

Course title: Water Related disasters: management and planning				
Course code: WSW 152	No. of credits: 2	L-T-P: 2-0-0		
Pre-requisite course code and title (if any): None				
Course Description This course is intended to provide an insight of whole gamut of natural and human induced water related disasters, planning and management for disaster to reduce vulnerability, risks and loss. The course will provide not only academic knowledge but also practical knowledge, by critically looking at popular practices and strategies.				
Course objectives 1. To introduce student to practice of disaster management specifically related to water. 2. To build capacities of students -with respect to various approaches, elements and tools of disaster management and policy				
Course content				
Module	Topic	L	T	P
1	Understanding disasters 1. Conceptual issues - hazards, vulnerabilities, risks, exposure, capacities, disasters – Types of disasters - natural and manmade disasters – geological, climatological, meteorological, hydrological 2. Trends of disasters and their impacts – catastrophic disasters - disaster management cycle - disaster management frameworks – disaster management and sustainable development	4		
2	Disaster Management in India 1. Evolution of disaster management in India – Disaster Management Act — Disaster management institutions 2. Disaster Management Policy - disaster management guidelines, regulations and practices 3. Lessons learnt from mega disasters in India	6		
3	Water related disasters and its management 1. Water related disasters – Trends of water related disasters 2. Floods 3. Droughts 4. Cyclones 5. Other water related disasters - rain-induced landslides-cloudbursts-sea and river erosion – avalanche – GLOFs 6. Disasters arising out of water pollution and water borne diseases	12		
4	Climate change and water-related disasters 1. Climate change and its impact on hydro-meteorological disasters Global, regional and national trends 2. Climate change adaptation for enhancing water security 3. Policy, planning and strategic issues for water security	6		
		28		
Evaluation criteria 1. 25% of the grades will be based on class participation. Class participation will be adjudged based on the quality of discussion that students engage in based on their reading/understanding of the				

material circulated and their preparedness for seminars and tutorials. Additionally, debates, role-play, etc. will be conducted to adjudge class participation.

2. 25% of the grade will be assessed through class presentation. Students can choose to present any session's reading. A list will be circulated in the first week of class, wherein students can mark their selection of text for presentation.
3. 25% of the grades will be assessed through short reaction papers (2000 words) that the student will be expected to hand in once in the semester. Students can choose any week's readings for writing their reaction papers. The reaction papers should go beyond summarizing readings and clearly articulate grasp of concepts and debates in order to undertake a good gender analysis. If students like, they can draw on any additional work for making their argument. It is expected that students will adhere to tenets of academic honesty, as elaborated in university regulations.
4. Another 25% of the grade will be assessed through written exam at the end of the semester.

Learning outcomes

By the end of the course students will:

- Have an understanding of disaster management practices and policies.
- Be able to recognise actions in situations of disasters.
- Be able of comprehend plans to minimise the impacts of various disasters.

Pedagogical approach

Course shall be conducted using black board, power point presentations. Effort shall be made to through case studies as it is this vision of long term planning and management which will assist in handling crises situations.

Materials

1. Terminology on Disaster Risk reduction, International Strategy on Disaster Reduction, 2009
2. National Policy on Disaster Management, 2009
3. Tenth Five Year Plan 2002-2007, Chapter on Disaster Management- A Development Perspectives
4. Report of the High Powered Committee on Disaster Management, National Centre of Disaster Management, 2001
5. Disaster Management in India, Ministry of Home Affairs, Government of India, 2011
6. A Manual for Drought Management, Ministry of Agriculture, 2009
7. National Guidelines for Management Floods, National Disaster Management Authority, 2008
8. National Guidelines for Management Cyclones, National Disaster Management Authority, 2008

Student responsibilities

Students are expected to come prepared for class, having done the required reading and be able to participate in class discussions.