



INSTITUTE OF ADMINISTRATION AND COMMERCE (ZIMBABWE)

SYLLABUS

LOGISTICS

PURPOSE

The purpose of this subject is to integrate the knowledge and expertise gained in the previous levels of Purchasing Management in order that the organizations resources and stock are properly and effectively procured, warehoused and utilized where they are required.

OBJECTIVES

- 1) To demonstrate that purchasing management, warehousing, and logistics are complementary disciplines.
- 2) To identify and apply methods leading to effective procurement and movement of all the organization's stock requirements.
- 3) To demonstrate that logistics covers the basics in Warehousing, transportation, inventory, packaging and materials, supply management, operations, information and organization.

Syllabus Content

1. INTRODUCING SUPPLY CHAIN MANAGEMENT

Elements and the evolution of Supply Chain Management.

- Supply Management.
- Operations.
- Integrated Logistics.

2. Purchasing and Supply Management

- Importance of Purchasing.
- The objectives/Goals of Purchasing.
- The Purchasing Process.
- Purchasing and other Functions.
- Purchasing and Integrated Logistics Interfaces.
- Types of Purchasing.
- Supplier Selection, Evaluation and Measurement.

2.1 Purchasing partnerships

- Characteristics of successful partnerships

2.2 Materials sourcing

- Outsourcing physical products
- Outsourcing services

2.3 Just-in Time Purchasing

- Characteristics of JIT Purchasing.
- Benefits of JIT Purchasing
- JIT Purchasing risks.
- JIT Purchasing contracts.

3.0 Operations

- Overview of basic operations
- Overall systems – Materials Requirements Planning (MRP1), Optimize Production Technology (OPT).
- Aggregate Planning/Workforce Planning – Production Scheduling , Shop Floor Control, Assessment.

4.0 Integrated Logistics

- Integrated Logistics Management
- The Integrated Logistics Model
- Integrated Logistics Activities
- Evolution of Integrated Logistics Concept
- Integrated Logistics Value-Added Concept – Form utility, Possession Utility, Place and Time Utility
- Financial Impact of Integrated Logistics on the Firm- Macro-level Impact, Micro-Level Impact
- Integrated Logistics interfaces within the Firm – Marketing Interface, Manufacturing Interface , Finance and Accounting Interface
- Emerging Integrated logistics Concepts – Service Response Logistics, Quick Response Logistics, Response Logistics Recovery, Efficient Consumer Response and Reverse Logistics.

5.0 Quality Consumer Service and Integrated Logistics

- Customer Service – Definition, Importance of Customer Service and Logistics, Consumer Service Elements and the Order Cycle System
- Channels of Distribution – Definition, Reasons for having Distribution Channels, Functions Performed in the Distribution Channels, Types of Distribution Channels and Designing the Channel of Distribution

6.0 Service Response Logistics

- Products versus Services – Identifying the four Characteristics that differentiates a Service from a Product
- Equipment – Based and People-Based Services
- Integrated Logistics from a service perspective
- Primary Service Response Logistics Activities – Waiting Time, Service Capacity and Service Delivery
- Service Response Logistics Functions
- Intermediaries in Service Response Logistics
- Service Response Logistics Strategic Implications

7.0 Domestic Transportation

- Modes of Transportation
- Intermodal Transportation
- Transportation market structures, Transportation Cost Structures, Intermediaries/Third-Party Providers and JIT delivery.

8.0 Transport Management

- Traffic and Transportations Strategy
- Modal Characteristics and Selection-Nature of goods, Access to Carriers Price, Transit Time, Security of Goods, Government Regulations, Safety and other Aspects of Integrated Logistics
- Carrier Characteristics and Selection
- Private Fleet or For-Hire Carriage
- Transport Manager Activities-Contract Negotiations, Efficiency Improvement, Evaluation of Customer Service Quality Levels, Supervision and Skills Requirements.

9.0 INVENTORY MANAGEMENT

- Rationale for having Inventory.
- Symptoms Impact of Inventory, Inventory Costs-Carrying Costs and Ordering Cost.
- Inventory Management Models-Economic Order Quantity(EOQ) Model, Push and Pull Model, EOQ Assumptions
- Customer Service Levels and Safety Stock.

10.0 SCHEDULING

- Scheduling Concepts and Sales.
- Scheduling Concepts and Integrated Logistics
- Scheduling-Repetitive Manufacturing, Batch Processing and Job Shop.
- Materials Requirements Planning(MRP I)
- Manufacturing Resources Planning(MRP II)
- Distribution Requirements planning (DRP)
- Just-in-Time Manufacturing (JIT)
- Scheduling in Service Companies

11.0 WAREHOUSE MANAGEMENT

- Warehouse versus Distribution
- Rationale for warehousing
- The role Warehousing

- Basic concepts of a Warehouse, Functions of a Warehouse.
- Types of a Warehouse-Private, Public, and Contract Warehousing
- Warehouse Design, Warehouse Productivity
- Warehouse Information Systems-Electronic Data Interchange, Automatic Data Collection And Radio Frequency Systems.

12.0 MATERIAL HANDLING PLANNING

- Material Handling-Symptoms of Inefficient Material Handling, Objectives of Material Handling, Material Handling Systems and Equipment, Principles of Materials Handling and Materials Productivity Ratios.
- Packaging-Packaging Interfaces, Packaging Functions, Packaging Units and packaging tests.

13.0 REVERSE LOGISTICS

- Recycling
- Customer returns of new products, Customer returns of used products, Customer returns of reused products
- Outsourcing Reverse Logistics Requirements
- Designing an effective Reverse Logistics System
- Handling of Environmentally Sensitive Materials.

14.0 ORGANIZING INTEGRATED LOGISTICS

- Organizational structures in Integrated Logistics.
- Mediating Factors in organizational Design-Centralized versus Decentralized, Strategic versus Operational Focus, Line versus Staff, Scope of Authority, Outsourcing the Integrated Logistics Function, Integrated Logistics Performance Measurement.

15.0 INFORMATIONAL ISSUES IN INTEGRATED LOGISTICS

- Integrated Logistics Information Systems- Quality of Information, Effective Communications, Defining the Integrated Logistics Information System.

- E-Commerce-Categories of E-Commerce, E-Commerce Levels, Order fulfillment in E-Commerce.

16.0 INTEGRATED LOGISTICS ACCOUNTING

- Logistics Accounting-Purpose, Types of Cost, Costing methods.
- Break-Even Analysis.
- Activity-Based Management (ABM).
- Activity-Based Costing (ABC).

17.0 STRATEGIC INTEGRATED LOGISTICS MANAGEMENT

- Evolution of Strategic Logistics Management-Definitions of planning, Strategy and Strategic Managements. The Strategic Logistics Management Model.
- Integrated Logistics Quality-Evolution of Logistics quality, Logistics Quality Goals and Why Quality Efforts Fail.
- Integrated Logistics Benchmarking -Definition of Benchmarking, The Benchmarking Process, Selecting the right firms to Benchmark against.

18.0 GLOBAL INTEGRATED LOGISTICS

- Global Integrated Logistics Strategic Options.
- Global Logistics Management-Global Transportation, Warehousing, Packaging, Inventory Management, Materials Handling and Information Systems.
- Global Intermediaries-International Freight Forwarders, Non-vessel-operating common carrier, Export Management Companies, Export Trading Companies Export Packers Ship Brokers, AND ship Agents.

RECOMMENDED READING MATERIAL

The Management of Business Logistics, 6th Ed. Coyle John. PUBLISHER West Publishing Co.

Logistics Author, David J Bloomberg, Stehen LeMay, Joe B. Hanna. Prentice Hall