

Course title: Policy Perspectives on Water				
Course code: PPS 193		No. of credits: 2	L-T-P: 30-0-0	Learning hours: 30
Pre-requisite course code and title (if any): None				
Department: Policy and Management Studies				
Course Coordinator(s): Prof Arun Kansal			Course Instructor(s): Prof Arun Kansal	
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Course type: Core			Course offered in: Semester 1	
Course Description This course will introduce students to diverse perspective on water resource management. It examines the relations between water and development and explores this relation in the context of policy framework which is increasingly being influenced by conflict over resources. A prominent focus of this course is on discussing the trajectory of water management reforms in India and salience of various actions in bringing positives changes in its management.				
Course objectives 1. To introduce students to principles and conceptual issues in the analysis of water scarcity and security 2. To provide familiarity with approaches and multi-dimensionality of water management				
Course content				
Module	Topic	L	T	P
1.	Water as component of Ecosystem Introduction to models and systems; Water and Climate; Water and Soil; Water and Vegetation, Water resources distribution and Indian Monsoon	7		
2.	Overview of water situation in India Introduction to Water Stress and Water Quality Index; Status and Trends of SW & GW exploitation and pollution; factors responsible- technical, policy and institutional factors.	5		
3.	Water and Development Water and Food; Water and Energy; Population, human settlement and water use; Water and Industry; Evolution of understanding of water security and governance Concepts of transboundary water Water access, ownership and rights	8		
4.	Water management approaches and national strategies River basin approach; Watershed approach; Community management; Economics, finance and private sector participation; Sectoral analysis of water management (Agriculture, Domestic, Industry, Power (thermal and Hydro)), interlinking projects	6		
5.	Water Security and conflict management Concept of water security, Regional consciousness and inter-state issues	4		
	Total	30	0	0
Evaluation criteria:		Weightage (%)		
Class participation		25%		
Class presentation		25%		
Review papers		25%		
Written exam		25%		
Learning outcomes At the end of the course, students would:				
<ul style="list-style-type: none"> ▪ Have the ability to understand the reasons for contestation over water resources, its management and governance 				

- Be able to understand, analyse issues regarding water governance and reforms in India taking into account social, economic and environmental parameters
- Be able to articulate the contemporary challenges that the water sector in India faces.

Pedagogical approach

This course has been designed wherein students will be able to read, discuss and write about work being discussed. The course will be run majorly as a discussion forum and it will be expected that student read beforehand the assigned reading and come prepared to the class to participate in the discussion. This will also give them an opportunity to reflect on author's approach, methods employed, and explanatory building blocks used to take forward the argument. Audio-visual tools like short documentaries that highlight the issues will also be used in the class.

Materials:

Required text

Suggested readings:

Note: Latest research papers, articles and topic-wise readings will be suggested in class.

1. Loucks, D.P., J.R. Stedinger, and D. A. Haith, (1981) *Water Resource Systems Planning and Analysis*, Englewood Cliffs, NJ, Prentice Hall.
2. Simonvic, S.P. (2009) *Managing water resources: Methods and tools for a system approach*, UNESCO Publishing, France.
3. Loucks, D.P. and J.S. Gladwell, (1999) *Sustainability Criteria for Water Resource Systems*, Cambridge, UK, Cambridge University Press.
4. Chorley, R. J. 1969. *Water, earth and man: a synthesis of hydrology, geomorphology and socio-economic geography*. London: Methuen young Books.
5. Ehrlich, P.R., Holdren, J.P., and Ehrlich A. H. 1978. *Ecoscience: population, resources, environment*, 3rd ed. San Francisco: W.H. Freeman.
6. Shaw E. M. (1994) *Hydrology in Practice (3rd Edition)*, Chapman & Hall, London.

Case Studies

Websites

Journals

Other readings

Additional information (if any): None

Student responsibilities

The nature of the course demands that the students shall attend all lectures and have the habit of identifying and reading open e-learning resources.

Reviewers

1. Prof Ajay Temburkar, DoCE, VNIT, Nagpur
2. Dr A K Mishra, DoCE, NCU, Gurugram