

Name: Water Economics and Governance
L-T-P: 4-0-0
Credit: 4
Semester: Spring (Elective)

Total contact hours in the semester: **40**

Detailed Syllabus

Contact hours	Topics to be covered
1-5	General Overview: Introduction, national and international scenario on water availability, concept of sustainable water uses, water rights, elements of water governance.
6-15	Water Pricing and Economics: Importance of water pricing, sectoral water economics, unaccounted for water, existing scenarios of water pricing in India and abroad, relevant case studies.
16-20	Water Governance in India: Existing practices on water governance in India, national water policies and water acts, water regulatory authorities, power and roles of central and state regulatory authorities, institutional arrangement and administrative controls of water service, statutory requirements and policy implementations, interstate water management initiatives, stakeholders' participation, NGOs and social movements in water governance policy influence.
21-26	Water Disputes Management: Interstate and intrastate water disputes resolutions practices, judiciary involvements, tribunals for water disputes resolutions, treaties and bilateral agreements, relevant case studies.
27-33	Global Water Diplomacy: International freshwater agreements, global water treaties and trans-boundary water agreements between the countries on international water resources, multi-national water disputes and their resolution mechanisms, relevant case studies.
34-40	Challenges and Open Issues: Key challenges in water governances, fundamental reforms required, ensuring safe and equitable water distribution, environmental management, water losses minimization, subsidy verses sustainability aspects in water pricing, community awareness and participation in water governances and management, protection of stockholders' interest.

Reference books/materials:

1. Scarcity, Entitlements, and the Economics of Water in Developing Countries (2007), by P.B. Anand, New Horizons in Environmental Economics, Series Editors: Wallace E. Oates and Henk Folmer, ISBN: 978-1-84376-768-8, Edward Elgar Publishing Limited, UK.
2. Current Issues in the Economics of Water Resource Management: Theory, Applications and Policies (2002), Edited by Panos Pashardes, T.M. Swanson, A. Xepapadeas, Kluwer Academic Publishers, The Netherlands.
3. Handbook of Water Economics: Principles and Practice (2003), by Colin Green, Wiley Publishers, England.
4. Water and the Laws in India (2009), by Ramaswamy R. Iyer
5. Water Law Poverty and Development, Water Sector Reforms in India (2009), by Philippe Cullet
6. Governance of Water, Institutional Alternatives and Political Economy (2008), by Vishwa Ballabh
7. Water Governance: An Evaluation of Alternative Architectures (2013), by A. Gunawansa and L. Bhullar
8. International Trade in Water Rights (2010) by Aline Biallat