

# MS4109: PROJECT MANAGEMENT

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## Effective Term

Semester B 2024/25

## Part I Course Overview

### Course Title

Project Management

### Subject Code

MS - Department of Decision Analytics and Operations

### Course Number

4109

### Academic Unit

Department of Decision Analytics and Operations (DAOS)

### College/School

College of Business (CB)

### Course Duration

One Semester

### Credit Units

3

### Level

B1, B2, B3, B4 - Bachelor's Degree

### Medium of Instruction

English

### Medium of Assessment

English

### Prerequisites

Nil

### Precursors

CB2201 Operations Management or equivalent

### Equivalent Courses

Nil

### Exclusive Courses

Nil

## Part II Course Details

### Abstract

This course aims to

- Provide students with basic concepts and systematic approaches for effective project management.
- Equip students with quantitative techniques for effective project planning, scheduling, cost control and estimation.
- Train students to plan, undertake a project either independently or as a team, communicate results, and manage effectively in a multi-project environment.
- Enable students to learn the practice of leading companies in the planning and scheduling of projects. This could be either through case studies or invited guest speakers.

### Course Intended Learning Outcomes (CILOs)

CILOs		Weighting (if DEC-A1 DEC-A2 DEC-A3 app.)			
1	Recognize the importance of aligning the strategic direction of an organization with project selection and the measurement of their effectiveness.		x	x	
2	Demonstrate knowledge of the important processes which should be managed throughout the project life cycle (e.g. cost management, risk management, communication management).		x	x	
3	Recognize the important role of project manager as a key success factor, and the requirement of managing both the technical and socio-cultural aspects of the project.		x	x	
4	Apply business knowledge from various disciplines to enable effective project management.				x
5	Employ project planning methods for estimation and resources scheduling.				x
6	Use project management software in managing different stages of a project.				x

#### 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.

### Learning and Teaching Activities (LTAs)

LTAs	Brief Description	CILO No.	Hours/week (if applicable)
1	Lecture	Lecturer explains the project management concepts, practices and techniques.	1, 2, 3, 4, 5, 6
2	Computer laboratory	Software demonstration, computer assignment	5, 6

3	Group presentation	Students work in small groups to design a project and deliver an oral presentation in the class.	2, 4, 5	
4	Essay / report writing	Students work in small groups to design a project and produce a collaboratively written report documenting the project details.	2, 4, 5, 6	

**Assessment Tasks / Activities (ATs)**

ATs	CILO No.	Weighting (%)	Remarks (e.g. Parameter for GenAI use)
1	Computer assignment	5, 6	20
2	Group presentation	2, 4, 5	5
3	Essay / report writing	2, 4, 5, 6	15

**Continuous Assessment (%)**

40

**Examination (%)**

60

**Examination Duration (Hours)**

2

**Assessment Rubrics (AR)****Assessment Task**

Written Examination

**Criterion**

ABILITY to EXPLAIN project management concepts and APPLY them to new environment with ACCURACY.

**Excellent (A+, A, A-)**

High

**Good (B+, B, B-)**

Significant

**Fair (C+, C, C-)**

Moderate

**Marginal (D)**

Basic

**Failure (F)**

Not even reaching marginal levels

**Assessment Task**

Computer Assignment

**Criterion**

ABILITY to manage different stages of a project through employing project PLANNING methods. This is assisted by ACCURATE use of SOFTWARE for estimation and resources scheduling.

**Excellent (A+, A, A-)**

High

**Good (B+, B, B-)**

Significant

**Fair (C+, C, C-)**

Moderate

**Marginal (D)**

Basic

**Failure (F)**

Not even reaching marginal levels

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**Assessment Task**

Group Presentation

**Criterion**

ABILITY to EXPLAIN in DETAIL a project requiring their CREATIVITY, application of project management concepts with ACCURACY.

**Excellent (A+, A, A-)**

High

**Good (B+, B, B-)**

Significant

**Fair (C+, C, C-)**

Moderate

**Marginal (D)**

Basic

**Failure (F)**

Not even reaching marginal levels

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**Assessment Task**

Essay / Report Writing

**Criterion**

ABILITY to ORGANIZE and WRITE a report requiring their CREATIVITY, application of project management knowledge with ACCURACY.

**Excellent (A+, A, A-)**

High

**Good (B+, B, B-)**

Significant

**Fair (C+, C, C-)**

Moderate

**Marginal (D)**

Basic

**Failure (F)**

Not even reaching marginal levels

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## Part III Other Information

### Keyword Syllabus

#### **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 staffing 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.

**Reading List****Compulsory Readings**

	<b>Title</b>
1	Gray, C. F. and Larson, E. W., Project management: the managerial process (6th ed.), 2014, McGraw-Hill.
2	Kerzner, H., Project management: a systems approach to planning, scheduling and controlling (11th ed.), 2013, John Wiley & Sons, Inc.
3	A guide to the project management body of knowledge: PMBOK® guide (5th ed.), 2013, Project Management Institute

**Additional Readings**

	<b>Title</b>
1	Online Resources: Project Management Institute, <a href="http://www.pmi.org/">http://www.pmi.org/</a>
2	Hong Kong Chapter: <a href="http://www.pmi.org.hk/">http://www.pmi.org.hk/</a>
3	International Journal of Project Management (electronic journal in CityU library system)
4	Project Management Network (online magazine): <a href="http://www.pmnetwork-digital.com/">http://www.pmnetwork-digital.com/</a>
5	PMWorld Library: <a href="http://pmworldlibrary.net/">http://pmworldlibrary.net/</a>