

LSCM 1001	Introduction to Logistics	L	T	P	C
<b>Version 1.0</b>		4	0	0	4
<b>Pre-requisites/Exposure</b>	12th level				
<b>Co-requisites</b>	Basic understanding of Business				

### Course Objectives

The objectives of this course are:

- Developing an understanding of the key concepts applied in Logistics Management
- To provide a framework for considering Logistics Management problems and issues and to apply these concepts in practice.
- To highlight the importance of all activities of distribution and an understanding of concepts like inbound and outbound logistics, warehouse, and inventory etc.
- To develop skills for planning, designing the operational facilities of Logistics with the analytical and critical understanding.
- To understand the role of logistics information system and value chain excellence of firm.
- To develop ability to make rational logistics related decisions on the basis of problem analysis
- To develop ability to apply principles and practices of Logistics Management in real business applications

### Course Outcomes

- CO1. Understand major logistics functions and activities.
- CO2. Differentiate logistics and supply chain management.
- CO3. Analyze alternative ways to organize logistics management.
- CO4. Apply methods of inventory and Transportation planning.
- CO5. Explain how technology has and continues to change logistics management.
- CO6. Compare modes of transportation and related policies.

### Catalog Description

Introduction to Logistics management is a business management program that prepares students for employment in the areas of total supply chain management, including inventory control, materials management, and transportation. The field of logistics management includes occupations such as supervisors and/or managers of transportation, warehousing, and materials management.

In addition, skilled-labor in logistics-related areas such as materials handling, equipment operators, and administration support, play an equally vital role. Logistics is now widely recognized as a critical driver of operational excellence, cost reduction, and customer service to an organization's bottom line.

Three major functional areas of logistics are warehousing, transportation and materials management. Warehouse management system, RFID and Logistics Management Systems (LMS) technology have enabled logistics managers in each of these functional areas to gather, analyze and process data, resulting in automation and enhanced productivity. The demand for trained logistics professionals is growing nationally, resulting in career opportunities in high-growth industries and is projected to add substantial numbers of new jobs in India overseas.

## **Course Content**

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### **Unit I:**

**9 Hours**

#### **INTRODUCTION TO LOGISTICS MANAGEMENT**

Why Logistics as a carrier option , Definition of Logistics Management, Functions and Objectives, Importance of logistics , Logistics-A systems concept, Mini Case Studies of Logistics and Supply Chain Cost Reduction, Introduction to Logistics Specialists and industry stakeholders, Airlines, Shipping Lines, NVOCCs, Introduction to Logistics Specialists and industry stakeholders., Freight Forwarders, Custom House Agents, Export Packers, 3PL & 4PL Companies, Trends, Issues and challenges in Logistics management, Case Study1. Shree Cements – Freight reduction through transportation mix

### **Unit II:**

**7 Hours**

#### **LOGISTICS AS A PART OF SUPPLY CHAIN MANAGEMENT**

Introduction to Supply Chain management, Evolution and Concept, Logistics Versus Supply Chain Management: An International Survey by Paul d. Larson & Arni Halldorsson, Value chain versus supply chains by Andrew Feller, Dr Dan Shunk and Dr.Tom Callarman Drivers of Supply Chain – Logistical Drivers and Cross Functional Drivers Role of Logistics in SCM, Supply Chain Management vs. Logistics Management, Concept of Value Chain, Case Study 2: Is Apple Supply Chain Really the No. 1? A Case Study

### **Unit III:**

**4 Hours**

#### **INTRODUCTION TO INBOUND LOGISTICS**

Concept and definition, Decision making for inbound and outbound, improving inbound logistics performance – A DHL Case study, Case study: Snowman Frozen Foods Ltd.

**Unit IV: 4 Hours**

**INTRODUCTION TO WAREHOUSING ACTIVITY**

Ware house concept and Operations, Types of warehouses, Warehouse decisions, Site selection and methods of location, Design, Product mix analysis, Expansion, Role of CWC/FCI

**Unit V: 4 Hours**

**INTRODUCTION TO MATERIAL HANDLING TECHNIQUES**

Introduction to material Handling and Types of MHEs, Criteria for selecting MHE, Inventory management and Classification techniques, Case study : Inventory Management and Logistics Cost Reduction: A Case of a Malaysia Herbal Medicine Company

**Unit VI: 5 Hours**

**INTRODUCTION TO MODES OF TRANSPORTATION**

Transportation Mode and Mix Documentation and Processes Rail, road, waterway, airways and pipelines, Transport mode Selection, Performance Characteristics, Policy Reforms and Govt. Initiatives, Multi Modal Transportation, Role of MTO

**Unit VII: 5 Hours**

**INTRODUCTION TO OUTBOUND LOGISTICS**

Strategic Sourcing Process, Concept of Outbound Logistics, Same-day Parts Deliveries to Automotive Service Centers - A DHL Case Study  
Distribution Strategies, New Delhi Auto mobile – A case of Logistics Integration

**Unit VIII: 4 Hours**

**UNDERSTANDING LOGISTICS INFORMATION SYSTEM**

Logistics Information Systems and E- commerce Portals, Basics of ERP, EDI, WMS and TMS

**Unit IX: 2 Hours**

**UNDERSTANDING LOGISTICS SKILLS**

Role of Government in Skill Enhancement, Career Options as a logistician

**Unit X: 4 Hours**

**PREPARATION OF LOGISTICS REPORT: RAIL-ROAD-AIR-SEA DISPATCH PLAN, STOCK REPORT, VERIFICATION OF DOCUMENTATION**

Logistics Freight Documentation, International Transport Documents and INCO Terms, Exim Procedure, Mearsk line - Case Study For Process Improvement and ROI improvement

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**Text Book**

- a) Bowersox, D. J., Closs, D. J., & Cooper, M. B. (2013). Supply Chain Logistics Management. Ohio: McGraw-Hill Education.
- b) Sople, V. V. (2012). Logistics Management. New Delhi: Pearson Education.

**Reference Books**

- a) Ballou, R. H. (2007). Business Logistics Management. London: Pearson Education.
- b) Christopher, M. (2010). Logistics and Supply chain management. New Jersey: Prentice Hall.
- c) Supply Chain Management 6/e. (2016). New Delhi: Pearson Education India.

**Modes of Evaluation: Quiz/Assignment/ presentation/ extempore/ Written Examination Examination Scheme:**

<b>Components</b>	<b>MSE</b>	<b>IA</b>	<b>ESE</b>
<b>Weightage (%)</b>	<b>20</b>	<b>30</b>	<b>50</b>
		<ul style="list-style-type: none"> <li>• Case Presentation (30 Marks)</li> <li>• Online Assignments (40 Marks)</li> <li>• Quiz (30 Marks)</li> </ul>	

**Relationship between the Course Outcomes (COs) and Program Outcomes (POs)**

<b>Mapping between COs and POs</b>		
	<b>Course Outcomes (COs)</b>	<b>Mapped Programme Outcomes</b>
<b>CO1</b>	Understand major logistics functions and activities.	<b>PO 1, 2, 4, 8,9,12</b>
<b>CO2</b>	Differentiate logistics and supply chain management.	<b>PO 2,3,4,8,7,8</b>
<b>CO3</b>	Analyze alternative ways to organize logistics management.	<b>PO 3,4,6,8, 9, 12</b>
<b>CO4</b>	Apply methods of inventory and Transportation planning.	<b>PO 4,5,6,7,9,10,11</b>
<b>CO 5</b>	Explain how technology has and continues to change logistics management.	<b>PO 1,2,6,7,8,9</b>
<b>CO 6</b>	Compare modes of transportation and related policies.	<b>PO 1,2,3,4,5,10,11</b>

## Program Outcome / Course Outcome mapping

<b>Course Outcomes</b>	<b>CO 1</b>	<b>CO 2</b>	<b>CO 3</b>	<b>CO 4</b>	<b>CO 5</b>	<b>CO6</b>
<b>PO 1</b>	3	3	3	2	2	1
<b>PO 2</b>	3	3	3	2	2	1
<b>PO 3</b>	3	3	3	2	2	1
<b>PO 4</b>	3	1	1	3	2	2
<b>PO 5</b>	2	2	1	3	1	2
<b>PO 6</b>	2	2	2	2	1	1
<b>PO 7</b>	3	3	1	2	1	1
<b>PO 8</b>	3	3	3	3	2	2
<b>PSO 9</b>	3	3	3	1	2	2
<b>PSO 10</b>	3	3	3	2	1	2
<b>PSO 11</b>	3	3	3	2	1	2
<b>PSO 12</b>	1	1	1	3	2	1

		Students will demonstrate strong conceptual knowledge of management & its functional areas.	Students will demonstrate effective oral and written communication skills in the professional context.	Students will be able to work effectively in teams and demonstrate team-building capabilities.	Students will be able to evaluate the legal, social and economic environments of business.	Students will be able to describe the global environment of business.	Students will demonstrate sensitivity towards ethical and moral issues and have ability to address them in the course of business.	Students will be able to apply decision-support tools to business decision making.	Students will be able to apply knowledge of business concepts and functions in an integrated manner.	Students will demonstrate conceptual domain knowledge of the logistics sector.	Students will apply decision-support tools to decision making in logistics sector.	Students will apply conceptual knowledge of logistics sector in an integrated manner.	Students will demonstrate employable and deployable skills for appropriate roles in management.
LSC M 100 1	Introduction to Logistics	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PSO 9	PSO 10	PSO 11	PSO12
		3	3	3	2	2	2	2	3	2	3	3	2

**1 – Weakly mapped**

**2 – Moderately mapped**

**3 – Strongly mapped**

## **Model Question Paper**

**University of Petroleum & Energy Studies**  
**College of Management & Economics Studies**  
Kandoli Campus, Dehradun

**End Semester Examination, December 2017**

**Programme Name: BBA (LM)**  
**Subject: Introduction to Logistics**  
**Subject code: LSCM 1001**

**Semester - IV**  
**M.Marks: 100**  
**Duration: 3 Hrs**

<b>Note: All sections are compulsory &amp; this question paper carries 4 sections.</b>		
<b>Section – A (20 Marks) Attempt all questions in this section</b>		
1. (A) Write the full form of the following		(2*5=10 marks)
(i) ICD	(2)	CO1
(ii) TMS	(2)	CO1
(iii) RFID	(2)	CO1
(iv) EDI	(2)	CO1
(v) MMTD	(2)	CO1
(B) Explain the following		(2*5=10 marks)
1. Document issued by shipping line for transport of goods through sea mode of transportation is _____.	(3)	CO4
2. _____ is an organization set up by Ministry of Skill Development under NSDC for bridging gap in logistics sector.	(3)	CO3
3. Demand variability increases as one moves up the supply chain away from the retail customer, and small changes in consumer demand can result in large variations in orders placed upstream this is known as _____.	(3)	CO2
4. _____ is a plan by government of India to develop ports, transport through waterways and promote shipping.	(3)	CO3
5. Document issued by airline for transport of goods through air mode of transportation is _____.	(3)	CO2
<b>Section – B (20 Marks)</b>		
<b>Attempt any 4 question, each question carries 5 marks only</b>		<b>(5*4=20 marks)</b>
2. (a) What are different types of material handling equipment explain with example?	(5)	CO4

(b) What is the role of a CHA and MTO in Logistics Industry?	(5)	CO2
(c) Mention various types of inventory and inventory classification techniques?	(5)	CO3
(d) Mention various strategies in warehousing operation?	(5)	CO3
(e) What is difference between hub & spoke and milk run model?	(5)	CO4
<b>Section – C (30 Marks)</b>		
<b>Attempt any two question, each question carries 15 marks (15*2=30 marks)</b>		
3. (a) What is Logistics Information System? Mention some Logistics Information System and their applicability in e-commerce industry.	(15)	CO4
(b) Define following terms: (i) VMI (ii) Reverse Logistics (iii) Multimodal Transportation	(15)	CO3
(c) What are INCOTERMS? Explain all the incoterms with the help of examples?	(15)	CO3
<b>Section – D (30 Marks)</b>		
<b>Attempt the Case &amp; provide the solution for this case</b>		
<b>Case Study - Improving Inbound Logistics Performance</b>	(25)	CO3,CO4, CO5
<p>DHL is present in over 220 countries and territories across the globe, making it the most international company in the world. With a workforce exceeding 285,000 employees, we provide solutions for an almost infinite number of logistics needs. DHL is part of the world's leading postal and logistics Group, Deutsche Post DHL and encompasses three divisions: DHL Express, DHL Global Forwarding, Freight and DHL Supply Chain.</p> <p>The customer is an international car manufacturer present in approximately 120 countries, producing a range of cars and vans. Headquartered in Europe, it is one of the top automotive brands in the region. At the same time, it enjoys international success, counting emerging economies such as Brazil and Russia among its leading markets. With a stable of brands under its belt, the manufacturer has achieved a global presence through its alliance with and acquisition of other automotive companies.</p> <p><b>DHL Supply Chain Solution</b></p> <p>DHL Supply Chain's proven inbound expertise in the automotive industry, its ability to pioneer breakthrough</p>		



<p>logistics services in emerging markets and its integrated service offering – combining contract logistics capabilities with freight management expertise – proved to be the winning formula. A brand new platform that would provide reliable and efficient service across the country and into the manufacturer's plants and warehousing depots in France, Spain, Slovenia and Romania was established. This involved daily “milk runs” with a cross-docking operation in Gebze, Turkey, where the parts are consolidated before onward distribution. Furthermore, a comprehensive solution encompassing a whole range of services, from consolidation and route planning, customs clearance and freight management, to order and supplier management was put in place.</p> <p><b>Customer Benefits</b></p> <p>Following its implementation, the solution has engendered a host of advantages for the manufacturer. Not only has truck utilization increased to 98%, but also supplier performance has been on the uptick. Furthermore, enhanced order and supplier management processes has allowed for more accurate planning and quicker customs clearance. Based on this track record of improvements, the manufacturer increased the scope of the contract by 300%. The multilingual team from DHL Supply Chain now handles around 2,000 shipments per annum, delivering unparalleled value to the manufacturer.</p>		
<p>1. Explain Automobile Industry Supply Chain with help of a diagram. DHL applied a unique combination of services to optimize the multiple logistics operations. Identify and explain solutions provided by DHL with the benefits.</p>	(15)	CO3,CO4, CO5
<p>2. Explain steps of import clearance procedure form port with help of a flowchart?</p>	(15)	CO3,CO4, CO5