

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

**Name of Course: Civic and Social Infrastructure (BPLN 404),**

Programme & Sem: **M Bachelor of Planning (UG), Semester Four**  
 Course Duration: Jan 02, 2024 to April 19, 2022  
 Course Coordinator: Prasanth Vardhan, Mr., Assistant Prof., Dept. of Planning (prasanth@spav.ac.in)  
 Number of Credits: 03  
 Subject Category: Theory  
 Total Periods/Week: 3  
 Internal Assessment: 50 (minimum pass marks 40%)  
 End Evaluation: 50 (minimum pass marks 40%)  
 Total Marks: 100 (to be converted to CGPA credit pattern as per regulations)

**Subject Objective:** To cover various aspects related to concepts and components of civic and social infrastructure

Week	Lecture / Session Topic (Teaching-Learning Objective aimed)	Session Mode (Optional)	References / Suggested Readings
Week 1 (starting Jan 02)	Components and types of social infrastructure; education facilities, categories and standards;	Lecture & Discussions	1. Government of India (2015), Urban and Regional Development Plans Formulation and Implementation (URDPFI) Guidelines. Vol.1, Town and Country Planning Organisation, Ministry of Urban Development, New Delhi. 2. Chokshi, M., Patil, B., Khanna, R., Neogi, S. B., Sharma, J., Paul, V. K., & Zodpey, S. (2016). Health systems in India. <i>Journal of perinatology : official journal of the California Perinatal Association</i> , 36(s3), S9–S12. <a href="https://doi.org/10.1038/jp.2016.184">https://doi.org/10.1038/jp.2016.184</a> 3. The New Capital City of Andhra Pradesh-Capital City Master Plan Draft Report, Andhra Pradesh Capital Region Development Authority (APCRDA) 2015. 4. Nagpur Model Solar City Final Master Plan, January 2013, Ministry of New and Renewable Energy, Government of India, New Delhi. 5. Mishra, P. (2019). Overview of the power sector. PRS. Available at <a href="https://prsindia.org/files/policy/policy_analytical_reports/Overview_of_the_Power_Sector_final_web.pdf">https://prsindia.org/files/policy/policy_analytical_reports/Overview_of_the_Power_Sector_final_web.pdf</a> 6. Ministry of Urban Development. 'Service Level Benchmarks Data Book – Improving Service Outcomes 2008-09'. Gol. 2010. (GUIDELINES).
Week 2 (starting Jan 08)	healthcare facilities, categories and standards;	Lecture	
Week 3 (starting Jan 15)	Socio-cultural facilities and other infrastructure services include milk distribution centers, police station and posts, control room, fire stations and disaster management center and etc.; provision of open spaces, parks, playgrounds, cremation grounds and multipurpose grounds category wise. <b>Internal Assessment I (15 Marks) Assignment (Group/Individual)</b>	Lecture	
Week 4 (starting Jan 22)	Power, sources of generation, transmission and distribution, national grid, high tension lines and buffer; gas storage and supply, telecommunication lines;	Lecture	
Week 5 (starting Jan 29)	Locating all infrastructure lines within the ROW in efficient road cross sections	Lecture	7. R K Goel, Bhawani Singh, Jian Zhao(2012), <i>Underground Infrastructures: Planning, Design, and Construction</i> , BH Publications. 8. CPHEEO Manuals
Week 6 (starting Feb 05)	Field Visits (Planning Studios)		
Week 7 (Feb 15)	Planning the local circulation pattern in relation to adjoining land use and on street activities; integration of underground infrastructure planning with local circulation planning and design;		9. Rangawala, 'Water Supply and Sanitary Engineering'. Charotar Publishing House. 2008. (BOOK) 10. Water Management Team. (2010).

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Week 8 (starting Feb 19)	Appraisal and critical evaluation of an existing road network, water supply situation, drainage and sewerage system, and solid waste management situation in a urban context	Lecture	Decentralised Wastewater Treatment: A way to manage septage in Shimla. Center for Science and Environment. New Delhi.
Week 9 (starting Feb 26)	<b>Mid-Semester Assessment (20 Marks), Close Book Examination</b>		
Week 10 (starting Mar 04)	Understanding the nature of the problem in utilities and services; understanding relations between land use change demographic change and development pattern with utility services demand, project estimates	Lecture	11. Ministry of Urban Development. 'Service Level Benchmarks Data Book – Improving Service Outcomes 2008-09'. Gol. 2010. (GUIDELINES). 12. Ahluwalia, I. J. (2016). Challenges of urbanisation in India. In Contemporary issues in development economics (pp. 163-177). London: Palgrave Macmillan UK. 13. Ramanathan, R., & Dasgupta, S. (2009). Estimates of Urban Infrastructure Financing Requirements in India, 2006-2031. Centre for Policy Research. 14. Mahesh C Purohit (2016), 'Financing Urban Infrastructure in India: An Overview of Policy Lessons', First High-Level Follow-up Dialogue on Financing for Development in Asia and the Pacific Incheon, Republic of Korea (Discussion Paper)
Week 11 (starting Mar 11)	Smart cities and its infrastructure;	Lecture	15. Kasznar, A. P. P., Hammad, A. W., Najjar, M., Linhares Qualharini, E., Figueiredo, K., Soares, C. A. P., & Haddad, A. N. (2021). Multiple dimensions of smart cities' infrastructure: A review. Buildings, 11(2), 73. 16. Chandran, S., Thiruchelva, S. R., & Dhanasekarapandian, M. (2021). Integrated urban water resources management strategy for a smart city in India. Water Supply, 21(2), 736-749.
Week 12 (starting Mar 18)	Market mechanisms which influence/regulate the urban land use	Lecture	
Week 13 (starting Mar 25)	Concepts and application of Integrated Urban Water Management (IUWM), application of information technology in infrastructure services	Lecture	
Week 14 (starting Apr 01)	<b>Internal Assessment III (15 Marks); Assignment (Group/Individual)</b>		
Week 15 (starting Apr 08)	Decentralised Wastewater Treatment Systems (DEWATS); Low cost treatment systems;	Lecture	Singh, A., Sawant, M., Kamble, S. J., Herlekar, M., Starkl, M., Aymerich, E., & Kazmi, A. (2019). Performance evaluation of a decentralized wastewater treatment system in India. <i>Environmental Science and Pollution Research</i> , 26, 21172-21188. 17. Varma, V. G., Jha, S., Raju, L. H. K., Kishore, R. L., & Ranjith, V. (2022). A review on decentralized wastewater treatment systems in India. <i>Chemosphere</i> , 300, 134462. 18. HPEC Report on Urban Infrastructure.
Week 16 (starting Apr 15)	Role of line agencies in municipal areas; jurisdiction and scope of work of line agencies; cost recovery methods of infrastructure planning and development projects; SLBs	Lecture	
Apr 23/24	Finalisation of Internal Marks	--	--

**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.