LOGISTICS AND SUPPLY CHAIN MANAGEMENT

23MBPC621

(COURSE HANDBOOK)

MBA

COURSE FACULTY:

Asso. Prof. Shreekant G Naik

1. GENERAL INFORMATION

Welcome to Logistics and Supply Chain Management!

This course equips aspiring managers with a comprehensive foundation in the principles, tools, and theories of Logistics and Supply Chain Management, preparing them for success in today's dynamic business environment. The program delves into various concepts, techniques, and strategies related to Logistics systems and management while expanding the knowledge about Supply Chain, warehouse, and distribution management.

The curriculum is structured into five comprehensive modules designed to build upon the last. You will begin with an introduction to Logistics management, followed by basic concepts of Logistics systems and Planning. The subsequent modules will delve into the introduction to supply chain management, warehouse management systems, and distribution management. Practical activities accompany each topic to enhance your understanding and application of these concepts in real-world scenarios.

As you progress through the course, you will be encouraged to actively participate in learning the concepts and various functions of logistics and supply chain. This participation helps you understand the supply chain environment and make you familiarize with tools and techniques used in supply chain management. This course will enhance your knowledge of sustainable supply chain models applied in industries, which will be beneficial in your immediate career. To have value addition you are expected to undertake a course on Logistics and Supply Chain Management and to do various activities.

The analytical and problem-solving skills gained after learning tools and techniques used in supply chain management are highly valuable in exploring career opportunities in the logistics and supply chain industry. This handbook is a valuable resource that outlines assessments, learning outcomes, and the support services available to you. We are excited to embark on an engaging and productive semester together.

1.1.Course Objectives

This course is designed to:

- Impart the knowledge of basic concepts of logistics and supply chain management
- Provide insights for establishing efficient, effective, and sustainable supply chains.
- Acquaint the role of distribution in managing supply chains
- Familiarize the tools and techniques used in warehousing.

1.2.Course Outcomes

By the end of this course, students will be able to:

CO1: Summarize the concepts and functions of logistics and supply chain management.
CO2: Apply the concepts of the supply chain to organizational problems.
CO3: Apply the logistics concepts for optimized inventory and warehouse operations.
CO4: Identify the key components and decision-making processes in distribution management
CO5: Apply the logistics concepts of pricing and planning in organizations.

1.3.Textbooks and Suggested Sources

All the below mentioned books are available in the 1st Floor Library.

Key Text Books:

1. Donald J, Bowersox and David J. Closs, "Logistical Management", 6th Edition, Tata McGrow Hill, 2000
2. Janat Shah, "Supply Chain Management- Text and Cases" 2nd Edition, Pearson, 2007

Reference Books:

1. John J Coyle, C John Langley, Brian J Gibson, Robert A Novack, and Edward J Bardi, "A Logistics Approach to Supply Chain Management" Cengage, 2009

2. David Smichi Levi, Philip Kaminsky, Edith Simchi Levi, and Ravi Shankar, "Designing and Managing the Supply Chain", 3rd Edition, McGraw Hill, 2008

2. THE COURSE

2.1.Course Description

Logistics and Supply Chain Management			
Semester	**III**	CIE Marks	**50**
Course Code	**23MBPC621**	SEE Marks	**50**
Teaching Hours/Week (L:T:P)	**4:0:0**	Exam Hrs	**03**
Total Hours	**52**	Credits	**04**

The Logistics and Supply Chain Management course is designed to provide students with foundational knowledge in Logistics and Supply Chain Management which helps in developing a career in the supply chain world. The course will run for 13 weeks during Semester 4 and consists of 5 modules that cover essential topics in Logistics and Supply Chain Management. Each week includes 4 lectures, delivered by Dr. Shreekant G Naik focusing on theoretical concepts, practical applications, and course-related activities. Spanning a total of 52 hours, this 4-credit course is assessed through Continuous Internal Evaluation (CIE) for 50 marks and a Semester-End Examination (SEE) for 50 marks, with 3-hour exam duration. This structure ensures a balanced and engaging learning experience for students.

2.2.Initiating Contact with Staff and Other Students

Students are encouraged to use class hours for inquiries and are welcome to visit the faculty office for additional support. Given the large class size, emailing is also an effective communication option.

2.3.Resources

Resources include dynamic tools such as digital libraries, e-learning platforms, and research databases, which provide students with anytime, anywhere access to academic materials and interactive courses through a variety of resources available on the college website, including the VTU Consortium, open-access repositories, and government portals (e.g., NPTEL, NDLI).

E-learning and digital library can be accessed via the college website https://mite.ac.in/ (Campus Life section > Library > VTU Consortium/e-learning platforms/additional sources).

2.4. Staff

Course Faculty: Dr Shreekant G Naik
Cabin: 3rd floor, PG Block
Email: shreekant@mite.ac.in

2.5. Topics and Reading materials for each module

Module 1 *No. of Hours: 08*

- **Topic: Introduction to Logistics Management**
  - Introduction: Concept, Objectives of Logistics, Types of Logistics, Need for Logistics Management, Evolution of logistics toward Supply chain Management, Logistics Industry in India. Logistical Activities, Logistics Costs, Expected cost of stock outs. Logistical Informational Requirements.

- **Activities:**
  - Classroom discussion on challenges and opportunities in the Indian Logistics sector https://www.ibef.org/research/case-study/transforming-india-s-logistics-sector-challenges-and-opportunities

- **Essential Readings:**
  - Donald J, Bowersox and David J. Closs, "Logistical Management", 6th Edition, Tata McGraw Hill, 2000 (Chapter 2)

- **Additional Reading:**
  - John J Coyle, C John Langley, Brian J Gibson, Robert A Novack, and Edward J Bardi, "A Logistics Approach to Supply Chain Management" Cengage, 2009 (Chapters 1 & 2)

Module 2 *No. of Hours: 10*

- **Topic: Logistic Systems and Planning**
  - Strategic Logistic plan, Operating objectives of logistics planning, Flow of logistics planning
  - Developing Logistics strategy, Logistics System Design and Administration, logistic environment assessment, and Pricing in logistics.

- **Activities:**
  - Students (team-wise) will pick various companies and do the presentations/chart-making on the logistics and supply chain functions of a company by collecting details from the websites and other secondary data. This activity will encourage students to know how companies use logistics and supply chain concepts in their companies. Also through this activity, students will explore logistics companies and can think of starting careers in those companies.

- Classroom discussion on Indian logistics policy
  https://www.investindia.gov.in/blogs/national-logistics-policy-india
  This exercise will help students understand the overall Indian Logistics environment

- **Essential Reading:**
- Donald J, Bowersox and David J. Closs, "Logistical Management", 6th Edition, Tata McGraw Hill, 2000 (Chapters 18 & 16)

Module 3 *No. of Hours: 12*

- **Topic: Supply Chain Management**
- Significance, key challenges. Scope of SCM- historical perspective, decision phases – process view, supply chain framework, key issues in SCM and benefits.
- Managing uncertainty in Supply Chain, Bullwhip Effect, impact of uncertainties, forecasting in Supply Chain, Innovations in Supply Chain.

- **Activities:**
- Discussion on the report: Supply Chain systems and Challenges in India https://iimmumbai.ac.in/files/Research-Report-on-Key-Research-Issues-in-Supply-Chain-and-Logistics-Management-2030.pdf

- **Essential Reading:**
- Donald J, Bowersox and David J. Closs, "Logistical Management", 6th Edition, Tata McGraw Hill, 2000 (Chapter 4)

- **Additional Reading:**
- Janat Shah, "Supply Chain Management- Text and Cases" 2nd Edition, Pearson, 2007 (Chapters 1 & 2)

Module 4 *No. of Hours: 12*

- **Topic: Warehouse Management System**
- Warehousing – primary functions. Efficient Warehouse Management. Types of Warehouses. Warehouse Layout Design, criteria. Warehouse Management System, various costs associated with inventory, EOQ, buffer stock, lead time reduction, reorder point, re-order level fixation, ABC analysis, SDE/VED Analysis.
- Types of Inventories, Alternative approach for classification of inventories, components of inventory decisions, inventory cost management, business response to stock out, replenishment of inventory, material requirements planning, Order matching process, and volume analysis.

- **Activities:**
- Case study discussion on warehouse management system https://www.researchgate.net/publication/330293478_Implementing_Warehouse_Management_Systems_WMS_in_Logistics_A_Case_Study

- **Essential Reading**:
  - John J Coyle, C John Langley, Brian J Gibson, Robert A Novack, and Edward J Bardi, "A Logistics Approach to Supply Chain Management" Cengage, 2009 (Chapters 9, 10, 11, & 13)

- **Additional Reading:**
  - Donald J, Bowersox and David J. Closs, "Logistical Management", 6th Edition, Tata McGraw Hill, 2000 (Chapter 13)
  - Video on "Inside Amazon India's Fulfilment Center: How the e-comm giant makes online shopping seamless" https://www.youtube.com/watch?v=9MLC8_9FAxc

Module 5 *No. of Hours: 10*

- **Topic: Distribution Management**
  - Distribution Management, Designing the distribution network, the role of distribution in logistics, factors influencing distribution, design options, distribution networks in practice, network design in the supply chain, and factors affecting the network design decisions. Hub & spoke Vs distributed warehouses. Mode of transportation and criteria of decision. Hazards in transportation.

- **Activities:**
  - Teams will present various industry distribution models and will do a competitor analysis in the channel networks. Industries include FMCG, Durable, Paints, B2B, D2C, automobile, apparel, etc.

- **Essential Reading:**
  - Donald J, Bowersox and David J. Closs, "Logistical Management", 6th Edition, Tata McGraw Hill, 2000 (Chapter 4)

- **Additional Reading:**
  - David Smichi Levi, Philip Kaminsky, Edith Simchi Levi, and Ravi Shankar, "Designing and Managing the Supply Chain", 3rd Edition, McGraw Hill, 2008 (Chapter 7)

3. ASSESSMENT

The assessment for the Logistics and Supply Chain Management module is divided into two components: Continuous Internal Evaluation (CIE) and Semester End Examination (SEE), each accounting for 50% of the total marks.

Continuous Internal Evaluation (CIE) comprises two internal tests, scheduled for the 8th and 14th week, which together contribute 30% of the total marks. Additionally, students can earn 20% through the completion of assignments 10 marks is allotted for the Presentation / Chart-making exercise on various companies' logistics and supply chain functions, 10 marks is allotted for assignment Distribution model presentation in various industries

Semester End Examination (SEE) constitutes the remaining 50% of the total marks. Key information regarding examination dates and related details can be accessed via the college website (Academics and Courses section > Calendar of Events > PG Even Sem).

Rubrics for Other Assessment (Total: 20 Marks / 40% of CIE)

1. Presentation / Chart-making exercise on various companies logistics and supply chain functions (10 Marks)					
Criteria	**10-9 Marks (Excellent)**	**8-7Marks (Very Good)**	**6-5 Marks (Good)**	**4-3 Marks (Fair)**	**2-1 Marks (Poor)**
Creativity and Delivery	Highly creative, impactful delivery	Creative, minor delivery gaps	Basic delivery, limited creativity	Minimal effort	No meaningful participation
Subject Understanding	Deep understanding, well-integrated	Good understanding	Basic understanding	Weak understanding	No effort to understand

2. Distribution model presentation in various industries (10 Marks)				
Criteria	**10-9 Marks (Excellent)**	**8-7Marks (Good)**	**6-5 Marks (Fair)**	**4-2 Marks (Poor)**
Relevant Information collected, presentation	Highly creative, impactful delivery	Creative, minor delivery gaps	Basic delivery, limited creativity	Minimal effort
Subject Understanding	Deep understanding, well-integrated	Good understanding	Basic understanding	Weak understanding