# The Hong Kong Polytechnic University

# **Subject Description Form**

Subject Code	LGT3301			
Subject Title	Logistics Technologies and Distribution Management			
Credit Value	3			
Level	3			
Normal Duration	1-semester			
Pre-requisite / Co-requisite/ Exclusion	Nil			
Objectives	Logistics was originally a military term. Traditionally, logistics means the organised movement of goods, services, information and people from the point of origin to the point of consumption. The scope of logistics has been growing rapidly since the last few decades with the advance of technology. It has also been estimated that logistics costs account for one third of the cost of doing business. Effective logistics management is hence crucial for the success of the company. This course provides an introduction to logistics and distribution management and aims at providing students with a full understanding of business logistics management, transport, inventory and distribution systems supported with real business case studies. It includes the analysis of modern business logistics management strategies, and discusses how products and services are created and delivered to the customers effectively. Besides, the course covers the management of the logistics system operations in this information era, and the effectively utilisation of the information technology concepts to gain a competitive advantage of the company.			
Intended Learning Outcomes	<ul> <li>Upon completion of the subject, students will be able to:</li> <li>a. Analyse modern business logistics management strategies, and its significance and applications in the business world, so as to improve customer satisfaction.</li> <li>b. Manage the operations of the logistics systems in the information age, and effectively utilise the concepts learnt to gain a sustainable competitive advantage of the company.</li> <li>c. Recognize the need for learning to learn and self-improvement in the field of logistics and distribution management and be able to plan and manage their own learning for professional development. (BBA Outcome 13)</li> <li>Students are expected to be able to demonstrate a range of skills to solve logistics and distribution problems (BBA Outcome 14). These include:</li> <li>d. Critical thinking and analysis skills that include the capability to identify assumptions, evaluate statements, detect false logic, and formulate problems.</li> </ul>			

e. Problem-solving skills including identifying, formulating and solving logistics and distribution problems.

# Subject Synopsis/ Indicative Syllabus

## **Supply Chain Management**

Show the role of Supply Chain Management (SCM) and distribution channels in a firm's marketing strategy. Concepts of SCM and the types of channel structures. Channel design, development and performance measurement. Demonstrate the role of logistics in SCM. Discuss the role of information technologies in enhancing the effectiveness and efficiencies of supply chains.

#### Warehousing

Define warehousing. Importance of warehouses. Uses and classification of warehouses. Role of information transfer and information technologies in warehouses. How warehouse management systems (WMS) enhance inventory management, improve customer service and company's productivity.

## **Information System and Technology**

Discuss the enterprise integration and administration, enterprise operations, enterprise planning and monitoring, and communication technology applications. Increasing importance of automatic identification systems in company's operations and the benefits to its stakeholders. Emerging technologies in supply chain and logistics such as Internet of Things (IoT), Big Data, Autonomous vehicles, Augmented Reality, Artificial Intelligence.

### **Inventory and Materials Management**

Basic concepts of inventory management. How to calculate safety stocks. How production policies influence inventory levels. How inventories and customer service levels are interrelated. Financial aspects of inventory strategy. Ways to recognise poor inventory management and improvement methods.

#### **Transportation**

Roles of transportation in logistics management. Transportation service pricing and contract terms. Describe alternative transport modes. Examine the issues of transportation cost and performance measurement. How Transportation Management Systems (TMS) provides visibility to transportation planning and operations ensuring customer satisfaction.

#### **Materials Handling**

Overview of the various types of automated and non-automated materials handling systems. Examine the role of packaging in warehouse operation.

#### Procurement

Show the importance of procurement policy in improving profitability. Identify the procurement activities. Present issues in procurement cost management. Illustrate the role of partnering in supplier relationship management. Define and discuss the role of e-procurement in organization's procurement processes. Discuss benefits and disadvantages of e-procurement.

# Teaching/Learning Methodology

Lectures are used to discuss the major theories of the subject. Case studies and small group discussions are carried out in tutorials. A term project which aims at exploring the logistics management issues in local industries is designed to let students apply what they have learnt in class to analyse real world cases. A reflective writing is designed to let students reflect on their readiness for learning as a professional in the logistics technologies and distribution field.

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	e	
	Continuous Assessment	50%						
	Reflective Writing	5%			✓			
	Individual Assignment	25%	✓	✓		✓	✓	
	Group Project	20%	✓	✓		✓	✓	
	Final Examination	50%	✓	✓		✓	✓	
	Total	100 %						
	To reflect the significant the overall weighting of the concerning technology-re	his subject is	based or			,	·	
Student Study Effort Expected	Class contact:							
	Lecture					26 Hrs.		
	Tutorial/Seminar					13 Hrs.		
	Other student study effort:							
	■ Project Preparation					51 Hrs.		
	Exam Preparation				36 Hrs.			
	Total student study effort					126 Hrs.		
Reading List and References	Recommended Textbook  Bowersox, D.J., Closs, D.J. and Cooper, M.B. (2020), Supply Chain Logistics  Management (5 <sup>th</sup> edition). McGraw Hill.							
	References Coyle, J.J., Langley J.R.,	C.J., Novack	. R.A. at	nd Gibso	n. B.J. <i>(</i>	2013)		

Grant, D. (2012), Logistics Management. Pearson.
Murphy, P.R. and Knemeyer, A.M. (2018), <i>Contemporary Logistics (12<sup>th</sup> edition)</i> . Pearson.