



Department of Planning,
Lecture Plan, Odd Semester, AY 2025-26

Name of Course: M.Planning

Subject Name:	INFRASTRUCTURE PLANNING (MPIS115)
Year & Sem:	M.Plan -Sem One- Odd Semester AY 2025-26
Course Duration:	15 Weeks
Course Coordinator:	Mr. Bhargava Teja, Ms. Zorba
Number of Credits:	3
Subject Category:	Theory
Total Periods/Week:	3 per Week / Total 15 Weeks
Internal Assessment	50
End Evaluation	50
Total Marks	100
Total No. of Internal Assessment & Mode	3

Subject Objective: *To develop skill sets pertaining to provision of physical and social infrastructure services in urban and regional planning*

Week	Lecture / Session Topic (Teaching-Learning Objective aimed)	Session Mode	Reference / Suggested Readings
19th Aug	Commencement of Classes		
Week 1 20th Aug	Unit I: Introduction to Infrastructure Planning Importance of Infrastructure, objectives of the utilities, service planning and implications on public health and environment	Lecture/ interactive sessions	1. Handbook of Service Level Benchmarking, Ministry of Housing & Urban Affairs (MoHUA), GoI, 2015
Week 2 27th Aug	Role of Physical Planner in planning of utilities and services, Role of line agencies in municipal areas;	Lecture/ interactive sessions	1. Handbook of Service Level Benchmarking, MoHUA (2015), 2. Guidelines for Preparation and Appraisal of Detailed Project Reports for Urban Infrastructure, MoHUA & Asian Development Bank
Week 3 3rd Sept	Jurisdiction and scope of work of line agencies; smart Cities and Infrastructure	Lecture/ interactive sessions	1. Reforms in Urban Planning Capacity in India, NITI Aayog, 2021 2. Smart City Mission Statement and Guidelines, Ministry of Urban Development, GoI



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Week 4 10th Sept	Unit II Physical Infrastructure: Water and Waste Water Scheme, Layouts of distribution system; IUWM, Water and Waste water treatment methods	Lecture/ interactive sessions	1. Manual on Water Supply and Treatment (Third Revision), (CPHEEO), MoHUA, 2013; 2. Environmental Engineering, Vol I: Water Supply Engineering – B.C. Punmia, A.K. Jain 3. Solid Waste Management Manual, CPHEEO, MoHUA, 2016; 4. Handbook of Service Level Benchmarking, MoHUA (2015) 5. National Environmental Policy 2006, Ministry of Environment and Forests, Gol.
Week 5 – Field Work			
Week 6 24th Sept	Low-cost sanitation methods and storm water drains; Zero discharge systems;	Lecture/ interactive sessions	1. Indian Public Health Standards (IPHS) Guidelines, Ministry of Health & Family Welfare (MoHF), Gol, 2022 2. Right of Children to Free & Compulsory Education Act, 2009 (with Model Rules 2010), MoE, Gol 3. Handbook of Service Level Benchmarking, MoHUA (2015)
Week 7 1st Oct	Integrated Solid Waste Management; MSWM 2000. Environmental Policy 2006; Urban Energy Systems and Civic services. Service Level Benchmarks	Lecture/ interactive sessions	1. Indian Public Health Standards (IPHS) Guidelines, Ministry of Health & Family Welfare (MoHF), Gol, 2022 2. Right of Children to Free & Compulsory Education Act, 2009 (with Model Rules 2010), MoE, Gol 3. Handbook of Service Level Benchmarking, MoHUA (2015)
Week 8 8th Oct	Unit III Social and Economic Infrastructure Types of social infrastructure; Health care - essential service, availability, access and utilisation, standards, public and private institutions, policies,	Lecture/ interactive sessions	1. Indian Public Health Standards (IPHS) Guidelines, Ministry of Health & Family Welfare (MoHF), Gol, 2022 2. Right of Children to Free & Compulsory Education Act, 2009 (with Model Rules 2010), Ministry of Education, Gol 3. Handbook of Service Level Benchmarking, MoHUA (2015)
Week 9 15th Oct	National Rural Healthcare Mission, hierarchy of health care establishments; Education - primary and secondary educational institutions, standards, policies, right to education (RTE)	Lecture/ interactive sessions	
Week 10: 19th -23rd Oct, Mid Semester Week			
Week 11 29th Oct	Public and community spaces — recreational, safety and security; Distributional services, Economic Infrastructure.	Lecture/ interactive sessions	

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Week 12 05th Nov	Unit IV Transportation and Land use Integration Introduction to transport and travel; Understanding travel from the mobility, economic, social-psychologist, time/space perspective; Factors affecting land use-transport integration	Lecture/ interactive sessions	1. National Urban Transport Policy, MoHUA, 2014; 2. Traffic Engineering and Transport Planning – L.R. Kadiyali, Khanna Publishers, latest ed.
Week 13 12th Nov	tools for land use and transport integration, land use transport cycle, importance of accessibility, Transportation planning process; Introduction to four stage modelling;	Lecture/ interactive sessions	
Week 14 19th Nov	Demand and supply of transport; Congestion pricing; Transport Pricing, Basic transport economic model; SLBs; Introduction to carbon footprint.	Lecture/ interactive sessions	
Week 15 26th Nov	Unit V Formulation of DPR for Infrastructure Services DPR and its importance; contents of DPR; broad sequences to DPR formulation; capabilities required to prepare a DPR; DPR evaluation,	Lecture/ interactive sessions	1. Guidelines for Preparation and Appraisal of Detailed Project Reports for Urban Infrastructure, MoHUA & ADB (2019)
Week 16 03rd Dec	Project Cost, Institution Framework, Project Financial Structuring, Project Phasing, Project O&M planning, Project Financial Viability & Sustainability.	Lecture/ interactive sessions	

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Details of Internal Assessments

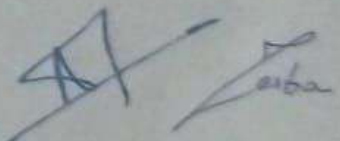
Tentative Date/Week of the Assessment	Mode of Assessment	Marks of the Assessment
<u>Week 03/04</u>	<u>Write up/ Class Test</u>	<u>15</u>
<u>Week 10</u>	<u>Written Exam</u>	<u>20</u>
<u>Week 13/14</u>	<u>Write up/ Class Test</u>	<u>15</u>

Reference books:

1. Guidelines for Preparation and Appraisal of Detailed Project Reports for Urban Infrastructure, MoHUA & Asian Development Bank
2. Handbook of Service Level Benchmarking Ministry of Housing & Urban Affairs (MoHUA), GoI, 2015
3. Indian Public Health Standards (IPHS) Guidelines, Ministry of Health & Family Welfare (MoHF), GoI, 2022
4. Manual on Water Supply and Treatment (Third Revision), (CPHEEO), MoHUA, 2013;
5. Traffic Engineering and Transport Planning – L.R. Kadiyali, Khanna Publishers, latest ed.

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 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.


Signature of the Faculty