

ECONOMICS OF SEA TRANSPORT AND INTERNATIONAL TRADE – Syllabus

Note: Students are expected to use appropriate graphs, diagrams, examples and modelling to illustrate economic concepts and changes.

Throughout the syllabus students should be able to relate the theory to empirical evidence.

This syllabus does not require an understanding of statistical techniques or methods.

Basic economic concepts

Understand the basic definitions of economics and maritime economics. Understand the distinction between the micro-economic theory of shipping and macro-economic factors affecting international trade and shipping, and the differences between them.

Thoroughly understand: factors of production, utility and price, opportunity cost.

Thoroughly understand price mechanism and the relationship between demand, price and quantity. Be aware of competitive models and demand factors.

The demand for shipping

Thoroughly understand how the demand for shipping arises. Understand the basic measures of economic activity (GNP and GDP).

Thoroughly understand derived demand, elasticity of demand and the relevance of elasticity. Understand demand measurement – distance, ton/miles and tonne/kilometres.

The supply of shipping

Thoroughly understand the factors influencing the supply of shipping – tonnage, number and fleet.

Understand the trends in development of the world fleet – newbuildings and scrapping.

Thoroughly understand productivity and supply trends – surplus tonnage, active fleet and market segments.

Understand short- and long-run supply, supply responsiveness and the concept of elasticity.

Cost analysis and economies of scale

Understand basic economic cost concepts – conventional cost analysis in shipping, specific factors affecting the relationship between costs and shipping output.

Thoroughly understand economies of scale in shipping and optimal ship size. Understand factors affecting costs including fiscal regimes and flags of registry. Be aware of the relationship between costs and quality.

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Understand empirical testing of theory against trends in ship size and the factors involved over the last two decades.

Competitive markets – tramps

Thoroughly understand the dry cargo market structure and characteristics. Understand market demand structure and the concept of perfect competition.

Understand the use of voyage estimating, breakeven analysis in determining minimum freight rates and the lay-up decision.

Thoroughly understand the cost structure of tramp ships.

Competitive markets – tankers

Thoroughly understand the structure of the tanker market and the seaborne trade in crude and products.

Understand the imbalance of ownership, identical service, freedom of entry and exit, full information and segmented supply.

Be aware of the relationship between the tanker and dry markets. Understand the effect of political and environmental factors.

Thoroughly understand recent changes in the tanker fleet and fleet in freight market indices.

Liner trades – oligopoly and the competitive market

Thoroughly understand characteristics and demand for liner services. Understand trends in liner markets and ship types.

Understand pricing behaviour including price discrimination and profitability and the empirical evidence of lower profits than other shipping markets.

Understand the relationship between profit maximisation and optimal utilisation.

Understand the role and function of conferences, alliances and consortia and the differences between these structures.

Be aware of the effect of international regulation.

Understand customer demand, the ability to meet customer demand and maximise utilisation.

Ports, canals and waterways

Understand the functions of ports, canals and waterways.

Understand the relationship between efficiency and cost and the importance of ship/port time.

Understand investment, criteria and economic factors including cost and tariff structure.

Be aware of arguments for and against public ownership.

Shipping and international trade

Understand the patterns of world trade; be aware of world trade statistics. Understand the demand for shipping.

Understand types of trade flows; inter-industry and intra-industry; absolute and comparative advantage.

Thoroughly understand global trading; the arguments for free trade versus protectionism in its many forms; the role of the World Trade Organization and the G8.

Exchange rates and balance of payments

Thoroughly understand how exchange rates are determined; free-floating and regulated markets. Understand the effect of exchange rate fluctuations on shipping.

Understand the components of a balance of payments with particular reference to shipping.

Understand the relationship between exchange rates and the factors affecting their fluctuations and a country's balance of payments.
