## <u>Lecture Plan</u> <u>Department of Planning, School of Planning and Architecture, Vijayawada</u>

Name of Course: Infrastructure Planning (MPIS106)

Programme & Sem: Masters of Planning (PG), Semester One

Course Duration: August 01 to Nov 14, 2018

Course Coordinator: Amuktha Meher , Assistant Prof., Dept. of Planning

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Number of Credits: 03

Total Periods/Week: 03 (See Time Table for details) Internal Assessment: 50 (minimum pass marks 50%)

End Evaluation: 50 (minimum pass marks 50%) – Written Exam.

Total Marks: 100 (to be converted to CGPA credit pattern as per regulations)

**Subject Objective:** To provide exposure to infrastructure and its sub-sectors relevant to physical

planner in planning and design of urban and regional Infrastructure

Week	Lecture / Session Topic (Teaching-Learning Objective aimed)	Session Mode	References / Suggested Readings	
Week 1 (Aug 01-03)	Introduction to Infrastructure Planning – Importance of Infrastructure, objectives of the utilities, services planning		<ul> <li>Ministry of Urban Development. 'Service Level Benchmarks Data Book – Improving Service Outcomes 2008-09'. Gol. 2010. (GUIDELINES)</li> <li>'Handbook of Service Level Benchmarks', National Capital Region Planning Board(NCPRB)</li> <li>'Manual: Infrastructure Statistics', Central Statistics Office, Ministry Of Statistics And Programme Implementation, Gol, New Delhi</li> <li>CPHEEO, 'Manual on Sewerage and Sewerage Treatment'. MOUD, Gol. 2013. (GUIDELINES)</li> </ul>	
Week 2 (Aug 6 -10)	Implications on public health and environment; Economic – introduction to policies and programmes in infrastructure planning.	Lecture		
Week 3 (Aug 13- 15)	Issues and concerns of maintaining the utilities and services, need and importance of service level benchmarks of water supply, sanitation, sewerage, solid waste and transportation	Lecture		
(Aug 16 - 21)		Internal Assessment -1		
Week 4 (Aug 22-24)	Physical Infrastructure – Role of physical planner in planning of utilities and services; water supply distribution system, storm water drainage system.	Lecture	<ul> <li>B.C. Punmia, Ashok K. Jain &amp; Arun K. Jain (2006) 'Water Supply Engineering', Laxmi Publications, New Delhi. (BOOK)</li> <li>James C. Y. Guo (2003) 'Urban Storm Water Design', Water Resource Publication. (BOOK)</li> </ul>	

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Week	Lecture / Session Topic (Teaching-Learning Objective aimed)	Session Mode	References / Suggested Readings	
Week 5 (Aug 27-31)	Sewerage system, solid waste management, electricity distribution system.	Lecture	B.C. Punmia &Ashok Kumar Jain (2005) 'Waste water engineering', Lakshmi Publications, New Delhi. (BOOK)  Ramesh Chandrappa & Diganta Bhusan Das (2012) 'Solid Waste Management – Principles and Practices', Springer. (BOOK)	
Week 6 (Sept 01-09)	Field Work			
Week 7 (Sept 10-14)	Social Infrastructure – Types of social infrastructure, Health care – essential service, availability, access and utilisation, standards, public and private institutions, policies, National Rural Healthcare Mission, hierarchy of health care establishments.	Lecture	Gol (Government of India, Ministry of Urban Development & Town and Country Planning Organisation). 'Urban and Regional Development Plans Formulation and Implementation (URDPFI) Guidelines'. Volume-1. 2015. (GUIDELINES)	
Week 8 (Sept 17 - 21)	Education – primary and secondary educational institutions, standards, policies, right to education (RTE); Public and community spaces – recreational, safety and security.	Lecture	Gol (Government of India, Ministry of Urban Development & Town and Country Planning Organisation). 'Urban and Regional Development Plans Formulation and Implementation (URDPFI) Guidelines'. Volume-1. 2015. (GUIDELINES)	
Week 9 (Sept 24-28)	Internal Assessment - II			
Week 10 (Oct 01-05)	Transportation – Introduction to transport and travel; Understanding travel from the mobility, economic, social-psychologist, time/space perspective; Transportation planning process.		<ul> <li>Ortuzar, J.D., Willumsen, J.G., Wiley, 'Modelling Transport' Routledge. 2011. (BOOK)</li> <li>Rorigue, J.P, Comtois, Slack, J., 'The geography of transport systems'.</li> </ul>	
Week 11 (Oct 08 - 12)	Introduction to four stage modelling; Landuse and transportation integration; Demand and supply for transport;	Lecture	Routledge. 2006 (BOOK)	

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Week 12 (Oct 15 - 19)		Dussehra H	lolidays	
Week 13 (Oct 22 - 26)	Congestion pricing, transit oriented development; Transport pricing, Basic transport economic model.	Lecture	<ul> <li>Rorigue, J.P, Comtois, Slack, J., 'The geography of transport systems'. Routledge. 2006 (BOOK)</li> </ul>	
Week 14 (Oct 29 - Nov 02)	Internal Assessment III – Assignment			
Week 15 (Nov 05 – 09)	Emerging and Future Infrastructure – Spatial data as infrastructure; Impact of technology on infrastructure; Other concepts, components and frameworks.	Lecture	National Infrastructure     Commission, 'The impact of     technological change on     future infrastructure supply     and demand'.2016 (REPORT)	
Week 16 (Nov12 - 14)	Finish the pending topics ,if any .	Lecture		

## Note:

- 1. Any other closed holidays as declared by SPAV shall supercede 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 is not exhaustive and is subject to addition students are advised to follow progression of class to keep abreast of the new reading lists, if any.