## The Hong Kong Polytechnic University

## **Subject Description Form**

Subject Code	LGT3019					
Subject Title	Economics of International Transport Logistics					
Credit Value	3					
Level	3					
Normal Duration	1-semester					
Pre-requisite / Co-requisite/ Exclusion	Nil					
Objectives	This subject provides students with fundamental concepts in economics and how these might be applied to international transport and logistics industries. Students will be encouraged to develop a global outlook, and an understanding of cultural, economic and market diversity across different countries.					
	It provides students with knowledge of appropriate sources of information and data in the international transport and logistics sectors, and how realistic business situations and problems can be analysed by applying the appropriate conceptual frameworks from the relevant economic studies.					
	In particular, case studies and policy analysis will be conducted for industries including the maritime, aviation and land transportation sectors. This will enable students to identify and analyse the means by which value is created in goods and services and delivered to users.					
Intended Learning Outcomes	Upon completion of the subject, students will be able to:					
	a. To develop an ability to build economic models to analyse the behaviors of shipping and aviation markets;					
	b. To instill an understanding of the interaction between economic, operational and technological aspects of the shipping and aviation industries;					
	<ul> <li>To establish an awareness of the range of perspectives which may be adopted theoretically, legally and practically towards the transport system;</li> </ul>					
	d. To analyse market data and forecast the trends in different shipping/aviation markets.					
	Studying this subject will also help develop students' critical thinking, analysis, oral and written communication skills.					
Subject Synopsis/	Transport Economics					
Indicative Syllabus	Fundamentals of economic theory and applications; economic development; patterns of trade and logistics industries; demand modeling; estimation and					

interpretation of elasticity; cost function estimation and interpretation; economies of scale; economies of transport density; hub and spoke networks.

#### **Maritime section**

Function of maritime transport; Demand for maritime transport: Supply of maritime transport: Shipping costs; Characteristics of different maritime sectors; Pricing mechanism in maritime transport: liner tariffs and tramp market freight rates; Economies of scale in shipping; Optimum ship size and optimum speed of ships; Cooperation and competition in maritime field; Shipping market analysis; Maritime policy and regulation;.

#### Air Transport section

Aircraft characteristics; Air transport in national, regional and local patterns and networks; Route selection and principles of timetable production, load factors and frequency; The interrelationship between passenger and freight transport; Marketing policy, strategy and analysis in airline industry; Elasticity of demand for airline operations; Performance indicators, total factor productivity; economic and operational Regulation; liberalization and deregulation.

# Teaching/Learning Methodology

In the lectures the general principles of the syllabus topic will be presented and developed, together with guidance on further reading and activities. Lectures may also be used for the presentation and discussion of leading cases.

In the seminars, students will develop and apply the general principles of the topic in student-centred activities, including role-plays, student presentations and discussions.

### Assessment Methods in Alignment with Intended Learning Outcomes

Specific assessment methods/tasks	% weighting	Intended subject learning outcomes to be assessed (Please tick as appropriate)					
		a	b	c	d		
Coursework	40%		✓	✓	✓		
Examination	60%	✓			✓		
Total	100 %					•	

Explanation of the appropriateness of the assessment methods in assessing the intended learning outcomes:

The coursework includes writing a project report (20%) and a group project presentation (20%). Students are required to apply some basic economic modeling skills learnt in this course in their project study. Examination is mainly used to test students' knowledge on economic models and calculation. Some common practices used in the industry will also be tested.

Student Study Effort Expected	Class contact:					
	Lecture	26 Hrs.				
	Seminar 13 l					
	Other student study effort:					
	Team Project	45 Hrs.				
	Reading	42 Hrs.				
	Total student study effort	126 Hrs.				
Reading List and	Recommended Textbooks					
References	Jenkins, D. (2002). <i>Handbook of Airline Economics</i> (2 <sup>nd</sup> ed.), McGraw Hill.					
	Stopford, M. (2009), Maritime Economics (3rd ed.), Routledge, London.					
	Wensveen, John G. (2011). <i>Air Transportation: A Mana Perspective</i> (7 <sup>th</sup> ed.), Ashgate.  Cowie, Jonathan (2010). The Economics of Transport: A Theoret: Applied Perspective, London: Routledge					
	Consultant report					
	UNCTAD: Review of Maritime Transport (2018,2019,2020)					
	IATA: Annual Review					
	Reference Journals: (available via POLYU library e-journals)					
	Journal of Air Transport Management  Maritime Policy and Management  Maritime Economics and Logistics  Transportation Research – Part A					
	Transportation Research – Part E					
	Transport Policy					