

BMEE310L	Supply Chain Management	L	T	P	C
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Pre-requisite	NIL	Syllabus version			
		1.0			
Course Objectives					
<ol style="list-style-type: none"> 1. Provide an overview and conceptual understanding of Supply Chain Management. 2. Introduce theoretical models and applications in the area of Supply Chain Management. 3. Equip the students with tools and concepts to manage and improve Supply Chain for operational excellence. 					
Course Outcome					
At the end of the course, the student will be able to					
<ol style="list-style-type: none"> 1. Understand supply chain need, and analyze the strategies, and drivers of performance of the supply chain. 2. Evaluate different distribution and network design options. 3. Analyze the impact of information in achieving coordination. 4. Optimize inventory level in a Supply Chain. 5. Evaluate different transportation modes and pricing strategies. 6. Analyze the challenges in the global Supply Chain network as well as in maintaining sustainability of the Supply Chain. 					
Module:1		Introduction to Supply Chain Management			5 hours
Definition – Stages – Objective - Importance of SC Decisions - Decision Phases - Process views of a SC					
Module:2		Strategic Fit and Drivers of Performance			6 hours
SC Strategies - Achieving strategic fit - Uncertainty and Capabilities of SC - Steps and Challenges in achieving the fit – Scope - Measures of performance - Drivers of SC performance - roles and impact on financial performance					
Module:3		Distribution Systems and Networks			6 hours
Role of distribution – Influence of drivers on distribution systems - Distribution Network Options – Impact of online sales on distribution Factors influencing network design decisions – phases in design decisions - models – facility location – capacity allocation					
Module:4		Coordination and Technology in Supply Chain			6 hours
Lack of coordination and Bullwhip Effect – Vendor Managed Inventory and Collaborative Planning, Forecasting and Replenishment - Role of IT in the supply chain – Macro processes - Customer Relationship Management –Internal supply chain management – Supplier Relationship Management - Supply chain IT in practice – Future of IT in supply chain.					
Module:5		Planning & Managing Inventories in a Supply Chain			7 hours
The role of cycle inventory in a supply chain –Managing multi echelon cycle inventory – Estimating cycle inventory – related costs in practice – the role of safety inventory in a supply chain – managing safety inventory in a multi echelon supply chain – estimating and managing safety inventory in practice.					
Module:6		Sourcing, Transporting and Pricing of Products			7 hours
Sourcing decisions in supply chain – transportation in the supply chain – transportation infrastructure – suppliers of transport services – transportation modes and trade-offs – pricing and revenue management in the supply chain.					
Module:7		Global and Sustainable Supply Chains			6 hours
Trend towards globalization - Challenges – Off shoring Decisions – Risk and Uncertainty in Global SCM – Sources – Sustainability in Supply Chain – Role and importance – sustainability pillars and drivers – best practices.					

Module:8	Contemporary Issues	2 hours	
		Total Lecture hours:	45 hours
Text Book(s)			
1.	Chopra, S. and Meindl, P., Supply Chain Management: Strategy, Planning & Operations, 2018, 7th edition, Pearson India Education Services Pvt. Ltd., India.		
Reference Books			
1.	Simchi-Levi, D. Simchi-Levi, E. Ravi Shankar, and Kaminsky, P., Designing & Managing the Supply Chain: Concepts, Strategies & Case Studies, 2019, 3rd Edition, McGraw-Hill, New York.		
2.	Janat Shah, Supply Chain Management, Text and Cases, 2016, 2 nd edition, Pearson India Education Services Pvt. Ltd., India.		
3.	Martin Christopher, Logistics and Supply Chain Management, 2016, 5 th edition, Pearson Education Limited, UK.		
Mode of Evaluation: CAT, Digital Assignment, Quiz, FAT			
Recommended by Board of Studies		09-03-2022	
Approved by Academic Council		No. 65	Date 17-03-2022