

National Education Policy-2020

**Common Minimum Syllabus for Uttarakhand State
Universities and Colleges**

SKILL ENHANCEMENT COURSE

Disaster Management

2025

For Undergraduate Courses

**DEPARTMENT OF GEOGRAPHY
DSB CAMPUS, KUMAUN UNIVERSITY
NAINITAL**

COMMITTEE OF BOARD OF STUDY

Sl. No.	Name and address of external experts/member	
1	Prof. S. Sreekesh, Centre for the Study of Regional Development, School of Social Sciences, Jawahar Lal University, Delhi Email: sreekesh@mail.jnu.ac.in , sreekesh@jnu.ac.in Mob. No. 9013575858	Expert
2	Prof. A. R. Siddiqui, Department of Geography, University of Allahabad, Allahabad, E-mail: arsiddiqui1970@yahoo.com , azizrs@yahoo.com Mobile No. 9450608208	Expert
3	Prof. B. W. Pandey Department of Geography, Delhi School of Economics, University of Delhi 110007. Email: bwpandey@geography.du.ac.in Mobile No.- 9560525260	Expert
4	Prof. Anita Pande, Department of Geography, DSB Campus, Kumaun University, Nainital, Email: anita.ku.ntl@gmail.com Mob. No. 9411793991	Member
5	Prof. T. B Singh Govt. Girls' PG College of Commerce, Haldwani Email: drtbsingh1961@gmail.com Mob. No. 9456109466	Member
6	Prof. Anjali Punera, Government Degree College, Kotabagh, District – Nainital Email: dranjali punera@gmail.com Mob. No. 9837852832	Member
7	Prof. R C Joshi, Department of Geography, DSB Campus, Kumaun University, Nainital, Email: hod.geog23dsb@gmail.com Mob. No. 8958811453	Head and convener

DRAFT SYLLABUS PREPARATION COMMITTEE

S.N.	NAME	DESIGNATION	DEPARTMENT	AFFILIATION
1.	DR. R. C. JOSHI	PROFESSOR AND HEAD	GEOGRAPHY	KUMAUN UNIVERSITY, NAINITAL
2.	DR. ANITA PANDE	PROFESSOR	GEOGRAPHY	KUMAUN UNIVERSITY, NAINITAL
3.	DR. MANISHA TRIPATHI	ASSOCIATE PROFESSOR	GEOGRAPHY	KUMAUN UNIVERSITY, NAINITAL
4.	DR. MOHAN LAL	ASSISTANT PROFESSOR	GEOGRAPHY	KUMAUN UNIVERSITY, NAINITAL
5.	DR. PRAKASH CHANYAL	ASSISTANT PROFESSOR	GEOGRAPHY	KUMAUN UNIVERSITY, NAINITAL
6.	DR. VINITA JOSHI	ASSISTANT PROFESSOR (c)	GEOGRAPHY	KUMAUN UNIVERSITY, NAINITAL
7.	DR. D. S. PARIHAR	ASSISTANT PROFESSOR (c)	GEOGRAPHY	KUMAUN UNIVERSITY, NAINITAL
8.	DR. MASOOM REZA	ASSISTANT PROFESSOR (c)	GEOGRAPHY	KUMAUN UNIVERSITY, NAINITAL

PROGRAMME PREREQUISITES

Any student in B.A./B.Sc./B.Com programme (undergraduate level) can opt for Skill Enhancement Course as per university rules.

List of Papers (SEC) with semester wise titles

Semester 1 - DM.SEC-01	Basic Concepts of Disaster Management
Semester 2 - DM.SEC-02	Disaster Preparedness
Semester 3 - DM.SEC-03	Disaster Response
Semester 4 - DM.SEC-04	Disaster Rehabilitation
Semester 5 - DM.SEC-05	Community Based Disaster Management
Semester 6 - DM.SEC-06	Disaster Management and Planning

PROGRAMME OUTCOMES [POs]:

PO1: Enrichment of Intellectual Ability: The programme develops students' comprehensive understanding of the various dimensions of disaster management. It also helps to learn and understand the concepts, thoughts, and ideas about disaster management.

PO2: Inculcation of Planning Abilities: The programme develops effective planning abilities including time management, resource management, delegation skills and organizational skills of students which may develop their leadership qualities.

PO3: Appropriate Application of Knowledge Methodological Tools: The programme makes a sincere attempt of familiarizing students with critical knowledge and methodological tools which help them in making applications of new ideas, thoughts, and concepts in the real world.

PO4: Formation of Professional Identity: The programme intends to develop professional skills among students that would help them in building their professional identity as well becoming professional leadership from local to global level.

DEPARTMENT OF GEOGRAPHY
B.A./B.Sc./B.Com.

SKILL ENHANCEMENT COURSE (SEC-1) Basic Concepts of Disaster Management

Programme: Under Graduate in Arts/Science		Year: I	Semester: I
Subject: Skill Enhancement	Course Code: DM.SEC-01		Course Title: Basic Concepts of Disaster Management
Course Outcomes 1. To provide students an understanding the need for studying the disaster management 2. Develop an understanding about the various types of disasters.			
Theory- (Credit-1)	Distribution of marks according the University rule.		
Total No. of Lectures – Tutorials – Practical (in hours per week): 1-0-1		15 hrs for 1 credit theory, 30 hrs for 1 credit practical	
Unit	Course Content		Lectures
Unit – I	Introduction to the nature and human interaction; Hazards and Disasters; Natural disasters: earthquakes, floods drought, landside, land subsidence, cyclones, volcanoes, tsunami, avalanches, and global climate extremes. Man-made disasters: Terrorism, gas and radiations leaks, toxic waste disposal, oil spills, and forest fires; Disaster Management Cycle.		09
Unit – II	Risk and its concept and analysis; Risk Reduction; Vulnerability: Concept and analysis, Methodologies and tools for assessing Hazard		06
Practical (Credit-1)	Class room work: Risk Assessment exercises, Vulnerability Analysis Exercises, Group Discussion/ Presentation/Quiz Hands-on Exercise: First Aid Bandaging- Control bleeding, Protect the wound, Immobilize injuries and Secure dressing Field Exercise: Field report writing (10 to 20 Pages) based on the study carried out at disaster prone area. (It should not be copy/ cut and paste from the Internet or other sources)		30

Suggested Readings:

1. Carter, W.N. (1992) Disaster Management: A Disaster Manager's Handbook, Asian Development Bank
2. Damon, P. Copola, (2006) Introduction to International Disaster Management, Butterworth Heineman.
3. Disaster Management Guidelines, GOI-UND Disaster Risk Program (2009-2012).
4. Feilden, B. 1987, "Between Two Earthquakes; Cultural Property in Seismic Zones", ICCROM and Getty Conservation Institute
5. Getty Conservation Institute, Online Bibliography for Museum Emergency Programme; <http://gcibibs.getty.edu/asp/> accessed on 25 August 2008
6. Gupta A.K., Niar S.S and Chatterjee S. (2013) Disaster management and Risk Reduction, Role of Environmental Knowledge, Narosa Publishing House, Delhi.
7. Modh S. (2010) Managing Natural Disasters, Mac Millan publishers India LTD.
8. Murthy D.B.N. (2012) Disaster Management, Deep and Deep Publication PVT. Ltd. New Delhi.
9. Stovel, H. 1998, "Risk Preparedness: A Management Manual for World Cultural Heritage", Rome, ICCROM

DEPARTMENT OF GEOGRAPHY

B.A./B.Sc.

SKILL ENHANCEMENT COURSE (SEC 2) Disaster Preparedness

Programme: Under Graduate in Arts/Science		Year: I	Semester: II
Subject: Skill Enhancement		Course Code: DM..SEC-02	Course Title: Disaster Preparedness
Course Outcomes Developing skills for risk and vulnerability assessment. Recognizing the importance of early warning system and disaster monitoring. Developed the concept and importance of Disaster Preparedness.			
Theory- (Credit-1)		Distribution of marks according the University rule.	
Total No. of Lectures – Tutorials – Practical (in hours per week): 1-0-1		15 hrs for 1 credit theory, 30 hrs for 1 credit practical	
Unit	Course Content: Disaster Preparedness		
Unit 1	A brief Revision of Semester - I (Basic Concepts of Disaster Management)		
	Disaster Preparedness: Concept and Nature, Components of Disaster Preparedness: Prevention, Mitigation, Disaster Preparedness Plan; Prediction; Early Warnings and Safety Measures of Disaster.		
Unit 2	Disaster Preparedness for people with special needs and Vulnerable groups; Role of Information, Education, communication and Training; Role of Government; International organizations and NGO; Role of Technology in Disaster Preparedness.		
Practical (Credit-1)	i. Class Room Exercise: Preparation of First-aid and Emergency Kit.		
	ii. Field Exercise a. Preparation of a base map showing the infrastructure available; Preparation of Telephone Directory of all line department (electricity, water, transportation, and communication networks) b. Field report writing (10 to 20 Pages) of the campus/college area based on the above a. and b. (It should not be copy/ cut and paste from the Internet or other sources)		

Suggested Readings

1. Alley, E.E, 1993, "Combating the Vulnerability of Communities" in P.A. Merriman and C.W.A. Browitt (Eds.), Natural Disasters: Protecting Vulnerable Communities, Thomas Telford, London.
2. Asian Development Bank, 1991, Disaster Mitigation in Asia and the Pacific, Manila.
3. Barker, George W and Dwight W. Chapman (Eds.) 1962, Man and Society in Disasters; Basic Books, New York.
4. Bhargava, Gopal, 1992, Environmental Challenges and Ecological Disaster-Global Perspective, Mittal Publications, New Delhi
5. Goel, S.L and Ram Kumar (Eds.), 2001, Disaster Management, Deep & Deep, New Delhi.
6. Government of India, Ministry of Agriculture, 2002, The Report of 'the High-Powered Committee on Disaster Management, New Delhi.
7. Government of India, Ministry of Home Affairs, Annual Report, 2003-2004, New Delhi.
8. Government of India, Ministry of Information and Broadcasting, India 2004, A Reference Manual, New Delhi.
9. Planning Commission, Xth Five Year Plan, 2002-2007, New Delhi.
10. Sharma, Vinod K. (Ed.), 1999, Disaster Management, Indian. Institute of Public Administration, New Delhi.
11. The Economic Times, 27 February, 2006.

DEPARTMENT OF GEOGRAPHY
B.A./B.Sc./B.Com.
SKILL ENHANCEMENT COURSE (SEC 3) Disaster Response

Programme: Under Graduate in Arts/Science		Year: II	Semester: III
Subject: Skill Enhancement		Course Code: DM..SEC-03	Course Title: Disaster Response
Course Outcomes 1. Prioritizing actions based on the severity of the situation and available resources. 2. Rapid assessment of the situation, including the extent of damage and immediate needs. 3. To understand the importance of Response. 4. To develop insight to evaluate the role played by Search and Rescue team. 5. To integrated policy to strengthen and expand the capacity, preparedness and response of the various agencies to disasters.			
Theory- (Credit-1)	Distribution of marks according the University rule.		
Total No. of Lectures – Tutorials – Practical (in hours per week): 1-0-1		15 hrs for 1 credit theory, 30 hrs for 1 credit practical	
Unit	Course Content: Disaster Response		Lectures
Unit 1	A brief Revision of Semester - II (Disaster Preparedness)		03
	Disaster Response: Nature and Concept; Disaster Response Plan; Communication; Participation; Search; Rescue; Evacuation and Logistic Management.		06
Unit 2	Role of Government; International and NGO Bodies; Psychological Response and Management (Trauma, Stress, Rumor and Panic); Relief and Recovery; Medical Health Response to Different Disasters.		06
Practical (Credit-1)	i. Class room work Formation of Rescue and Evacuation plan, Group discussion, Presentations and Quiz		30
	ii. Field Exercise CPR (Cardiopulmonary resuscitation) , Mock drills: Fire fighting and Earthquake. Field report writing (10 to 20 Pages) based on the CPR training and drills performed. (It should not be copy/ cut and paste from the Internet or other sources)		

Suggested Readings

1. "Special Issue on Crisis and Management" Asian Review of Public Administration 2, No. 1-2 (January – December 1990): 1-122.
2. Anderson, M.B. and P.J. Woodrow, 1998, Rising from the Ashes: Development strategies in Times of Disaster, Lynne Rienner Publishers, London.
3. Annual Report, Ministry of Home Affairs, Government of India, New Delhi, 2002 – 2003, 2003 – 2004, 2004 – 2005.
4. Annual Reports, Ministry of Agriculture, Government of India, New Delhi, 1996 – 1997, 1998 – 1999, 1999 – 2000, 2000 – 2001, 2001 – 2002, 2002 – 2003, 2003 – 2004, 2004 – 2005.
5. Carter W. Nick, 1992, Disaster Management: A Disaster Manager's Handbook, Asian Development Bank, Manila.
6. Down to Earth, Vol. 10, No. 6, Centre of Science and Environment, New Delhi, India, August 15, 2001.
7. Maharashtra Disaster Management Plan, 1998, Risk Assessment and Vulnerability analysis, Government of Maharashtra, Mumbai.
8. Manual on natural Disaster Management in India, 2001, NCDM, IIPA, New Delhi.
9. Mohan, Munasinghe and Clarke, Caroloine (eds.), 1995, Disaster Prevention for Sustainable Development – Economic and policy Issues, IDNDR and World Bank, Washington.
Natural Disaster Reduction - South Asian Regional Report, 1994, Ministry of Agriculture, Government of India, New Delhi.

DEPARTMENT OF GEOGRAPHY
B.A./B.Sc./B.Com Geography
SKILL ENHANCEMENT COURSE (SEC 4) Disaster Rehabilitation

Programme: Under Graduate in Arts/Science		Year: II	Semester: IV
Subject: Skill Enhancement		Course Code: DM.SEC-04	Course Title: Disaster Rehabilitation
Course Outcomes 1. To develop and implement comprehensive rehabilitation plans based on specific need of the community. 2. Ensuring sustainable and resilient rebuilding practices to mitigate future disaster risks.			
Theory- (Credit-1)	Distribution of marks according the University rule.		
Total No. of Lectures – Tutorials – Practical (in hours per week): 1-0-1		15 hrs for 1 credit theory, 30 hrs for 1 credit practical	
Unit	Course Content		Lectures
Unit 1	A brief Revision of Semester - III (Disaster Response)		03
	Reconstruction and Rehabilitation as a Means of Development; Damage Assessment; Post Disaster effects and Remedial Measures; Creation of Long-term Job Opportunities and Livelihood Options.		05
Unit 2	Disaster Resistant House Construction; Sanitation and Hygiene; Education and Awareness; Dealing with Victims' Psychology; Long-term Counter Disaster Planning; Role of Educational Institution; Disaster and Development.		07
Practical (Credit-1)	i. Disaster awareness and Stress management: Street play on Disaster awareness and importance of sanitation and hygiene, Stress management exercises.		30
	i. Field Exercise Need and Damage assessment field survey: Student may select nearby area affected by hazard/ disaster to collect data on shelter , Water, sanitation, and hygiene, Food security, Health facilities, Livelihood impacts and Infrastructure damage (roads, bridges, buildings) Field report writing (10 to 20 Pages). (It should not be copy/ cut and paste from the Internet or other sources)		

Suggested Readings

1. "Special Issue on Crisis and Management" Asian Review of Public Administration 2, No. 1-2 (January – December 1990): 1-122.
2. Anderson, M.B. and P.J. Woodrow, 1998, Rising from the Ashes: Development strategies in Times of Disaster, Lynne Rienner Publishers, London.
3. Annual Report, Ministry of Home Affairs, Government of India, New Delhi, 2002 – 2003, 2003 – 2004, 2004 – 2005.
4. Annual Reports, Ministry of Agriculture, Government of India, New Delhi, 1996 – 1997, 1998 – 1999, 1999 – 2000, 2000 – 2001, 2001 – 2002, 2002 – 2003, 2003 – 2004, 2004 – 2005.
5. Carter W. Nick, 1992, Disaster Management: A Disaster Manager's Handbook, Asian Development Bank, Manila.
6. Down to Earth, Vol. 10, No. 6, Centre of Science and Environment, New Delhi, India, August 15, 2001.
7. Maharashtra Disaster Management Plan, 1998, Risk Assessment and Vulnerability analysis, Government of Maharashtra, Mumbai.
8. Manual on natural Disaster Management in India, 2001, NCDM, IIPA, New Delhi.
9. Mohan, Munasinghe and Clarke, Caroloine (eds.), 1995, Disaster Prevention for Sustainable Development – Economic and policy Issues, IDNDR and World Bank, Washington.
10. Natural Disaster Reduction - South Asian Regional Report, 1994, Ministry of Agriculture, Government of India, New Delhi.

DEPARTMENT OF GEOGRAPHY

B.A./B.Sc./B.Com.

SKILL ENHANCEMENT COURSE (SEC 5) Community Based Disaster Management

Programme: Under Graduate in Arts/Science		Year: III	Semester: V
Subject: Skill Enhancement		Course Code: DM..SEC-05	Course Title: Community Based Disaster Management
Course Outcomes 1. Identification of local hazards, vulnerabilities and capacities within the community. 2. Strengthening community organization and leadership for effective disaster management. 3. To Understand the significance of community participation in disaster management, especially disaster planning and disaster response 4. Develop ability to come out with measures of community-based disaster handling			
Theory- (Credit-1)	Distribution of marks according the University rule.		
Total No. of Lectures – Tutorials – Practical (in hours per week): 1-0-1		15 hrs for 1 credit theory, 30 hrs for 1 credit practical	
Unit	Course Content		Lectures
Unit 1	A brief Revision of Semester - IV (Disaster Rehabilitation)		03
	Definitions of CBDM; Concept of CBDM; Community and Community based Organizations; Principles, strategies and Challenges of CBDM; Traditional and Emerging approaches.		06
Unit 2	CBDM: Institutional Framework; Community Based Disaster Management Plan; Community Based Risk Assessment: Hazard, Vulnerability; Tools for Community Based Disaster Risk Assessment.		06
Practical (Credit-1)	Course Title: Field Work Based Report (15 to 20 Pages) • Field based survey (village nearby Campus/college): Community based effective mitigation measures for any risk in the area and Mapping of hazard-prone areas with local input on Google Images • Preparation of report with recommendation about the involvement of community in the disaster management. (It should not be copy/ cut and paste from the Internet or other sources)		30

Suggested Readings

1. "Development, Planning and Administration", 2003, Course Material for Commonwealth Executive Masters in Public Administration, Commonwealth of Learning, Vancouver.
2. "Social Capital as a Health Determinant: How is it Defined?" Health Canada, Applied Research and Analysis Directorate at, <http://www.hc-sc.gc.ca/english/index.html>
3. Blackburn J. and J. Holland, 1998, Who Changes: Institutionalising Participation in Development, Intermediate Technology Publications, London.
4. Buckland, Jerry and M. Matiur Rahman, 1999, "Community-based Disaster Management during the 1997 Red River Flood in Canada", Disasters 23(2).
5. Cohen, J.M. and N.T. Uphoff, 1980, "Participation's Place in Rural Development: Seeking Clarity through Specificity," World Development, Vol. 8, No. 30.
6. GSDMA, 2005, "Plain Truth", Newsletter, Gujarat State Disaster Management Authority, Gujarat, India.
7. Hickey, Sam and Mohan Giles, 2003, "Relocating Participation within a radical politics of development: Citizenship and Critical Modernism", Draft working Paper prepared for Conference on Participation: From tyranny to transformation? Exploring new approaches to participation in development.
8. Info -change "Right to Information" at, <http://www.infochangeindia.org/changemakers.jsp>
9. Jain, S., "Standing up for trees: Women's role in the Chipko Movement", at <http://www.fao.org/docrep/r0465e/r0465e03.htm>
10. Knack, Stephen and Phillip Keefer, 1997, Does Social Capital Have an Economic Payoff: A Cross-Country Investigation, The Quarterly Journal of Economics (4).
11. Kreuter, Marshall, Laura Young and Nicole Lezin, 1998, Measuring Social Capital in Small Communities, Study conducted by Health 2000 Inc., Atlanta, in cooperation with the St. Louis University School of Public Health.
12. McMillan D. and D.W.Chavis, 1986, "Sense of Community; definition and theory," Journal of Community Psychology, 14, 6-2.
13. Paul, S., 1987, "Community Participation in Development Projects: The World Bank Experience", Readings in Community Participation, World Bank, Washington.
14. Putnam, Robert, 2001-02, "Social Capital: Measurement and Consequences," Isuma Canadian Journal of Policy Research, online at http://www.isuma.net/v02n01/index_e.shtml
15. Putnam, Robert, May 2000, "Social Capital: Wildfire of Research," The Ottawa Citizen.
16. Sagar, Alpana, 2004-05, "Health", Alternate Economic Survey, India, 2004-05, Daanish Books.
17. SEEDS, 2004, "Actahead II - Partnership in Community Based Disaster Management in Asia", Report based on proceedings of the international conference held in New Delhi, India, 24-26 August 2004", New Delhi, India.
18. UNDP Vietnam, 2005, "NDM Partnership: Partnership to Mitigate Natural Disasters in Central Vietnam", available at <http://www.undp.org.vn/ndmpartnership/default.htm>
19. World Health Organisation in Collaboration with the International League of Red Cross and Red Crescent Societies, 1989, coping with natural disasters: the role of local health personnel and the community, WHO, Geneva

DEPARTMENT OF GEOGRAPHY

B.A./B.Sc.

SKILL ENHANCEMENT COURSE (SEC 6) Disaster Management and Planning

Programme: Under Graduate in Arts/Science		Year: III	Semester: VI
Subject: Skill Enhancement		Course Code: DM..SEC-06	Course Title: Disaster Management and Planning
Course Outcomes 1. Developing emergency response plans.			
Theory- (Credit-1)		Distribution of marks according the University rule.	
Total No. of Lectures – Tutorials – Practical (in hours per week): 1-0-1			15 hrs for 1 credit theory, 30 hrs for 1 credit practical
Unit	Course Content: Disaster Planning		Lectures
Unit 1	Concept and components of Disaster Management Planning; Important phases of management planning, Short term and long-term Planning.		08
Unit 2	Role of National, International agencies in Disaster management Planning; Incident Command System.		07
Practical (Credit-1)	Project Work Final Research project: Field survey based project report writing and project presentation. A 20–25-page dissertation where the students are required to select the topic and area with the help of their respective teachers. Students are required to prepare a disaster management-based project report. Plan for any of the following: Village, School, Institution, Hospital, and Municipality. Hard copy of Report must be submitted to the Department one week before the commencement of the Theory Examinations. The Report will be evaluated in house. The evaluation and viva –voce examination will be conducted by internal examiners. (It should not be copy/ cut and paste from the Internet or other sources)		30

Note: In 6th semester the fresh entry (those who have not opted at least two previous semesters of this course) is not Allowed.

Suggested Readings

Carter, Nick W, 1991, Disaster Management: A Disaster Manager's Handbook, Asian Development Bank, Manila.