City University of Hong Kong Course Syllabus

offered by Department of Systems Engineering with effect from Semester A 2024 / 25

Part I Course Overview

Course Title:	Supply Chain Management
Course Code:	SYE6015
Course Duration:	One Semester
Credit Units:	3
Level:	Рб
Medium of Instruction:	English
Medium of Assessment:	English
Prerequisites : <i>(Course Code and Title)</i>	Nil
Precursors : (Course Code and Title)	Knowledge of Basic Probability & Statistics and SEEM3060 Operations Research (offered until 2021/22)/ ADSE3060 Operations Research (offered until 2023/24) / SYE3060 Operations Research
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Equivalent Courses : <i>(Course Code and Title)</i>	SEEM6015 Supply Chain Management (offered until 2021/22) ADSE6015 Supply Chain Management (offered until 2023/24)
Exclusive Courses : (Course Code and Title)	Nil

Part II Course Details

1. Abstract

This course aims to develop students' abilities to understand the components of manage the global supply chain of a company or system, including raw material procurement, storage, materials handling, production, inventory, transportation, and delivery.

2. Course Intended Learning Outcomes (CILOs)

(CILOs state what the student is expected to be able to do at the end of the course according to a given standard of performance.)

No.	CILOs	Weighting	Discov	very-en	riched
		(if	curricu	lum re	lated
		applicable)	learnin	g outco	omes
			(please	e tick	where
			approp	riate)	
			A1	A2	A3
1.	Develop a familiarity with supply chain logistics	30%	\checkmark	\checkmark	
	concepts				
2.	Explain the important concepts and approaches in	20%	\checkmark	\checkmark	
	procurement of materials and distribution of finished				
	products				
3.	Describe the issues in logistics system design and	20%	✓		
	operation				
4.	Understand and apply appropriate state-of-the-art	15%	✓		
	mathematical principles quantitative models and				
	techniques to formulate and solve inventory and supply				
	chain management problems				
~	chain management problems	1.50/			
5.	Discover how information technology and data	15%	v	v	v
	analytics are adopted to improve existing supply chain				
	systems, and to develop new business models for				
	supply chains.				
		100%			

A1: Attitude

Develop an attitude of discovery/innovation/creativity, as demonstrated by students possessing a strong sense of curiosity, asking questions actively, challenging assumptions or engaging in inquiry together with teachers.

A2: Ability Develop the ability critical thinking

Develop the ability/skill needed to discover/innovate/create, as demonstrated by students possessing critical thinking skills to assess ideas, acquiring research skills, synthesizing knowledge across disciplines or applying academic knowledge to real-life problems.

A3: Accomplishments Demonstrate accomplishment of discovery/innovation/creativity through producing /constructing creative works/new artefacts, effective solutions to real-life problems or new processes.

3. Learning and Teaching Activities (LTAs)

(LTAs designed to facilitate students' achievement of the CILOs.)

LTA	Brief Description	CILO No.					Hours/week (if
		1	2	3	4	5	applicable)
Large Class Activities	Lectures	~	~	~	~	~	33 hrs/sem
Group Work	Group project with a group paper	~	~	~	~	~	6 hrs/sem

4. Assessment Tasks/Activities (ATs)

(ATs are designed to assess how well the students achieve the CILOs.)

Assessment Tasks/Activities	CILO No.				Weighting	Remarks	
	1	2	3	4	5		
Continuous Assessment: <u>50</u> %							
Group Project	✓		\checkmark	✓	\checkmark	30%	
Individual Coursework	✓	>	\checkmark	✓		10%	
Midterm Tests	✓	>	\checkmark	✓	\checkmark	10%	
Examination:50% (duration: 2	2 ho	urs	, if	appl	icable	e)	
Examination will be arranged to	✓	~	\checkmark	✓	\checkmark	50%	
assess students' understanding and							
ability to apply knowledge of							
supply chain management and							
operation learnt.							
						100%	

5. Assessment Rubrics

(Grading of student achievements is based on student performance in assessment tasks/activities with the following rubrics.)

Applicable to students admitted before Semester A 2022/23 and in Semester A 2024/25 & thereafted
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Assessment Task	Criterion	Excellent $(A + A - A)$	Good (B+ B B-)	Fair (C+ C C-)	Marginal (D)	Failure (F)
1. Group Project	ABILITY to identify novel applications of state-of-the-art data analytics tools in supply chain systems.	High	Significant	Moderate	Basic	Not even reaching marginal levels
2. Individual Coursework	UNDERSTANDING of the principles of business operation.	High	Significant	Moderate	Basic	Not even reaching marginal levels
3. Midterm Tests	UNDERSTANDING of the principles of business operation in supply chain systems.	High	Significant	Moderate	Basic	Not even reaching marginal levels
4. Examination	UNDERSTANDING and ABILITY to describe the principles of business operation in supply chain systems.	High	Significant	Moderate	Basic	Not even reaching marginal levels

This is a Continuing Education Fund (CEF) Approved Course, to be eligible for reimbursement; students must achieve the following criteria;

- A minimum attendance rate of 70% (Students should sign on the attendance record for every lesson); and
- Grade C+ or above of the reimbursable course.

Applicable to students admitted from Semester A 2022/23 to Summer Term 2024

Assessment Task	Criterion	Excellent	Good	Marginal	Failure
1. Group Project	ABILITY to identify novel applications of state-of-the-art data analytics tools in supply chain systems.	(A+, A, A-) High	(B+, B) Significant	(B-, C+, C) Moderate/Basic	(F) Not even reaching marginal levels
2. Individual Coursework	UNDERSTANDING of the principles of business operation.	High	Significant	Moderate/Basic	Not even reaching marginal levels
3. Midterm Tests	UNDERSTANDING of the principles of business operation in supply chain systems.	High	Significant	Moderate/Basic	Not even reaching marginal levels
4. Examination	UNDERSTANDING and ABILITY to describe the principles of business operation in supply chain systems.	High	Significant	Moderate/Basic	Not even reaching marginal levels

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Part III Other Information (more details can be provided separately in the teaching plan)

1. Keyword Syllabus

(An indication of the key topics of the course.)

- Logistics systems and network
- Data collection, data management, and forecasting
- Inventory management and risk pooling
- Distribution strategies
- Information technology, bullwhip effect, and vendor managed inventory
- Freight transportation and logistics
- Transportation modelling and techniques

2. Reading List

2.1 Compulsory Readings

(Compulsory readings can include books, book chapters, or journal/magazine articles. There are also collections of e-books, e-journals available from the CityU Library.)

1.	Lecture notes
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2.2 Additional Readings

(Additional references for students to learn to expand their knowledge about the subject.)

1.	SUNIL CHOPRA & PETER I	MEINDL, Supply Chain	Management, Pearson Education.
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