# City University of Hong Kong Course Syllabus

# offered by Department of Management Sciences with effect from Semester A 2024 /2025

#### Part I Course Overview

Course Title:	Project Management
Course Code:	MS5223
Course Duration:	One Semester
Credit Units:	3
Level:	P5
Medium of Instruction:	English
Medium of Assessment:	English
<b>Prerequisites</b> : (Course Code and Title)	MS5313 Managerial Decision Modeling or MS5216 Decision Analytics
<b>Precursors</b> : (Course Code and Title)	Nil
<b>Equivalent Courses</b> : (Course Code and Title)	Nil
<b>Exclusive Courses</b> : (Course Code and Title)	Nil

### Part II Course Details

# 1. Abstract

This course offers a comprehensive introduction to the fundamental concepts of project management, focusing on the critical trade-offs involved in managing projects. Students will gain proficiency in the essential tools and methodologies designed to aid project managers in various industries. Key topics covered include an overview of project management, detailed project planning, and the use of computerized project management systems. The curriculum also delves into project graphics, pricing and estimation, and cost control strategies. Emphasis is placed on trade-off and risk analysis, concurrent engineering, and integrating Total Quality Management (TQM) techniques with effective project planning. Through a combination of theoretical lessons, practical assignments, real-world projects, and case studies, students will develop the skills necessary to apply project management concepts and tools effectively, preparing them to handle complex projects and drive successful outcomes in their professional careers.

# 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)	curricu learnin (please approp	llum rel g outco tick riate)		
1.	Make informed decisions on project portfolios by considering strategic goals, financial impacts, and resource allocation.	25%	<u>A1</u>	<u>A2</u> ✓	<u>A3</u>	
2.	Create comprehensive project plans that ensure timely and cost-effective completion, while upholding quality and scope, and exhibit expertise in project monitoring, risk management, and communication management	25%		~		
3.	Recognize the critical role of the project management office in project success and acknowledge the need to balance both technical and socio-cultural aspects of project management.	20%	~			
4.	Utilize contemporary project management software, such as Microsoft Project, to efficiently manage various project stages and apply spreadsheet models as decision support tools in project management.	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	CIL	CILO No.			Hours/week (if applicable)
	•	1	2	3	4	
Lecture	Engage in interactive lectures to understand the foundational theories and principles of project management, including strategic decision-making for project portfolios and the role of the project management office. Participate in discussions on project planning methodologies, risk management, and communication management to develop a comprehensive understanding of these concepts.	✓	✓	✓	✓	
Peer discussion	Complete practical exercises using project management software, such as Microsoft Project, to gain hands-on experience in managing different stages of a project and applying decision support tools. Work on individual and group exercises that challenge you to create project plans, perform risk assessments, and develop cost control strategies. Analyze real-world case studies to identify best practices and common pitfalls in project management, encouraging critical thinking and application of theoretical knowledge to practical scenarios. Prepare and present reports on case studies, demonstrating your ability to synthesize information, make informed decisions, and propose innovative solutions to project management challenges.					

# 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		
Continuous Assessment: 50%						
Exercises	✓	✓		✓	30%	
Case studies and report		✓	✓		20%	
Examination: 50% (duration: 2 hours, if applicable)						
Examination (2 hours)	✓	$\checkmark$		✓	50%	
					100%	

# 5. Assessment Rubrics

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

Assessment Task	Criterion	Excellent	Good	Fair	Marginal	Failure
1. Exercises	The accuracy and completeness of the project plans, risk assessments, and cost control strategies produced using the software tools.	(A+, A, A-) Strong evidence of original thinking; good organization, capacity to analyse and synthesize; superior grasp of subject matter; evidence of extensive knowledge base.	(B+, B, B-) Evidence of grasp of subject, some evidence of critical capacity and analytic ability; reasonable understanding of issues; evidence of familiarity with literature.	(C+, C, C-) Student who is profiting from the university experience; understanding of the subject; ability to develop solutions to simple problems in the material.	(D) Sufficient familiarity with the subject matter to enable the student to progress without repeating the course.	(F) Little evidence of familiarity with the subject matter; weakness in critical and analytic skills.
2. Case studies and report	The depth and insightfulness of the analysis and the innovativeness and feasibility of the proposed solutions in the report.	Strong evidence of original thinking; good organization, capacity to analyse and synthesize; superior grasp of subject matter; evidence of extensive knowledge base.	Evidence of grasp of subject, some evidence of critical capacity and analytic ability; reasonable understanding of issues; evidence of familiarity with literature.	Student who is profiting from the university experience; understanding of the subject; ability to develop solutions to simple problems in the material.	Sufficient familiarity with the subject matter to enable the student to progress without repeating the course.	Little evidence of familiarity with the subject matter; weakness in critical and analytic skills.
3. Examination	The accuracy and thoroughness of the responses demonstrating understanding and application of project management concepts and methodologies.	Strong evidence of original thinking; good organization, capacity to analyse and synthesize; superior grasp of subject matter; evidence of extensive knowledge base.	Evidence of grasp of subject, some evidence of critical capacity and analytic ability; reasonable understanding of issues; evidence of familiarity with literature.	Student who is profiting from the university experience; understanding of the subject; ability to develop solutions to simple problems in the material.	Sufficient familiarity with the subject matter to enable the student to progress without repeating the course.	Little evidence of familiarity with the subject matter; weakness in critical and analytic skills.

Applicable to students admitted before Semester A 2022/23 and in Semester A 2024/25 & thereafter

Assessment Task	Criterion	Excellent	Good	Marginal	Failure (F)
1. Exercises	The accuracy and completeness of the project plans, risk assessments, and cost control strategies produced using the software tools.	(A+, A, A-) Strong evidence of original thinking; good organization, capacity to analyse and synthesize; superior grasp of subject matter; evidence of extensive knowledge base	(B+, B) Evidence of grasp of subject, some evidence of critical capacity and analytic ability; reasonable understanding of issues; evidence of familiarity with literature.	(B-, C+, C) Sufficient familiarity with the subject matter to enable the student to progress without repeating the course.	Little evidence of familiarity with the subject matter; weakness in critical and analytic skills.
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# Applicable to students admitted from Semester A 2022/23 to Summer Term 2024

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.)

### An Overview of Project Management

The scope of project management. Defining project success. Defining the project manager's role; Defining the functional manager's role; Defining the Executive's role. The downside risk of project management. Classification of projects. Deferring views of project management. Concurrent project management concept. TQM in project management.

# Management Issues

Organizing and stuffing for project management. Project management bottlenecks. Effective time management. Managing the conflicts. Performance measurement. R&D project management. Predicting project success. Project management effectiveness.

# Project Planning

Project specifications. Milestone schedules. Work breakdown structure. The planning cycle. Master production scheduling. Total project scheduling. Estimating activity time. Total PERT/CPA planning. Crash times. Alternative PERT/CPA models.

# Computerized Project Management

Computerized project management. Project software evaluation.

#### **Project Graphics**

Bar (Gantt) chart. Other conventional project presentation techniques. Logic diagrams/network.

#### Pricing and Estimation

Pricing process. Pricing out the work. The pricing review procedure. Systems pricing. Estimating pitfalls. Estimating high-risk projects. Life-cycle costing.

#### Cost Control

The operating cycle. Cost account codes. Budgets. Variance and earned value. Cost control problems.

#### Trade-off and Risk Analysis in Project Management

Methodology of trade-off analysis. Industry trade-off preferences. Defining risk. Risk management methodology (risk assessment, risk analysis, risk handling).

#### Concurrent Engineering in Project Management

Understanding concurrent engineering. Project planning. Creeping Scope. Project management guidelines.

# Merging Total Quality Management Techniques with effective Project Planning

Defining quality. The quality movement. The Taguchi approach. ISO 9000. The cost of quality. The seven quality control tools.

### 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.	Erik W. Larson, Clifford F. Gray, Project management: the managerial process latest edition,
	2014, NY: McGraw-Hill Education, New York
2.	Eliyahu M. Goldratt, Critical Chain, latest edition, North River Press, Inc., MA 01230.
3.	Kerzner, H., Project management: a systems approach to planning, scheduling and controlling
	latest edition, John Wiley & Sons, Inc.

#### 2.2 Additional Readings

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

1.	Project Management Institute, <u>http://www.pmi.org/</u>
2.	Hong Kong Chapter: <u>http://www.pmi.org.hk/</u>
3.	MS Project 2007 video tutorials:
	http://www.mhhe.com/business/ods/gray4e/Tutorials/VideoTutorials2007.html
4.	International Journal of Project Management:
	http://www.elsevier.com/wps/find/journaldescription.cws_home/30435/description#
	description