

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

Name of Course: Infrastructure Planning (MPIS106)

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

Course Duration: August 01 to Nov 03, 2017

Course Coordinator: Shakthe S, Ms., 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-Aug 4)	Introduction to Infrastructure Planning – Importance of Infrastructure, objectives of the utilities, services planning and implications on public health and environment; Economic – introduction to policies and programmes in infrastructure planning.	Lecture	1. Ministry of Urban Development. 'Service Level Benchmarks Data Book – Improving Service Outcomes 2008-09'. Gol. 2010. (GUIDELINES) 2. 'Handbook of Service Level Benchmarks', National Capital Region Planning Board(NCPRB)
Week 2 (Aug 7 -11)	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	3. 'Manual: Infrastructure Statistics', Central Statistics Office, Ministry Of Statistics And Programme Implementation, Gol, New Delhi 4. CPHEEO, 'Manual on Sewerage and Sewerage Treatment'. MOUD, Gol. 2013. (GUIDELINES)
Week 3 (Aug 14 - 18)	Internal Assessment I – Time bound written test		
Week 4 (Aug 21 - 25)	Physical Infrastructure – Role of physical planner in planning of utilities and services; water supply distribution system, storm water drainage system.	Lecture	5. B.C. Punmia, Ashok K. Jain & Arun K. Jain (2006) ' Water Supply Engineering', Laxmi Publications, New Delhi. (BOOK)

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			6. James C. Y. Guo (2003) 'Urban Storm Water Design', Water Resource Publication. (BOOK)
Week 5 (Aug 28-Sept 1)	Sewerage system, solid waste management, electricity distribution system.	Lecture	7. B.C. Punmia & Ashok Kumar Jain (2005) 'Waste water engineering', Lakshmi Publications, New Delhi. (BOOK) 8. Ramesh Chandrappa & Diganta Bhusan Das (2012) 'Solid Waste Management – Principles and Practices', Springer. (BOOK)
Week 6 (Sept 4)	Field Work		
Week 7 (Sept 11 - 15)	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	9. 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 18 - 22)	Internal Assessment II – Time bound written test		
Week 9 (Sept 25 - 29)	Education – primary and secondary educational institutions, standards, policies, right to education (RTE); Public and community spaces – recreational, safety and security.	Lecture	10. 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 10 (Oct 2 - 6)	Transportation – Introduction to transport and travel; Understanding travel from the	Lecture	11. Ortuzar, J.D., Willumsen, J.G., Wiley, 'Modelling Transport' Routledge.

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	mobility, economic, social-psychologist, time/space perspective; Transportation planning process.		2011. (BOOK) 12. Rorigue, J.P, Comtois, Slack, J., 'The geography of transport systems'. Routledge. 2006 (BOOK)
Week 11 (Oct 9 - 13)	Introduction to four stage modelling; Landuse and transportation integration; Demand and supply for transport;	Lecture	
Week 12 (Oct 16 - 20)	Congestion pricing, transit oriented development; Transport pricing, Basic transport economic model.	Lecture	
Week 13 (Oct 23 - 27)	Internal Assessment III – Assignment		
Week 14 (Oct 30 – Nov 3)	Emerging and Future Infrastructure – Spatial data as infrastructure; Impact of technology on infrastructure; Other concepts, components and frameworks.	Lecture	13. National Infrastructure Commission, 'The impact of technological change on future infrastructure supply and demand'.2016 (REPORT)

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.