



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

Department of Planning,
Lecture Plan, Odd Semester, AY 2024-25

Name of Course:	B.Planning
Subject Name:	Traffic and Transportation Planning (PLN215)
Year & Sem:	II Year & III Semester
Course Duration:	22 July – 14 November, 2024
Course Coordinator:	Dr. Naina Gupta
Number of Credits:	3
Subject Category:	Theory
Total Periods/Week:	3 (Minimum Attendance Requirement: 75%)
Internal Assessment	50 (Minimum Pass Marks: 50%)
End Evaluation	50 (Minimum Pass Marks: 50%)
Total Marks	100
Total No. of Internal Assessment & Mode	Three Assessments (including Mid Semester Assessment) Mode of Assessment: IA-I : Poster Presentation, Mid Semester Assessment: Closed Book Test; IA-III: PowerPoint Presentation

Subject Objective: To understand the basic knowledge of traffic surveys, infrastructure design and concepts of planning.

Week	Lecture / Session Topic (Teaching-Learning Objective aimed)	Unit and Assignment
22 - 26 Jul	Introductory Awareness Building Session and Lecture: Concept, Role and Significance of Transport Planning: Various transport systems; Traffic and transport problems and issues.	Unit-I
29 Jul - 02 Aug	Lecture: Road Cross-sectional Elements; Road hierarchies, classification, capacity and level of service.	Unit- III
05 - 09 Aug	Lecture: Intersection types; Uncontrolled, controlled; Space sharing and time-sharing junctions.	Unit-III
12 - 16 Aug	Internal Assessment – I	(15 Marks)
19 – 23 Aug	Lecture: Transport Surveys, Classified traffic volume count, Origin & Destination, spot speed studies, parking, pedestrian volume studies, household surveys.	Unit-II
27 Aug - 08 Sept	Field Trip	
09 – 13 Sept	Lecture: Traffic, travel and network characteristics and their significance in planning and design of transport infrastructure.	Unit-II
16 - 20 Sept	Mid- Semester Assessment week	Closed Book Test (20 marks)
23 -27 Sept	Lecture: Traffic Flow Models - traffic density, traffic flow and speed	Unit-III
30 Sept – 04 Oct	Lecture: Principles and Approaches for Traffic Management & Travel Demand Management	Unit-IV & Unit V

Naina G.



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07 -11 Oct	Lecture: Geometric Design of Road and Intersections: Vehicle and road characteristics; Components of geometric design-design speed; Horizontal and vertical alignment	Unit-IV
14 -18 Oct	Guest Lecture: Planning and Design for Active Mobility	Unit II & III
21 - 25 Oct	Internal Assessment – III	(15 Marks)
28 Oct - 01 Nov	Lecture: Network alignment planning, sight distance, cross-section elements, Lateral and vertical clearance, control of axis.	Unit IV
04 -08 Nov (14 Nov end of class work)	Lecture & Interactive Session: Emerging concepts - TOD, NMT, MRTS, RRTS etc.; Syllabus Revisions	Unit I & Unit V

Reference books:

1. Rodrigue, J. P., Comtois, C. & Slack, B, 'The Geography of Transport Systems'. Routledge Publishing. 2006.
2. P.K.Sarkar, V.Maitri & G.J.Joshi, 'Transportation Planning – Principles, Practices and Policies'. PHI Learning Pvt. Ltd., 2017.
3. Dr. L.R. Kadiyali, 'Traffic Engineering and Transport Planning'. Khanna Publishers. Eight Edition.
4. Speck, J. (2012). Walkable City. Farrar, Straus and Giroux.
5. Ministry of Urban Development: 'Code of Practice (Part -1&2): Cross Section'. Institute of Urban Transport. 2012; Service Level Benchmarking for Urban Transport.
6. IRC Codes: SP-41; 69; 11; 106; 67
7. Street Design Guidelines by UTTIPEC;
8. Electric Mobility Policy Framework, MoHUA
9. National Transit Oriented Development (TOD) Policy; National Urban Transport Policy

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.

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