Course title: Water and Sustainable Development: Policies & Management				
Course code: PPS 154	No. of credits: 2	L-T-P: 24-06-00	Learning hours: 30	
Pre-requisite course code and title (if any): None				
Department: Department of Policy & Management Studies				
Course coordinator(s): Prof. Arun Kansal	Course instructor(s): Prof. Arun Kansal			
Contact details: akansal@terisas.ac.in				
Course type: Core	Cou	Course offered in: 2 nd Semester		
Course description				

course description

Water governance and management are integral to sustainable development as they directly influence human health, economic prosperity, environmental sustainability, and social equity. Effective governance frameworks and management practices facilitate the responsible use of water resources, ensuring that they can support current and future generations while fostering resilience to climate change and enhancing overall community well-being. Prioritizing water governance is crucial for achieving a more just, sustainable, and equitable world.

This course offers an in-depth examination of the critical relationship between water resources, sustainability, and governance. As global water challenges continue to escalate, understanding the fundamental water-related issues from a management and policy perspective is essential for future leaders and practitioners in the field. Through a combination of theoretical frameworks, practical insights, and real-world case studies, students will explore how effective water management and innovative policies can contribute to sustainable development goals.

The course is divided into four modules. The first module discusses the role of water as component of ecosystem and sustainability. Students will explore the integral role of water in sustainable development frameworks, interconnections between water, ecosystems, health, and economic stability, as well as the social justice dimensions associated with water access and equity. Focusing on water governance and management, the second module examines institutional frameworks, approaches, policy instruments, and stakeholder engagement mechanisms that shape water management practices. Students will investigate various governance models, including integrated water resources management (IWRM), participatory approaches, and the roles played by governmental and non-governmental entities in ensuring effective and equitable water management. This module also assesses the water management in India. The third module addresses the multifaceted challenges in water policy, including climate change, pollution, over-extraction, and competing demands. Students will critically analyse existing policies and frameworks that govern water use and sustainability while exploring innovative solutions, such as advanced technologies, public-private partnerships, and communityled initiatives aimed at enhancing resilience and addressing water scarcity. The final module will engage students with real-world case studies from various regions to understand best practices and effective policy initiatives in water management.

Learning objectives:

- To help students understand and analyze the role of water in sustainability discourse and its implications for sustainable development.
- To orient students to water governance frameworks and management strategies that influence water resource allocation and use.
- To help students identify the key challenges facing water policy and explore innovative solutions and technological advancements.
- To assist students to apply knowledge from case studies of successful water management practices and policy initiatives to develop actionable strategies for diverse contexts.

Evaluation criteria:

- Course grades will be based on the following criteria:
 - Minor Test-1: Short-Answer Type Questions/Quizzes/MCQs (30%)
 - Minor Test-2: Case Study Presentation on select cases based on Module-4 (20%)
 - Major Test: Written Test/Term Paper Submission & Presentation (50%)

Learning outcomes

- Upon completion of this course, candidates will:
 - 1. have a comprehensive understanding of the complexities surrounding water resources in the context of sustainable development (All evaluations)
 - 2. develop critical thinking and innovative approaches essential for addressing contemporary water challenges, thereby preparing students for impactful careers in water management, policy-making, and sustainable development (All evaluations)

Student responsibilities

- At least 75% attendance will be necessary to be able to appear for the final exam.
- Active classroom participation; Critical reflections and timely submission according to the evaluation criterion.

Course Outline prepared by: Prof. Arun Kansal

Course Reviewers

- 1. Prof. Ajay R. Tembhurkar, Professor of Environmental Engineering, Department of Civil
- Engineering, Visvesvaraya National Institute of Technology (VNIT), Nagpur, Maharashtra, India. 2. Dr Geoff Goodwin, Faculty of Global Political Economy, School of Politics and International
- Studies (POLIS), University of Leeds, Leeds, United Kingdom.

Additional Information

This Course outline was approved in the 60th Academic Council Meeting held on 24th December 2024 at TERI School of Advanced Studies, New Delhi.

Note: This is a brief outline of the course. Detailed Course Content is available to students through University Intranet.