenda for 21st Century Disaster Risk Reduction Based on the Scientific Content of the 2016 UNISDR Science and Technology Conference on the Implementation of the Sendai Framework for Disaster Risk Reduction 2015–2030. International Journal Disaster Risk Science. DOI 10.1007/s13753-016-0081-x. Open Access Springer.
- Arnaldi, S., Quaglio, G., Ladikas, M., O'Kane, H., Karapiperis, T., Srinivas, K. R., & Zhao, Y. (2015). Responsible governance in science and technology policy: Reflections from Europe, China and India. Technology in Society, 42, 81-92.
- Basher, R. (2013) Science and Technology for Disaster Risk Reduction: A review of application and coordination needs. Final Report. Commissioned by the UNISDR

- Estrella, M. and N. Saalismaa (2013). Ecosystem-based Disaster Risk Reduction (Eco-DRR): An Overview. In: Renaud, F., Sudmeier-Rieux, K. and M. Estrella (eds) The Role of Ecosystems in Disaster Risk Reduction. UNU-Press: Tokyo. p. 30.
- Hostettler, S. (2015) Technologies for Development. What Really Matters? In S. Hostettler, E. Hazboun, & J.-C. Bolay (Eds.). Technologies for Development: What is Essential? Paris, Heidelberg, New York, Dordrecht, London: Springer.
- Hostettler, S., &Bolay, J-C. (2013). Technologies and Partnerships. In J.-C. Bolay, S. Hostettler,& E. Hazboun (Eds.) Technologies for Sustainable Development: A Way to Reduce Poverty?Paris, Heidelberg, New York, Dordrecht, London: Springer.
- Laszlo, A. (2003) The Evolutionary Challenge for Technology. World Futures.
- UNISDR. (2011). Global Assessment Report on Disaster Risk Reduction: Revealing risk, redefining development. Geneva: UNISDR. Retrieved from: http://www.unisdr.org/we/inform/gar/

3.4.B. GEOGRAPHICAL INFORMATION SYSTEM IN DISASTER MANAGEMENT

CO 1: Understand the concept of GIS and its applications in the field of Disaster Management

CO 2: With the help of GIS will assist disaster management teams in reducing disaster risk

CO 3: Apply GIS software in the disaster-prone areas.

- I. Geographical Information Systems (GIS): Definition, development, data sources, data structures, raster and vector, data capturing, pre-processing, Introduction to Geomorphology and Geology, Study the statigraphy of India, Morphometric analysis with the help of remote sensing &GIS techniques.
- II. Database management systems in GIS: Concept and scope, data manipulations and product generation- Environmental GIS, Data acquisition system using GPS On line GPS applications.
- III. Geographical Information System, Spatial data: Sources of error and data quality; database design, convention, mapping, concepts and Coordinate systems.

- IV. Methods of spatial interpolations in Geographical Information Systems: Visualizations in GIS, linking terrain, climate and socio economical parameters to target the vulnerability due to natural disasters using GIS and Remote Sensing.
- V. GIS Software: Over view of GIS software. Q-GIS- Principles, operation protocols and hands on training query-based information retrieval. Web GIS Online. GIS and its data applications. Development of GIS based decision support for disaster risk reduction.

- Albert, K.W. Yonng (2002). Concepts & Techniques of GIS. New Jersey: Prentice Hall.
- Alexander, David. (1993). Natural Disasters. London: UCL Press.
- Bell, F.G. (1999). Geological Hazards: Their Assessment, Avoidance and Mitigation. London: Routledge.
- Joseph, G. (2005). Fundamentals of Remote Sensing. India: Universities Press.
- Kang-Tsung Chang. (2017). Introduction to GIS. McGraw Hill Education
- Kumar, S. (2005). Basics of Remote sensing & GIS Laxmi Publications.
- LRA Narayana (1999). Remote Sensing and its applications. University Press.
- M. Anji Reddy (2001). Remote Sensing and Geographical Information systems JNTU Hyderabad, B.S. Publications.
- Panda, B.C. (2005). Remote Sensing Principles & Applications. India: Viva Book Pvt. Ltd.
- Peter A. Burragh and Rachael (2004). Principals of Geo physical Information Systems. A. McDonnell- Oxford Publishers.

SEMESTER IV

4.1. COUNSELLING FOR TRAUMA VICTIMS

CO 1: Understand the basics of Mental Health, crisis intervention and trauma counselling

CO 2: Critically engage with the practices of crisis intervention and trauma counselling and learn from good practice in the past

CO 3: Recognize the impact of different psychosocial approaches and be able to critically discuss its implications for the target populations

- Introduction to Counselling: Definition, and scope Differentiating from Guidance, Case Work and Psychotherapy, Contexts: Remedial, Preventive, Developmental, Crisis – Forms: Telephone Counselling, Crisis Counselling, Vocational Counselling - Goals: Immediate and Long term. Psychological; Psychoanalytic/psychodynamic theories, behavioural theories, humanistic theories, and existential theories, evolutionary theory, neuropsychology and counselling.
- II. Introduction to Trauma Counselling and Mental Health, Emotional Bleeding, Emotional Hygiene: Psychological Responses to Disaster and Traumatic Events, mental health impact of disasters, social determinants of mental health in both the Global North and the Global South. Community approaches to psychosocial support
- III. Psychology of disasters: Theory of Planned Behaviour, Social Cognitive Theories, Solution Focused Brief Therapy
- IV. Trauma Counselling: Meaning, Definition and Types of trauma and counselling: Theories of trauma Counselling; Effects of trauma in different humanitarian crises
- V. Disaster Trauma on Vulnerable groups: Effects of disasters on children, Migrants Dalits and tribals, Refugees Gender Based Sexual Violence (GBSV) in Disasters: Psychosocial effects and responses to GBSV and treating children affected by crises: Community-Based trauma counselling.

REFERENCES

Gladdings, S.T. (2009). Counselling a Comprehensive Profession (9th Ed.). New Jersey: Merrill/Pearson.

- Greenstone, James L (2015). Emotional First Aid: A Field Guide to Crisis Intervention and Psychological Survival.
- Guha-Sapir, D., Hoyois, P.H., & Below, R. (2014). Annual Disaster Statistical Review 2013: The Numbers and Trends. Brussels: CRED.
- Halpern, James and Mary Tramontin (2006). Disaster Mental Health: Theory and Practice (Crisis Intervention).
- Jacobs, Gerard A. Community-Based Psychological First Aid A Practical Guide to Helping Individuals and Communities During Difficult Times. Amsterdam: BH.
- James, Michael (2020). Emotional First Aid: How to Feel Better in Times of Crisis. Watkins Media,
- Lopez-Ibor, J.J, Christodoulou, G., Mai, M., Sartorius, N., & Okasha, A. (2005). Disasters and Mental Health (ed.). New Jersey: John Wiley & Sons Ltd.
- Mechthild von Vacano, Manfred Zaumseil (auth.), Manfred Zaumseil, Silke Schwarz, Mechthild von Vacano, Gavin Brent Sullivan, Johana E. Prawitasari-Hadiyono (eds.) Cultural Psychology of Coping with Disasters: The Case of an Earthquake in Java, Indonesia, New York: Springer-Verlag.
- Munich Re. (2015). Munchener Ruckversicherungs-Gesellschaft, Geo Risks Research, NatCatSERVICE Swiss Re, sigma, No 3/2014 Ursano,
- Nelson-Jones, R. (2004). Basic Counselling Skills: A Helper's Manual (4th Ed.). London: Sage 2. Egan, G. (2010). The Skilled Helper: A Problem-Management and Opportunity-Development Approach to Helping (9th Edn.). California: Cengage.
- Nelson-Jones, R. (2004). Practical Counselling and Helping Skills (4th Edn.). London: Sage.
- R.J., Fullerton, C.S., & Norwood, A.E. (2003). Terrorism and Disaster: Individual and Community Mental Health Interventions. New York: Cambridge University Press.
- Winch, Guy (2014). Emotional First Aid: Healing Rejection, Guilt, Failure, and Other Everyday Hurts. Australia: Exisle Publishing Pty Ltd.
- Zastrow, C.H. (2012). Practice of Social Work (10th Edn). CA: Cengage.

SPECIALIZATION A: DISASTER HEALTH

4.2.A. POST-TRAUMATIC STRESS DISORDER (PTSD) AND COGNITIVE BEHAVIOURAL THERAPY (CBT)

CO1: Understand PTSD, its symptoms, etiology, diagnosis and treatment.

CO2: Evaluate the efficacy of CBT as an effective method for PTSD treatment

- CO3: Apply CBT principles and technique to PTSD treatment
- I. Post-Traumatic Stress Disorder: Concept. Symptoms. Etiology. Case Studies. Assessment and Treatment Modalities.
- II. Cognitive Behavioural Therapy (CBT) Introduction: Background of CBT. Overview of CBT model of etiology and maintenance of psychological disorders. Applications of CBT and. CBT case formulation. Principles of clinical interviewing according to CBT. CBT and REBT. Limitations of CBT.
- III. Cognitive and Behavioural Therapeutic Theories: Behavioural Theory of Depression, Cognitive Theory. Behavioural Theory of Anxiety. The cognitive Triad: Negative automatic thinking, negative self-schemas and Errors in Logic or Cognitive Distortions.
- IV. Phases of CBT: Structure in Therapy. Assumptions. Functional Analysis. Steps in CBT. Treatment Planning. Course of Treatment, Integrating Cultural Considerations.
- V. CBT Tools and Techniques: Automatic Thoughts, Intermediate and Core Beliefs. Cognitive Restructuring. Relaxation Techniques, Exposure Therapy. Journaling and Thought Records. Homework. Activity Scheduling. Behavioural Activation. Behavioural Experiments. Role playing. Guided Discovery. Successive Approximation.

REFERENCES

Beck, J.S. (2011). Cognitive Behaviour Therapy: Basics and Beyond. New York: Guilford Press.

- Becker, C. B., Zayfert, C. (2006). Cognitive-Behavioural Therapy for PTSD: A Case Formulation Approach. United States: Guilford Publications.
- Dobson, K. S. (2010). Handbook of Cognitive-Behavioural Therapies New York: Guilford.
- Dugas, M. J., & Robichaud, M. (2007). Cognitive-Behavioural Treatment for Generalized Anxiety Disorder. New York: Routledge

Fairburn, C. (2008). Cognitive Behaviour Therapy and Eating Disorders. New York: Guilford

- Lara J. Farrell, Thomas H. Ollendick, Peter Muris. (2019). Innovations in CBT for Childhood Anxiety, OCD, and PTSD: Improving Access and Outcomes. United Kingdom: Cambridge University Press.
- Leahy, R. (2003). Cognitive Therapy Techniques. New-York: Guilford
- National Collaborating Centre for Mental Health (NCCMH). (2005). Post-traumatic Stress Disorder: The Management of PTSD in Adults and Children in Primary and Secondary Care. London and Leicester: Gaskell and BPS
- Perrin, S., Smith, P., Clark, D. M., Yule, W. (2014). Post-Traumatic Stress Disorder: Cognitive Therapy with Children and Young People. United Kingdom: Taylor & Francis.
- Porter, S. (2018). Treating PTSD: A Compassion-Focused CBT Approach. United States: Taylor & Francis.
- Raja, S. (2012). Overcoming Trauma and PTSD: A Workbook Integrating Skills from ACT, DBT, and CBT. United Kingdom: New Harbinger Publications.
- Roemer, L., & Orsillo, S. M. (2009). Mindfulness & Acceptance-Based Behavioural Therapies in Practice. New York: Cuilford
- Taylor, S. (2017). Clinician's Guide to PTSD, Second Edition: A Cognitive-Behavioural
Approach. UnitedCognitive-Behavioural
Publications.Approach. UnitedStates: GuilfordPublications.Ford, J. D. (2009). PosttraumaticStressDisorder:ScientificDimensions. Netherlands: Elsevier Science.Science.Scientific
- Wells, A. (2009). Metacognitive Therapy for Anxiety and Depression. New York: Guilford.
- Zayfert, C., Becker, C. B. (2020). Cognitive-Behavioural Therapy for PTSD, Second Edition: A Case Formulation Approach. United Kingdom: Guilford Publications.

4.3.A. POST-TRAUMATIC STRESS DISORDER (PTSD) AND THERAPY WITH CHILDREN

- CO 1: Explain why childhood development is crucial to the mental health of children
- **CO 2:** Understand the various child psychiatric disorders
- CO 3: Apply play therapy techniques in treating PTSD
- I. **Theories and Processes of Child Development**: Theories- Freud, Erickson, Piaget, Vygotsky, Kohlberg, Bowlby. Stages of Child Development- Prenatal period, Infancy,

Babyhood, Early childhood, Late childhood, Adolescence. Developmental Millstones, Developmental Tasks and Hazards.

- II. Child Psychiatric Information: Issues in Classification. Aetiology. Disorders: Adjust mental Reactions. Disorders of Biological Functions. Psychophysiological disorders. Anxiety Disorders. Childhood Psychoses. Mental Retardation. Learning Disabilities. Disorders of Language Development. Hyperkinesis and Attention Deficiencies. Habit Disorders. Organic Brain Syndromes. Physical Disability. Normal and Pathological Behaviour in Adolescence. Treatment.
- III. PTSD in Children and Adolescents: PTSD. Symptoms in Children. Myths and misconceptions about Trauma in Children. Unresolved Trauma and Impact of PTSD-Long and Short-Term. Neurobiological aspects in PTSD. Risk Factors. Outcome. Diagnosis. Different Treatment Modalities.
- IV. Play Therapy: Concept, History and Present. Types of Play and Play Therapy. Basic Requirements to Practice Play Therapy. The therapeutic environment for Play Therapy. Phases of play therapy. The Play Interview. Tools and Techniques.
- V. Techniques and Tools in Play Therapy: Use of Houses, Dolls, Puppets, Blocks, Ball, Mud and Clay and other Toys. Telephone, Costume Play. Role playing and Story-telling. Creativity and Imagination. Use of Food. Combining Play and Art- Finger Paints, Squiggle-Drawing Game, Colouring. Music, Singing and Dancing. Board Games, Video Games and High-tech Play Therapy.

- Boswell, J. N., Leggett, E. S. (2016). Directive Play Therapy: Theories and Techniques. United States: Springer Publishing Company.
- Butterworth, G. (2014). Principles of Developmental Psychology: An Introduction. United Kingdom: Taylor & Francis.
- Charles E. Schaefer, Donna M. Cangelosi. 2002. Play Therapy Techniques. United States: Jason Aronson, Incorporated.
- Chess, S., Hassibi, M. (2012). Principles and Practice of Child Psychiatry. Germany: Springer US.
- Danny Brom, Juliet M. Vogel, Ruth Pat-Horenczyk. (2014). Helping Children Cope with Trauma: Individual, Family and Community Perspectives. United Kingdom: Taylor & Francis.
- Goodyear-Brown, P. (2019). Trauma and Play Therapy: Helping Children Heal. United States: Taylor & Francis.

Hurlock, E. B. (2001). Developmental Psychology. India: McGraw-Hill Education.

- Jolene Philo. 2015. Does my child have PTSD? -What to Do When Your Child Is hurting from the inside out
- Joy Hasler, Anthea Hendry (Eds.). (2017). Creative Therapies for Complex Trauma: Helping Children and Families in Foster Care, Kinship Care Or Adoption. United Kingdom: Jessica Kingsley Publishers.
- Mitchell, P., Ziegler, F. (2013). Fundamentals of Developmental Psychology. United Kingdom: Psychology Press.
- Monahon, C. (1993). Children and Trauma: A Guide for Parents and Professionals. United Kingdom: Wiley.
- Spencer Eth. (2008). PTSD in Children and Adolescents. United States: American Psychiatric Publishing.

4.4.A. FIRST-AID FOR DISASTERS

- CO 1: Understand the concept of First-Aid during disasters
- **CO 2:** Evaluate situations where first-aid is required.
- CO 3: Become competent in basic first-aid.
- I. Introduction to First-Aid: Concept. Aims of first-aid. Significance. Types and Levels. Principles of first-aid. Emergency Medical Responder and Roles.
- II. First-Aid Assessment and Supplies: Recognising 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.
- III. Disaster specific safety guidelines: Avalanches, Landslides and Mud-flow. Earthquakes, Fires, Floods, Hazardous Materials. Epidemics. Others. Life-stock safety and Management during disasters.
- IV. 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.
- V. 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 Fireextinguisher.

- American Academy of Orthopaedic Surgeons (AAOS), American College of Emergency Physicians (ACEP), Alton L. Thygerson. (2011). First Aid, CPR, and AED Essentials. United States: Jones & Bartlett Learning.
- American Red Cross. (2008). A Family Guide to First Aid and Emergency Preparedness. United States: Staywell.
- Bowman, W. D., Backer, H. D., Paton, B. C. (2005). Wilderness First Aid: Emergency Care for Remote Locations. United States: Jones and Bartlett Publishers.

- Bradley, A. T. (2011). The Disaster Preparedness Handbook: A Guide for Families. United States: Skyhorse Publishing.
- Imel, J. S. (2020). Urban and Disaster Emergency First Aid Made Easy. (n.p.): Udtwfa, LLC.
- Jefferson's County Sheriff's Office. (2018). Jeffereson 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
- Kline, C., Brouhard, R. (2014). Disaster Preparedness: Ready Your Family and Home—Before Disaster Strikes. United Kingdom: DK Publishing.
- 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.
- Sawyer, J., Huertas, G. (2018). Animal Management and Welfare in Natural Disasters. United Kingdom: Taylor & Francis.
- Staywell. (2012). Responding to Emergencies: Comprehensive First Aid/ CPR/ AED. United States: American National Red Cross.

SPECIALIZATION B: TECNOLOGIES FOR DISASTER MANAGEMENT

4.2.B. DIGITAL IMAGE PROCESSING AND IMAGE ANALYSIS

CO 1: Understand digital image processing and image analysis technological options especially in disaster management

CO 2: Apply remote sensing technologies in disaster prone areas

CO 3: Develop sustainable models of image processing and image analysis for India

- Concepts about digital image and its characteristics, Spectral, Spatial, Radiometric and Temporal resolution, Visual vs. Digital methods, Image data storage and retrieval, Types of image displays and FCC System design considerations,
- II. Introduction: Definitions, concepts and types of remote sensing, evolution, stages and advantages of remote sensing, Digital Image Processing: Image processing systems, data

formats of digital image, pre-processing, image enhancement and transformation and image classification, multispectral images, Visual Image Interpretation, remote sensing products, elements of visual interpretation.

- III. Sources of image degradation Pre-processing of satellite image, Radiometric and Geometric correction technique, Interpolation methods – linear and nor linear transformation for geometric corrections.
- IV. Low Pass Filtering: Image smoothing, High Pass Filtering: Edge enhancement and Edge detection, Gradient filters, Directional and non-directional filtering, Band ratio, Types of Vegetation indices, Principal Component Analysis, Multi dated data analysis and Change detection
- V. Basics of Pattern Recognition, Spectral discrimination, Signature bank, Parametric and Non-Parametric classifiers, Unsupervised classification methods, Supervised classification techniques, Limitations of standard classifiers Remote Sensing Applications in Agricultural Drought Monitoring and Forecasting

- Campbell, James B. (2000). Introductory Remote Sensing: Principles and Concepts. New York: Routledge.
- Cracknell, A.P. & Hayes, L.W B. (1993). Introduction to Remote Sensing. London: Taylor & Francis.
- Curran, P. (1995). Principles of Remote Sensing. London: Longman.
- Gibson, P.J. (2007). Introduction to Remote Sensing. 2nd ed. London: Taylor & Francis.
- Jensen, JR., (2007). Remote Sensing of the Environment An Earth Resources Perspective. New York: Prentice Hall Inc.
- Rencz, Andrew N. (Ed) (1999). Remote Sensing for the Earth Sciences: Manual of Remote Sensing, 3rd ed. New York: John Wiley & Sons, Inc.
- Sabins, Floyd F. (1987). Remote Sensing: Principles and Interpretation. New York: W H. Freeman and C.
- Thomas M. Lillesand & Kiefer, Ralph W. (2015). Remote Sensing and Image Interpretation. New York: John Wiley & Sons.

4.3.B. GEOGRAPHIC INFORMATION SYSTEM (GIS) AND GLOBAL POSITIONING SYSTEM (GPS) TECHNOLOGIES IN DISASTERS

CO 1: Understand the spatial data and handle spatial and non-spatial database

CO 2: Describe various GIS tools and techniques within spatial analytical framework

CO 3: Apply spatial data analysis to solve natural, environmental and societal problems and challenges

- I. Geographical Information System (GIS): Definitions, History and development of GIS, components of GIS, applications of GIS; Coordinate Systems - Geographical Coordinate Systems, Projected Coordinate System, map projections; Geospatial data -Data input-existing GIS data, creating new data; attribute data query, spatial data query, raster data query.
- II. Components of GIS: GIS Functions, Basic concepts about spatial information, Spatial vs. non-spatial data, Spatial data models.
- III. GPS, DGPS and GNSS: Definition, history, components; types and application of GPS, GLONASS, GALILEO, COMPASS; system segmentation – control segment, user segment, space segment, types of receivers; DGPS – differential corrections, accuracy in DGPS; GNSS: different GNSS, GNSS Augmentation; RNSS - IRNSS, WAAS, EGNOS, MSAS, QZSS, SNAS, SDCM and WAGE; advantages and disadvantages
- IV. Hardware/software requirements for GIS: GIS Vs Cartography, Basics of Cartography: Map Scale, Categories of Maps, Grids and Graticules Raster Data & its Representation: Data Structure, Data Compression (block code, chain code, run length code, quadtree, MrSID).
- Data Input and Geo-Correction: Sources of Spatial Data (Raster and Vector), Data Acquisition Through Scanners and Digitizers, Methods of Digitization, Database Management System, Spatial Data Analysis and Visualization: Raster Data Analysis Techniques Local, Focal, Global and Zonal, Socio-economic thematic maps, dimensions of spatial data: 2D, 2.5D, 3D and 4D GIS, Current Issues and Trends in GIS.

REFERENCES

- Burrough, Peter A. and Rachael McDonnell, (1998). 'Principles of Geographical Information Systems' Oxford University Press, New York.
- C.P. Lo and Albert K.W. Yeung (2006). "Concepts and Techniques of Geographic Information Systems" Prentice Hall of India, New Delhi.
- Kang-tsung Chang, (2007). 'Introduction to Geographic Information Systems' Tata McGraw Hill, New Delhi.
- Leica. A. (2003). GPS Satellite Surveying, John Wiley & Sons, New York
- Magwire, D. J., Goodchild, M.F. and Rhind, D. M. (2005). Geographical Information Systems: Principles and Applications, Longman Group, U.K.
- N.K. Agrawal (2004). Essentials of GPS, Spatial Network Pvt. Ltd.
- Sathish Gopi (2000). GPS and Surveying using GPS
- Terry-Karen Steede (2002). Integrating GIS and the Global Positioning System, ESRI Press

4.4.B. GEO-INFORMATICS AND APPLICATIONS IN DISASTERS

- CO 1: Understand the basics of Geo-Informatics and its application
- CO 2: Apply multi hazard vulnerability mapping by using Geo-Informatics
- CO 3: Create models of Geo-Informatics applications in Disaster Management
- Introduction to Geo-informatics, Applications of Geoinformation 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.
- 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.
- 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.

- 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.
- V. **Application in Environmental Management**: Selection of disposal sites for industrial and municipal wastes, solid waste management, Environmental Impact Assessment (EIA)

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

10. FIELD WORK CURRICULUM

10.1. Overview

Proposed MSW DM Fieldwork comes under 7 segments: -

- 1) Bridge Course + Exposure Visits
- 2) Concurrent Fieldwork
- 3) Block Placement
- 4) Specialized Agency Training
- 5) Addon Certificate Courses
- 6) Walk with Experts
- 7) Research Projects
- 8) Dissertation
- 9) Disaster Drills

10.2. Team of Advisors to MSW DM Fieldwork

Team of Advisors have to be the pillars of MSW DM Fieldwork. The Advisor Team have to Plan, Coordinate, Support, Monitor and Evaluate the entire Fieldwork activity.

- 1) HoD (MSW DM)
- 2) Teaching Faculty in Charge of MSW DM Fieldwork Secretary
- 3) Asst Prof MSW DM Joint Secretary
- 4) Advisor from SDMA/NDMA
- 5) Advisor from Police (L&O, Training College)
- 6) Advisor from Fire Force
- 7) Advisor from Health Department (Physical Health DMO, Mental Health DMHP, Veterinary)
- 8) Advisor from Revenue Dept/ District Collector Office (DDMA)
- 9) Advisor from LSGD (Local Self Government Department)
- 10) Advisor from Military / Para Military including / NDRF (Serving or retired)
- 11) Advisor from credible NGO/DM Institute working in DM
- 12) Advisor from State Institute of Land and Disaster Management/ NIDM or Scientists
- 13) Advisor from Metrological Department
- 14) Prominent person in the field of Disaster Management (International Agency UNEP etc)

- 15) Representative from Volunteer Association (Sannadha Sena, Collectors Volunteer Group)
- 16) Advisor from Media (Print or Visual)
- 17) Structural Engineer / Architect in DM Field
- 18) Agriculturist / Industrialist / IT / Education / Social Justice Dept
- 19) Student Representative from MSW DM

Responsibilities of Fieldwork Advisor Team

- Plan & Formulate Fieldwork curriculum for MSW DM
- Ground support for conducting fieldwork in respective area
- Liaison with concerned department for conducting MSW DM Fieldwork.
- Timely Monitoring and Review of the Field Work
- Conduct Fieldwork evaluation/viva as per course guideline
- Update fieldwork practicum as per the need of the hour
- Adopt innovative and best practice in MSW DM Fieldwork to equip students for future opportunities

10.3. Bridge Course + Exposure Visit – 1 Month

Equip the MSW DM Students for the entire Course under Cognitive, Affective and Psychomotor level (Theory + Practical)

- 3 Days Theory + 3 Days Exposure Visits = 6 Days in a Week
- Each day Theory: 1 or 2 Subject Introduction = So Total 3 to 6 Subject Introduction in a week
- Remaining 3 Days in week = Exposure visits or activities which related to subject taught in that week

10.4. Concurrent Field Work (2 days / week)

Objectives (1st year Concurrent Fieldwork)

- Practice Basic Method of Social Work under assigned LSG
- Learn Governance and functioning of DDMA, LSGD DM, SDMA, NDMA
- Understand and Involve in Local Disaster Management Activities
- Understand and Support the Implementation of SOPs of DDMA, SDMA, NDMA Plan.
- Conducts activities based on MSW DM Curriculum (Projects, Assignments, Research)

- Study best practices and challenges on current DM Plan of LSG or DDMA.
- Learn and Understand the legislation (Plan for moot court and Student Parliament)
- Process Documentation
- Understand 'One Health'

Objectives (2nd year Concurrent Fieldwork)

- Practice all methods of Social Work
- Prepare a DM Plan for assigned LSG
- Conduct Mock Drill in LSG
- Capacity building in the community
- Possibilities of Research and PRA
- Prepare Plan for School Safety, Mental Health or any MSW DM specialized area.
- Information, Knowledge Management System (IKMS) for Disaster Management
- Prepare a Video/Short Film in consultation with Media advisor.
- Prepare Business Model for Social Entrepreneurship

Concurrent field work sites

- Posted as District Collectors Inters under District Disaster Management Authority (DDMA).
- Start with DDMA Orientation Programme in collaboration with SDMA and Loyola College
- Inters can be posted under Local Self Government
- Proposed Concurrent fieldwork will help the learner to integrate theory to practice and gain hands-on expertise in DM field.

10.5. Fieldwork with Specialized Agencies (With Certificate)

- Conduct 1-week quarterly training with the specialized agencies under DM
- It will help the learner to understand the procedures and SOPs of Multi-Discipline and learn how to blend with them and work together during disaster.
- 1) SDMA / NDMA
- 2) Ministry of Home Affairs (Police Dept / Fire force Dept)
- 3) Health Dept (Physical, Mental Health, Veterinary) "One Health"
- 4) Metrological Dept or DM Forecast agencies
- 5) Social Work Agency / Institute in DM
- 6) NDRF / Military/Paramilitary
- 7) Structural Engineering / Architect related to Disaster Management
- 8) Mass Media and IT related with DM

10.6. Addon Certificate Courses

Should be completed during the MSW DM Course.

- These certificate courses will help the students to meet global standards and enhance employability.
- Addon courses are to be learn along with the course and the time taken for addon courses can be calculated under field work time.
- Add on courses should be Short term courses and learner can choose.
- Update the addon courses as per advisor team and student recommendation.

Proposed Courses

- Basic Life Support (BLS) from American Heart Association (Offline Course)
- Psychological First Aid (Online Course by Coursera)
- Community based Disaster Management (from LES)

10.7. Block Placement

- One-month block placement should be in a Disaster affected area (recent) Or with ongoing Disaster to learn the reality of disaster and consequences.
- Block Placement should focus on problem identification and intervention to solve problem.
- Block placement should be coordinated between Loyola fieldwork team of advisors with NDMA, SDMA, NGO in DM, Govt or International Agencies.
 - Eg Flood Affected areas in Kerala,
 - Amphan, Nisarga Cyclone in North Kerala
 - Severe COVID affected areas
 - Vishakhapatnam Gas Tragedy

10.8. Walk with Experts

MSW DM Dept in Consultation with team of Advisors should arrange Interaction with Experts on a monthly basis to discuss on current trends, best practices, experience, job opportunities.

10.9. Collaborate with Multi-Disciplinary Students (Peer Learning)

As Disaster Management is a Multi-Disciplinary Subject. Students of MSW DM should collaborate with students of other disciplines.

Check the possibility of working together during Concurrent, Block Placement likewise

Collab with multi-disciplinary students helps in peer learning and able the incorporate best practices and different methods in action.

- Collab with Medical Students
- Collab with Structural Engineering Students
- Journalism Students
- Geologist and other DM Specialist
- Architecture Students
- Agriculture, Bio-Technology
- Psychology / Psychiatry
- Sociology / Economics

10.10. Research and Development (Education>Research>Action)

The Research wing under MSW DM course should be focus on Interventions and Sustainable solution to the problem under Disaster Management.

Research should look for

- Innovative Solution (Social Entrepreneurship & Start Up)
- Link Science>Academia>Government Policy
- Create and Implement policies that build on best available knowledge.
- Policy-Science gap must be filled with Research that can be translated to action.
- Address problem from the field and calibrate solution with research.
- "Link Locally Act Globally

Sem-wise Fieldwork Proposal for MSW DM, LCSS

- Contingency Fieldwork plan to meet requirement rise out of upcoming Disaster Management Situations
- All 4 Sem Concurrent fieldwork should in same Local Self Government Jurisdiction

QUESTION PAPER MODEL

MSW DISASTER MANAGEMENT

1.1. INTRODUCTION TO SOCIAL WORK

Time: 3 Hours

Max. Marks: 75

PART A

Answer all questions in not more than 50 words. Each question carries 2 marks.

- 1. Define Social Work.
- 2. Social Service
- 3. Names two Social Reformers of Kerala
- 4. Social Welfare
- 5. Communication
- 6. Liberalism
- 7. Non-Judgemental Attitude
- 8. Code of Ethics
- 9. CSWB
- 10. Social Work Values

(2x10=20 Marks)

PART B

Answer any five of the following in not more than 300 words. Each question carries 5 marks.

- 11. Spell out the need for Social Security measures in India.
- 12. Distinguish between Social Service and Social Welfare.
- 13. Highlight the relevance of moral and religious values in framing the social work values.
- 14. Narrate the importance of Field Work in Social Work Education.
- 15. Describe the need for Ethical standards in Social Work.
- 16. Discuss the components of a profession and its applicability to Social Work.
- 17. Discuss the importance of self-awareness and conscious use of self in social work practice.
- 18. Write short note on non-exertive attitude. 18. Elaborate the importance of Correctional Social Work.

(5x5=25 Marks)

PART C

Answer any three of the following in not more than 850 words. Each question carries 10 marks.

- 19. Write an essay on Basic and Ancillary methods of Social Work.
- 20. Critically analyse the various social reform movements undertaken by the Indian Social Reformers.
- 21. Discuss the historical evolution of the social work profession in India and discuss the current trends.
- 22. Discuss the Code of Ethics and its necessity to the practice of social work.
- 23. Discuss Social Work as a profession and the challenges posed.

(3x10=30 Marks)