## City University of Hong Kong Course Syllabus

# offered by Department of Advanced Design and Systems Engineering with effect from Semester A 2022 / 23

Part I Course Overv	view
Course Title:	Operations Management
Course Code:	ADSE5006
Course Duration:	One Semester
Credit Units:	3
Level:	P5
Medium of Instruction:	English
Medium of Assessment:	English
Prerequisites: (Course Code and Title)	Nil
Precursors: (Course Code and Title)	Nil
<b>Equivalent Courses:</b> (Course Code and Title)	SEEM5006 Operations Management (offered until 2021/22)
Exclusive Courses: (Course Code and Title)	Nil

1

#### Part II Course Details

#### 1. Abstract

This course aims to develop students' abilities to manage engineering operations by introducing them to notions of operations systems and focusing on the strategic role of operations in an overall business context and on problem solving to improve operations systems in the short and long term.

### 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	(if crapplicable) le		Discovery-enriched curriculum related learning outcomes (please tick where		
			approp		12	
1.	Define and formulate operations strategy	5%	Al	A2	A3	
2.	Define product and service design processes and plan operations process	15%				
3.	Forecast demand and formulate basic inventory policies	30%	<b>√</b>	<b>✓</b>	<b>✓</b>	
4.	Plan and schedule operations facilities and capacities for effective resource utilization	30%	<b>√</b>	<b>√</b>	<b>√</b>	
5.	Apply appropriate methods for operations planning and scheduling	20%				
		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/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 self-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.

#### Teaching and Learning Activities (TLAs) 3.

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

TLA	Brief Description	CILC	CILO No.		Hours/week (if		
		1	1 2 3 4 5		applicable)		
Large Class	Introduction and explanation of	✓	✓	✓	✓	✓	26 hrs/ sem
Activities	theory through examples						
Group	Further learning theory from	✓	✓	✓	✓	✓	13 hrs/ sem
Activities	solving problems together by						
	members in a group						
Office Hour	Discussions of course materials	✓	✓	✓	✓	✓	1 hr/ week

## 4. Assessment Tasks/Activities (ATs)

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

Assessment Tasks/Activities	CILO No.				Weighting	Remarks	
		2	3	4	5		
Continuous Assessment:500	%						
Participation & Exercises		✓	✓	✓	✓	30%	
Case Studies & Mini Projects		✓	✓	✓	✓	20%	
Examination: _50% (duration:			urs	,	, if ap	pplicable)	
						100%	

For a student to pass the course, at least 30% of the maximum mark for the examination should be obtained.

## 5. Assessment Rubrics

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

## Applicable to students admitted in Semester A 2022/23 and thereafter

Assessment Task	Criterion	Excellent	Good	Marginal	Failure	
		(A+, A, A-)	(B+, B)	(B-, C+, C)	(F)	
1. Participation & Exercises	Submitted solutions to individual assignments and	High	Significant	Moderate/Basic	Not even reaching	
Exercises	mid-term test.				marginal levels	
2. Case Studies &	$\mathcal{L}$	High	Significant	Moderate/Basic	Not even reaching	
Mini Projects	presentations.				marginal levels	
3. Examination	Submitted solutions to the	High	Significant	Moderate/Basic	Not even reaching	
	final examination.				marginal levels	

## Applicable to students admitted before Semester A 2022/23

Assessment Task	Criterion	Excellent	Good	Fair	Marginal	Failure
		$(A^{+}, A, A^{-})$	(B+, B, B-)	(C+, C, C-)	(D)	(F)
1. Participation & Exercises	Submitted solutions to individual assignments and mid-term test.	High	Significant	Moderate	Basic	Not even reaching marginal levels
2. Case Studies & Mini Projects	Submitted group work and presentations.	High	Significant	Moderate	Basic	Not even reaching marginal levels
3. Examination	Submitted solutions to the final examination.	High	Significant	Moderate	Basic	Not even reaching marginal levels

### 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.)

- Operations Strategy
- Product and Service Design
- Processes and Technologies
- Capacity and Facilities Planning
- Forecasting
- Inventory Management
- Aggregate Sales and Operations Planning
- Resource Planning
- Operations Scheduling

## 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.)

NIL

## 2.2 Additional Readings

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

1. Operations Management, 6th Edition, Russell & Taylor, John Wiley & Sons