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:	Business Process Improvement and Innovation
Course Code:	SYE6053
Course Duration:	One Semester
Credit Units:	3
Level:	P6
Medium of Instruction:	English
Medium of Assessment:	English
Prerequisites: *(Course Code and Title)*	Nil
Precursors: *(Course Code and Title)*	Nil
Equivalent Courses: *(Course Code and Title)*	SEEM6053 Business Process Improvement and Innovation (offered until 2021/22)/ ADSE6053 Business Process Improvement and Innovation (offered until 2023/24)
Exclusive Courses: *(Course Code and Title)*	Nil

Part II Course Details

1. Abstract

The course aims to instil students, the concept and value of process improvement by applying innovation techniques. Students will learn to appreciate that in today's organizations, process improvement requires analysis with tools; and the capability to improve outcomes with systematic innovative thinking to meet global competitions. This course uses analytical techniques with integration of management tools to let students experience the how's and what's of business process improvement and its role in an organization's long term development.

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 (if applicable)	Discovery-enriched curriculum related learning outcomes (please tick where appropriate)		
			A1	*A2*	*A3*
1.	Explain what is a process in the context of contemporary Organization	10%			
2.	Discuss the key elements of process analysis and improvement methodology	20%	✓		
3.	Distinguish the concept and value of innovation techniques	20%	✓	✓	
4.	Discuss the key methodologies of systematic innovation techniques for process improvement	20%	✓	✓	
5.	Discuss the integration and application of innovation techniques with other management tools	30%	✓	✓	
		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 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 applicable)
		1	2	3	4	5	
Lecture	Lecture, class discussion, Q&A	✓	✓	✓	✓	✓	39 hours/sem

The LTAs are made up of a mixture of lectures, tutorials and case studies. Students learning on lecture topics are complemented by groupwork and individual assignments.

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: 50 %							
Group Work			✓	✓	✓	30%	
Individual coursework	✓	✓	✓	✓	✓	20%	
Examination: 50 % (duration: 2 hours , if applicable)							
						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 before Semester A 2022/23 and in Semester A 2024/25 & thereafter

Assessment Task	Criterion	Excellent (A+, A, A-)	Good (B+, B, B-)	Fair (C+, C, C-)	Marginal (D)	Failure (F)
1. Group Work	Quality of submitted group works	High	Significant	Moderate	Basic	Not even reaching marginal levels
2. Individual coursework	Individual submission	High	Significant	Moderate	Basic	Not even reaching marginal levels
3. Examination	Quality of answers	High	Significant	Moderate	Basic	Not even reaching marginal levels

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

Assessment Task	Criterion	Excellent (A+, A, A-)	Good (B+, B)	Marginal (B-, C+, C)	Failure (F)
1. Group Work	Quality of submitted group works	High	Significant	Moderate/Basic	Not even reaching marginal levels
2. Individual coursework	Individual submission	High	Significant	Moderate/Basic	Not even reaching marginal levels
3. Examination	Quality of answers	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.)

- Business process modelling
- Business process analysis
- Flow analysis and measurement
- Process simulation
- Process streamlining
- Value analysis
- Cause and effect chain analysis
- Systematic innovation (SI)
- TRIZ
- Knowledge management

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.	Course Notes
2.	Guided list of papers on SI and Business Process Improvement

2.2 Additional Readings

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

1.	Ravi Anupindi, Sunil Chopra, Sudhakar D. Deshmukh, Jan A. Van Mieghem, & Eitan Zemel, "Managing Business Process Flows, Principles of Operations Management", Pearson Prentice Hall.
2.	Darrell Mann, Hands on Systematic Innovation, IFR Press,2007
3.	David Bustare, Peter Kawalek, Mark Norris, editors, "Systems Modeling for Business Process Improvements" Artech House, 2000