

## **ECONOMICS OF SEA TRANSPORT AND INTERNATIONAL TRADE – Group One Syllabus**

NB. 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 macroeconomic 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 tonnes/kilometres.

### **THE SUPPLY OF SHIPPING**

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

Understand the trends in development of the world fleet, new buildings and scrapping.

Thoroughly understand productivity and supply trends - surplus tonnage, active fleet, 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 flag of registry.

Be aware of the relationship between costs and quality.

Understand factors affecting costs including fiscal regimes and flag of registry

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 layup 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; fluctuations 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 behavior including price discrimination and profitability and the empirical evidence of lower profits than other shipping markets.

Understand the relationship between profit maximization and optimal utilization.

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 maximize utilization.

### **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 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. 3

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.