

# **LOGISTICS AND MULTI-MODAL TRANSPORT - SYLLABUS**

Note. This syllabus covers the interrelationship of all modes of transport used in international trade. However, students should note that because 90% of all international cargo transport includes a sea movement leg, the main thrust of this syllabus is on intermodal transport and logistics involving maritime transport on at least one leg. It is assumed that the systems used for supply chain management, associated logistics and inventory control are all computer-based and that students will be familiar with the fundamentals of the internet and basic e-commerce.

## **INTERNATIONAL TRADE**

Define the key phases in the evolution of the global economy and their significance for trade flows.

Discuss the effects of major economic crises on the development of container shipping.

Explain the basic principles, drivers, and barriers that underpin international trade.

Illustrate how various forms of trade agreements impact cross-border economic activities.

Apply logistics principles to understand their role in facilitating trade and economic development.

Analyse how free trade zones function as catalysts for trade and regional development.

Examine the logistical challenges and solutions for enhancing trade in landlocked countries.

Evaluate the usefulness of trade and service statistics in assessing international trade performance.

Design a classification model for goods moved by sea based on their handling characteristics and logistics needs.

Construct a comparative framework for evaluating the effectiveness of different inland and airborne transport modes in trade logistics.

## **INTERNATIONAL DISTRIBUTION CHANNELS**

Explain the role of distribution channels in facilitating trade between producers and consumers across borders.

Define the main functions and types of distribution channels used in international trade.

Describe the structural components and levels of distribution channels and their interdependencies.

Illustrate how physical and information flows move through distribution channels and affect efficiency.

Demonstrate the application of e-commerce tools in modern logistics and transport operations.

Analyse the strategic importance of websites in supporting e-commerce-based distribution models.

Differentiate between domestic and international distribution channels in terms of scope, complexity, and regulatory challenges.

Evaluate the effectiveness of different international market entry strategies, such as direct export, indirect export, and production abroad.

Develop a management plan for operating international distribution channels across multiple regions.

Assess channel performance metrics to improve the efficiency and responsiveness of international distribution networks.

## **PLAYERS IN INTERNATIONAL TRADE**

Identify the primary categories of players involved in international trade transactions.

Explain the roles of financial and insurance institutions in supporting international trade operations.

Describe the key functions of shippers, customs brokers, and packaging companies in international logistics.

Illustrate how cargo canvassers, freight forwarders, consolidators, and groupage operators coordinate cargo flows in global supply chains.

Demonstrate the role of NVOCCs and logistics providers in providing integrated international transport solutions.

Analyse the responsibilities and operational interactions of transport operators, ports, and dry port operators.

Compare the roles of warehouse operators in national versus international distribution networks.

Assess the regulatory landscape governing international trade, with a focus on customs, inspection, and certification procedures.

Evaluate the strategic contributions of ancillary intermediaries in supporting trade compliance and market competitiveness.

Design a stakeholder map outlining the interconnected roles of all players involved in a typical international trade operation.

## **STRUCTURING INTERNATIONAL SALE TRANSACTIONS**

List the key elements of an international sale of goods contract.

Explain the role and legal significance of the Vienna Convention in cross-border commercial sales.

Describe how INCOTERMS define responsibilities, costs, and risks between buyers and sellers in international trade.

Apply the correct INCOTERM rule to a given trade scenario based on the mode of transport and nature of the transaction.

Demonstrate the practical use of traditional and alternative payment methods in structuring international transactions.

Analyse the risks involved in international transactions and propose appropriate mitigation strategies.

Assess the role of customs authorities in verifying and processing international trade documentation.

Differentiate between key international commercial documents used in export, import, and transport operations.

Evaluate the implications of cargo liabilities, abandoned cargoes, and insurance options on transaction outcomes.

Design a paperless international transaction using digital platforms and electronic documentation tools.

## **LOGISTICS AND SUPPLY CHAIN MANAGEMENT**

List the primary reasons logistics is critical in the context of the modern global economy.

Explain the fundamental differences and connections between logistics and supply chain management.

Describe the structure and main elements of logistics systems.

Apply knowledge of logistics components to evaluate how goods and information flow through supply chains.

Demonstrate how risk assessment tools can be used to manage supply chain vulnerabilities.

Analyse how sustainability initiatives influence logistics strategies and environmental performance.

Compare the logistics needs and constraints of commercial shippers, military supply chains, and humanitarian operations.

Evaluate the specialised logistics requirements of cold chain, dangerous goods, and pharmaceutical products.

Assess how sector-specific logistics (e.g., automobile, apparel, construction) influence operational design and performance.

Design a logistics model that balances economic efficiency with environmental responsibility, using real-world examples.

## **TRANSPORT MANAGEMENT**

Define the core concepts and functions of transport within global trade and logistics.

Explain why global cargo transport is complex and how this complexity affects logistics decision-making.

Describe the dual nature of transport as both a service and a derived demand within the supply chain.

Apply knowledge of different transport modes to determine their suitability for specific cargo types and trade routes.

Demonstrate an understanding of the unique operational features of maritime transport in global logistics.

Describe the operations of containerships and roll-on-roll-off operations

Analyse the roles of air, rail, road, and inland transport systems in supporting international supply chains.

Compare and contrast different modes of transport in terms of service performance, cost, speed, and environmental impact.

Evaluate how different types of transport costs affect decision-making across various transport modes.

Assess the criteria and constraints that influence the selection of an appropriate transport mode for a given logistical need.

## **TRANSPORT SYSTEMS AND INFRASTRUCTURE**

List the basic characteristics and advantages of multimodal transport systems.

Explain the roles of combined and multimodal transport operators and the documentation required for multimodal shipments.

Describe the function and design of intermodal freight units in cargo handling and mode integration.

Apply knowledge of intermodal systems to assess the use of sea-back, rail-back and air-back networks in global freight transport.

Identify and describe the key components that support effective multimodal transport infrastructure.

Analyse the priorities and expectations of shippers in evaluating multimodal transport service performance.

Examine how sustainability and green initiatives are integrated into multimodal transport planning and infrastructure.

Evaluate the strengths and weaknesses of international infrastructure elements supporting multimodal transport.

Assess the effectiveness of non-physical infrastructure—communications, services, legal, and utilities—in facilitating international multimodal flows.

Design an ideal multimodal transport system that integrates infrastructure, sustainability, and shipper needs across global regions.

## **MULTIMODAL TRANSPORT PLANNING AND PRICING**

List the key logistics and global services provided by multimodal transport operators.

Explain the core elements involved in planning maritime and air multimodal service options.

Apply service planning techniques to develop an integrated multimodal transport plan.

Describe the role of risk management and contingency planning in multimodal service design.

Demonstrate how computer applications and digital platforms support multimodal transport operations.

Analyse the benefits, challenges, and requirements of information systems used by multimodal operators and transport hubs.

Examine how tariffs reflect the relationship between transport costs, trade dynamics, and government intervention.

Explain how freight rates are established in multimodal transport and how rebates or modern equivalents influence pricing decisions.

Evaluate the evolution of freight rates from commodity tariffs to modern flexible pricing mechanisms.

Assess how multimodal pricing strategies are shaped by cost factors, additional charges, and the value of transported goods.

## **CORPORATE STRUCTURE, MARKET RESEARCH, AND MANAGEMENT CONTROL FOR MULTIMODAL OPERATIONS**

List the main types of corporate and operating structures used in multimodal transport, including distinctions between public and private ownership.

Explain the role of agency representation in facilitating multimodal operations across different regions and legal environments.

Describe the evolution of commercial cooperation in multimodal transport, from consortia to strategic global alliances.

Apply market research tools to identify customer needs and inform service customisation in multimodal transport.

Demonstrate the differences between marketing and sales approaches in the context of logistics and transport services.

Analyse historical business volume and market indicators to forecast future demand and revenue trends in multimodal operations.

Evaluate strategic opportunities for business development in a competitive multimodal transport environment.

Assess the financial viability and performance of multimodal services using cost-benefit analysis and other evaluation tools.

Evaluate the benefits and limitations of decentralised vs centralised control structures in managing multimodal networks.

Design a quality management system for a multimodal transport operator, incorporating ISO standards, TQM, and benchmarking tools.

## **MULTIMODAL TRANSPORT CONVENTIONS AND STATUTORY REGULATIONS**

Explain the key roles of international institutions and players involved in the development and enforcement of multimodal transport conventions.

List the main international conventions that govern the carriage of goods across different transport modes.

Describe the regulatory frameworks governing the transport of dangerous and perishable goods across borders.

Apply safety-related international conventions to assess compliance in container handling and packing practices.

Demonstrate the impact of international security conventions on multimodal transport operations and planning.

Analyse the role of customs conventions in streamlining cross-border cargo movement and trade facilitation.

Compare competition regimes and their application across jurisdictions, including the US, EU, and China.

Evaluate the implications of statutory competition law on transport pricing, inland charges, and service contracts.

Assess the scope and effectiveness of operator-specific regulations in maritime, air, rail, road, and multimodal transport.

Develop a compliance strategy for a multimodal transport operator that integrates conventions, safety, security, and regulatory obligations.