योजना तथा वास्तुकला विद्यालय, विजयवाड़ा
School of Planning and Architecture, Vijayawada
An Institute of National Importance, Ministry of Education Gov. of India

School of Planning and Architecture, Vijayawada
Department of Planning
Lecture Plan

Name of Course: Water Sensitive Urban Development (PLN423)

Programme & Sem :	Bachelors in Planning- Semester VIII
Course Duration :	2nd January 2024 – 19th April 2024
Course Coordinator :	Ms.D.Aparna Sai; Assistant Professor Department of Planning
Number of Credits :	3
Subject Category :	Theory
Total Periods/Week :	3
Internal Assessment :	50 (minimum pass marks 50%)
End Evaluation :	50 (minimum pass marks 50%) – Written Exam.

Subject Objective: Ensures students learn how to design cities sustainably, consider community needs, and tackle water-related challenges. This prepares them for a profession that increasingly values expertise in creating environmentally friendly and socially aware urban environments.

Week	Lecture Topic	Session Mode	References / Suggested Readings
Week 1 09-01-24	Hydrological cycle; Various sources of water and its quality, uses of water and its variation,	Lecture Presentation	The Water Sensitive City Paperback - 29 April 2016 by Gary Grant. Jain, Sharad K., Agarwal, Pushpendra K., Singh, Vijay P. (2007), Hydrology and Water Resources of India, Springer, India.
Week 2 16-01-24	Scenario and meaning of water stress and water footprint in the world: social imperatives, environmental considerations and economic challenges.	Lecture Presentation	
Week 3 23-01-24	Urbanization and Sociology Urbanization-trends in the Global, Asian and Indian context;	Lecture Presentation & Reading Exercise	
Week 4 30-01-24	Wastewater - Various traditional and historic case studies on water management based on traditional wisdom, stormwater management, and rainwater harvesting.	Lecture Presentation	
Week 5 06-02-24	Studio Site Visit Duration		
Week 6 16-02-24	**Internal Assessment 1 – Weightage 10 Marks**		
	Wastewater - Various traditional and historic case studies on water management based on traditional wisdom, stormwater management,	Lecture Presentation & Reading Exercise	Approaches to Water Sensitive Urban Design Potential, Design, Ecological Health, Urban Greening,

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	and rainwater harvesting.		Economics, Policies, and Community Perceptions 1st Edition - October 3, 2018
Week 7 20-02-24	Definition of economics - terms used in economics related to urban and regional planning (URP). central problems of economics.	Lecture Presentation	
Week 8 27-02-24	**Internal Assessment 2 - Mid-Semester Exam (Written Exam) - Weightage 20 Marks**		
Week 9 05-03-24	Water demand and supply management Water demand management, Integrated Urban Water Management and associated case studies.	Lecture Presentation	The Water Sensitive City (Gary Grant,29 April 2016)
Week 10 12-03-24	Strategies of Water Pricing and Regulation and Water Demand Management Measures	Lecture Presentation	
Week 11 19-03-24	Overview of the concept, principles, and importance of urban planning. A brief exploration of global examples showcasing successful water-sensitive projects. Identifying Case Area: Criteria for selecting a case area: urbanization level, water-related challenges, and potential for sustainable development.	Lecture Presentation & Reading Exercise	Liveability and its interpretation in urban water management: Systematic literature review (Beata A. Sochacka, Steven J. Kenway, Marguerite A. Renouf,Volume 113 – 2021)
Week 12 26-03-24	Structuring the Paper: Outlining the key sections: Introduction, Literature Review, Case Area Analysis, Recommendations, and Conclusion. Emphasizing clarity, coherence, and logical flow in presenting the information.	Lecture Presentation	
Week 13 02-04-24	**Internal Assessment 3 - Weightage 20 Marks**		
Week 14 09-04-24	Strategies of Water Pricing and Regulation and Water Demand Management Measures.	Lecture Presentation	Water Sensitive Cities Index: A diagnostic tool to assess water sensitivity and guide management actions

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Week 15 16-04-24	Aspects of water-sensitive layouts Neighbourhood design of the water-sensitive layout, water-sensitive street design; water drainage and Site Analysis and various Site Planning Measures; Waste Water management and Recycling Techniques.	Lecture Presentation & Reading Exercise	(C. Rogers a b c, G. Dunn 2019)

Note:

1. Any other closed holidays as declared by SPAV shall supersede the above lecture plan. Holidays shown above may alter as per Notice from time to time.
2. Assessment Sessions may be re-scheduled, with prior intimation.
3. Reading lists provided are not exhaustive and are subject to addition – students are advised to follow the progression of the class to keep abreast of the new reading lists, if any.