

Lesson Plan

Name of Institute: Ambala College of Engineering and Applied Research

Name of the Faculty member : Er. Rupen Trehan

Discipline: Mechanical Engineering

Semester: 8th

Subject: Supply Chain Management (MEO-402A)

Lesson Plan Duration: 15 weeks (from Jan 2026 to May 2026)

Work Load: L: 3 T: 0 P: 0

1 st	1	introduction and understanding the supply chain
	2	Objective of a supply chain
	3	Objective of a supply chain, Importance of supply chain decisions
2 nd	4	decision phases in a supply chain
	5	Decision phases in a supply chain
	6	Process views of a supply chain, Examples of supply chains.
3 rd	7	Achieving strategic fit and scope
	8	Competitive and supply chain strategies
	9	Achieving strategic fit, Expanding strategic scope
4 th	10	Challenges to achieving and maintaining strategic fit.
	11	Challenges to achieving and maintaining strategic fit.
	12	Supply chain drivers and metrics, Financial measures of performance
5 th	13	Drivers of supply chain performance
	14	framework for structuring drivers
	15	Transportation, sourcing, pricing.
6 th	16	Designing the supply chain network

	17	Designing distribution networks and applications to online sales
	18	Designing distribution networks and applications to online sales, factors influencing distribution network design,
7 th	19	online sales and the distribution network
	20	online sales and the distribution network
	21	Network design in the supply chain, Network design in the supply chain
8 th	22	The role of network design in the supply chain,
	23	framework for network design decisions
	24	framework for network design decisions, framework for network design decisions
9 th	25	models for facility location and capacity allocation,
	26	models for facility location and capacity allocation,
	27	making network design decisions in practice, making network design decisions in practice
10 th	28	The impact of globalization on supply chain networks
	29	The impact of globalization on supply chain networks
	30	framework for network design decisions, total cost, risk management in global supply chains
11 th	31	discounted cash flows, evaluating network design decisions using decision trees
	32	to onshore or offshore
	33	the off shoring decision: total cost, risk management in global supply chains, discounted cash flows. evaluating network design decisions using decision trees
12 th	34	evaluation of global supply chain design decisions under uncertainty
	35	making global supply chain design decisions under uncertainty in practice.
	36	Cycle inventory
13 th	37	the role of cycle inventory in a supply chain,

	38	estimating cycle inventory–related costs in practice
	39	Economies of scale to exploit fixed costs, economies of scale to exploit quantity discounts
14 th	40	Safety inventory, the role of safety inventory in a supply chain
	41	determining the appropriate level of safety inventory
	42	impact of supply uncertainty on safety inventory, impact of aggregation on safety inventory
15 th	43	managing safety inventory in a multi-chelon supply chain
	44	the role of IT in inventory management
	45	estimating and managing safety inventory in practice

(Signature of the teacher concerned with date