

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

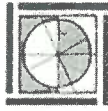
Department of Planning,
Lecture Plan, Odd Semester, AY 2024-25

Name of Course:	M.Planning (Transport Planning)
Subject Name:	Logistics and Freight Distribution (MTP213)
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 : Open Book Test/Paper Writing, Mid Semester Assessment: Closed Book Test; IA-III: PowerPoint Presentation

Subject Objective: To provide a comprehensive overview of the main issues related to the fields of freight transport, logistics and all relevant aspects related to freight routing, scheduling, distribution, storage and inventory management.

Week	Lecture / Session Topic (Teaching-Learning Objective aimed)	Unit and Assignment
22 - 26 Jul	Introductory Awareness Building Session and Lecture: Concepts of logistics and supply chain; Integrated logistics and supply chain, Complexity of freight demand, different freight transport systems; key issues and challenges for logistics.	Unit-I & Unit III
29 Jul - 02 Aug	Lecture: Planning framework for logistics, logistics processes, supply chain segmentation, logistics network planning, logistics management; Decision Areas in Logistics	Unit- I
05 - 09 Aug	Lecture: Introduction to Inventory Management and Planning - Definition, importance in SC management, Objectives of inventory management, Inventory classification, Inventory cost analysis, Forecasting demand	Unit-II
12 - 16 Aug	Lecture: Inventory Models and Optimization Techniques; Deterministic models, Stochastic models, Continuous, Periodic Review Models; Inventory control in uncertain environments	Unit-II
19 – 23 Aug	Internal Assessment – I	(10 Marks)
27 Aug - 08 Sept	Field Trip	

Naina G.



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Week	Lecture / Session Topic (Teaching-Learning Objective aimed)	Unit and Assignment
09 – 13 Sept	Lecture: Inventory Performance Measures KPIs for inventory management: inventory turnover ratio, stockout rate, fill rate, cycle time, carrying cost; Supplier Performance	Unit-II
16 - 20 Sept	Mid- Semester Assessment week	Closed Book Test (20 Marks)
23 -27 Sept	Lecture: Warehouse Planning, Purpose, role and operation of warehouse, types of warehouses; Facility Location Models	Unit-IV
30 Sept – 04 Oct	Lecture: Principles of warehousing, warehouse design, warehouse management and information; Design of Freight Terminals; Planning of Inland Container Depot, Container Freight Stations, Integrated Freight Complex, Logistics hub etc.; Intermodal Integration	Unit-IV
07 -11 Oct	Guest lecture: Port Planning, Port Performance Indicators, Hinterland Delineation; Port Infrastructure; Maritime Logistics	Unit III
14 -18 Oct	Lecture: Demand forecast and modelling for freight traffic	Unit III
21 - 25 Oct	Internal Assessment – III	(20 marks)
28 Oct - 01 Nov	Lecture: Freight distribution and management: Principles of freight distribution, management of freight traffic, freight costs and distribution economics; Transport modes selection, route selection (VRP), vehicle scheduling (TSP), Transportation Problem, fleet sizing.	Unit V
04 -08 Nov	Lecture & Interactive Session: Emerging concepts in Logistics, Performance monitoring, benchmarking, information and communication technology in freight distribution, security and safety issues; logistics and environment	Unit I & Unit V
10- 14 Nov	Interactive Session: Syllabus Revision	All Units

Reference books:

1. Krajewski, L. J., Malhotra, N. K., Malhotra, M. K., & Ritzman, L. P. (2015). Operations Management: Processes and Supply Chains, eBook, Global Edition. Pearson Higher Ed.
2. Bronson, R. (1982). Schaum's Outline of Theory and Problems of Operations Research.
3. Taniguchi, E. (2017). City Logistics: Modelling, planning and evaluation. Routledge.
4. Rushton, A. et. al. (2010), The Handbook of logistics and Distribution Management, Kogan Page Limited, United Kingdom.
5. Kotler, P. (2008), Principles of Marketing, Pearson Education India, 2008
6. Waters, D. (2010), Logistics: An Introduction to Supply chain Management, Palgrave Macmillan, New York.

Jain



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7. Rodrigue, J. P. (2020). The Geography of Transport Systems. In Routledge eBooks. <https://doi.org/10.4324/9780429346323>
8. Tseng, Y. et. al.(2005), The Role of Transportation in Logistics Chain, Eastern Asia Society for Transportation Studies.
9. Harit Sagar, Green Port Guidelines, 2022
10. PM Gati Shakti - National Master Plan for Multi-modal Connectivity
11. National Logistics Policy, 2022
12. Efficient Urban Freight Best Practices, MoHUA
13. Guidelines for National Sustainable Urban Freight Transport System, 2020

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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