# MS3322: QUALITY MANAGEMENT

**Effective Term** Semester B 2024/25

# Part I Course Overview

**Course Title** Quality Management

Subject Code MS - Department of Decision Analytics and Operations Course Number 3322

Academic Unit Department of Decision Analytics and Operations (DAOS)

**College/School** College of Business (CB)

**Course Duration** One Semester

Credit Units

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

**Medium of Instruction** English

Medium of Assessment English

**Prerequisites** Nil

Precursors

Nil

**Equivalent Courses** MS3303 Service Quality Management

**Exclusive Courses** Nil

# Part II Course Details

Abstract This course aims to :

- · provide a comprehensive understanding of quality management for service and manufacturing industry
- · expose students to the key trends and quality issues of the service and manufacturing industry
- provide students with the requisite quality knowledge and the corresponding management skills to pursue a career mainly in the service industry such as in banks, retail chains, restaurants, food and beverage operations, casinos, theme venues, and entertainment centres.

#### **CILOs** Weighting (if DEC-A1 DEC-A2 DEC-A3 app.) 1 Discuss the major roles in managing quality in 10 Χ the service and manufacturing industry. 2 Critically explore management issues, 15 Х technology and key trends and developments in the service and manufacturing industry from a quality perspective. Effectively plan and manage quality by applying 25 3 х multi-disciplinary thinking skills, key concepts and problem-solving tools to create workable solutions to real-world problems in the service and manufacturing industry. 4 Evaluate the quality of systems by applying 25 Χ recent multi-disciplinary analytical tools to increase productivity and enhance quality outputs. Analyze challenges and competitive forces in 25 5 Χ order to make improvements to the quality of outputs.

#### Course Intended Learning Outcomes (CILOs)

#### 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	Lectures	Concepts and relevant knowledge quality management are explained during lectures.	1, 2, 3, 4	

2	Think-pair-share	Students are asked to pair up to discuss and explore possible solutions to case problems which may be in real-life settings. The lecturer provides instant feedback based on students' responses.	1, 2, 3, 4	
3	Watching and critiquing video case studies	Videos are shown to highlight quality scenarios in real-life settings. Follow-up discussions provide students with the opportunity to create and evaluate alternative solutions to problems.	1, 2, 4	
4	Problem solving exercises / activities	Students participate in in-class exercises and activities. They are required to exploit the activities by applying their own real-life examples or their own experiences where relevant.	2, 3	
5	Group discussion & mini case studies	Students work in groups to research and brainstorm the latest issues and trends regarding quality in the service and manufacturing industry. The findings are then prioritised, synthesised and presented to the class.	2, 3, 5	

## Assessment Tasks / Activities (ATs)

	ATs	CILO No.	Weighting (%)	Remarks (e.g. Parameter for GenAI use)
1	Group presentation	1, 2, 3, 4, 5	15	
2	In-class activities and problem solving exercises	2, 3, 4, 5	10	
3	Reflective learning blog	1, 2, 3, 4, 5	5	
4	Research assignments	1, 2, 3, 4, 5	10	
5	Mid-term test	1, 2	10	

# Continuous Assessment (%)

50

Examination (%)

#### **Examination Duration (Hours)**

2

#### Assessment Rubrics (AR)

#### Assessment Task

Group presentation

#### Criterion

Students in a group collaborate to formally present the findings of their case studies in which they highlight their skills in being able to analyze and to solve quality problems.

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

In-class activities and problem solving exercises

#### Criterion

Students discuss and brainstorm the causes of quality problems and possible alternative solutions. They are required to apply the theories and analytical frameworks they learned to these issues.

## 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 Reflective learning blog

#### Criterion

Towards the end of semester students write and reflect upon their learning experiences and challenges.

#### 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

Research assignments

#### Criterion

Students work together to conduct a collaborative survey report. It logs all students' learning processes and activities including their research work into the recent trends of quality.

#### 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

Mid-term test

#### Criterion

The mid-term test is designed to assess students' understanding of the key concepts and subject matter of the course.

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

Final examination

#### Criterion

The final examination is designed to assess students' professional knowledge of managing quality problems and issues mainly in the service and manufacturing industry, as well as the ability to apply the theories and key concepts to solve management problems.

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

# Part III Other Information

#### **Keyword Syllabus**

#### Fundamental Concepts of Quality

Definition of quality. Dimensions of quality (product and service). Cost of quality. Motivation for quality. Management philosophy of quality gurus, e.g. Deming, Juran and Crosby.

#### Approaches and Tools

Basic tools (the "Magnificent Seven"). New seven tools. Quick and simple statistical techniques. Basic SPC tools.

#### Techniques for Improving Quality

Service gaps analysis. QFD Quality function deployment. SERVQUAL and its applications. Taguchi method.

#### **Concepts of Continuous Improvement**

Interpretation ISO9000. The Japanese Quality Revolution. Lean Six-sigma.

#### **Reading List**

**Compulsory Readings** 

#### 7 MS3322: Quality Management

	Title
1	Managing Quality – Integrating the Supply Chain, by S. Thomas Foster Jacobs, Prentice Hall, the latest international edition.

# Additional Readings

	Title
1	Nil