MS6325: OPERATIONS MANAGEMENT

Effective Term
Semester A 2025/26

Part I Course Overview

Course Title
Operations Management

Subject Code
MS - Decision Analytics and Operations
Course Number
6325

Academic Unit
Decision Analytics and Operations (DAOS)

College/School
College of Business (CB)

Course Duration
One Semester

Credit Units
3

Level
P5, P6 - Postgraduate Degree

Medium of Instruction
English

Medium of Assessment
English

Prerequisites
Nil

Precursors
Nil

Equivalent Courses
MS6325A Operations Management

Exclusive Courses
FB5721 Operations Management

Part II Course Details

Abstract
This course equips students with the knowledge and skills necessary to effectively manage and optimize operations within organizations. Starting with an introduction to operations management, students will explore a range of critical

topics, including the Process View of Organizations, Capacity Analysis and Planning, Project Management, Link between Operations and Finance, Service Operations and Queuing, Inventory Management, Risk Pooling Strategies, and Supply Chain Coordination. By examining real-world examples and case studies, students will develop the analytical and decision-making skills necessary to optimize operations, enhance efficiency, and drive organizational success.

Through lectures, discussions, practical exercises, case analysis, and group projects, students will engage in active learning, fostering a deep understanding of operations management principles and their application in various industries. Upon completing this course, students will be equipped with the tools and knowledge to make informed operational decisions, improve processes, and contribute to organizations' overall competitiveness and profitability.

Course Intended Learning Outcomes (CILOs)

	CILOs	Weighting (if app.)	DEC-A1	DEC-A2	DEC-A3
1	Apply operations management principles and techniques to analyze and solve complex operational problems.		x		x
2	Evaluate and optimize operational processes to align supply with demand and improve overall efficiency.			x	
3	Demonstrate critical thinking skills in assessing and making informed operational decisions.			x	
4	Communicate effectively, both orally and in written form, using structured and well-organized texts, to convey operational concepts and findings.			x	x
5	Collaborate and work effectively in teams to analyze and solve operational challenges, leveraging diverse perspectives and skills.				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	Students will attend interactive lectures delivered by course instructor, providing comprehensive coverage of operations management theories, frameworks, and best practices, and facilitating understanding of key concepts.	1, 2, 3, 4	
2	Case Study/Simulation	Students will engage in interactive case studies and simulations, applying operations management principles to analyze and solve complex operational problems, fostering the development of critical thinking skills.	2, 4, 5	
3	Group Project	Students will conduct group projects on operational issues and present findings, enhancing communication skills and the ability to convey operational concepts effectively. Collaborate in project teams to develop and present solutions to operational issues, promoting teamwork, diverse perspectives, and the ability to work effectively in groups.	2, 3	
4	Exercises/Projects	Students will engage in hands-on exercises and projects to optimize operational processes, align supply with demand, and enhance efficiency, developing the ability to apply academic knowledge to real-life problems.	1, 2, 3, 4	

Assessment Tasks / Activities (ATs)

	ATs	CILO No.	Weighting (%)	Remarks ("-" for nil entry)	Allow Use of GenAI?
1	In-class/Take-home Exercises	1, 2, 3	15	-	No
2	Group Assignments (such as case studies, group project, etc.)	1, 2, 4, 5	35	-	Yes
3	Active Participation	1, 2, 3, 4	10	-	No

Continuous Assessment (%)

60

Examination (%)

40

Examination Duration (Hours)

2

Additional Information for ATs

Examination: CILO No. 1,2,3,4,5.

Assessment Rubrics (AR)

Assessment Task

In-class/Take-home Exercises (for students admitted before Semester A 2022/23 and in Semester A 2024/25 & thereafter)

Criterion

The accuracy and effectiveness of the solutions provided, showcasing the application of operations management principles and critical thinking skills. Grades can be differentiated based on the depth of analysis, the clarity of explanations, and the ability to identify and evaluate alternative solutions.

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

Group Assignments (such as case studies, group project, etc.) (for students admitted before Semester A 2022/23 and in Semester A 2024/25 & thereafter)

Criterion

The group's ability to apply operations management principles, communicate effectively, and work collaboratively. Grades can be differentiated by the depth of analysis, the coherence and clarity of the presentation, the integration of diverse perspectives, and the demonstration of innovative and creative problem-solving.

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

Active Participation (for students admitted before Semester A 2022/23 and in Semester A 2024/25 & thereafter)

Criterion

The frequency and quality of contributions, demonstration of critical thinking skills, active engagement in group activities, and effective communication of ideas. Grades can be differentiated based on the level of participation, the depth of analysis in discussions, and the ability to articulate and support viewpoints.

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

Examination (for students admitted before Semester A 2022/23 and in Semester A 2024/25 & thereafter)

Criterion

The accuracy and depth of understanding demonstrated in answering questions related to operations management principles, critical thinking skills, communication of concepts, and problem-solving abilities. Grades can be differentiated based on the level of comprehension, the ability to analyze and integrate knowledge, and the application of concepts to real-life situations.

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/Take-home Exercises (for students admitted from Semester A 2022/23 to Summer Term 2024)

Criterion

The accuracy and effectiveness of the solutions provided, showcasing the application of operations management principles and critical thinking skills. Grades can be differentiated based on the depth of analysis, the clarity of explanations, and the ability to identify and evaluate alternative solutions.

Excellent

(A+, A, A-) High

Good

(B+, B) Significant

Marginal

(B-, C+, C) Basic

Failure

(F) Not even reaching marginal levels

Assessment Task

Group Assignments (such as case studies, group project, etc.) (for students admitted from Semester A 2022/23 to Summer Term 2024)

Criterion

The group's ability to apply operations management principles, communicate effectively, and work collaboratively. Grades can be differentiated by the depth of analysis, the coherence and clarity of the presentation, the integration of diverse perspectives, and the demonstration of innovative and creative problem-solving.

Excellent

(A+, A, A-) High

Good

(B+, B) Significant

Marginal

(B-, C+, C) Basic

Failure
(F) Not even reaching marginal levels

Assessment Task
Active Participation (for students admitted from Semester A 2022/23 to Summer Term 2024)

Criterion
The frequency and quality of contributions, demonstration of critical thinking skills, active engagement in group activities, and effective communication of ideas. Grades can be differentiated based on the level of participation, the depth of analysis in discussions, and the ability to articulate and support viewpoints.

Excellent
(A+, A, A-) High

Good
(B+, B) Significant

Marginal
(B-, C+, C) Basic

Failure
(F) Not even reaching marginal levels

Assessment Task
Examination (for students admitted from Semester A 2022/23 to Summer Term 2024)

Criterion
The accuracy and depth of understanding demonstrated in answering questions related to operations management principles, critical thinking skills, communication of concepts, and problem-solving abilities. Grades can be differentiated based on the level of comprehension, the ability to analyze and integrate knowledge, and the application of concepts to real-life situations.

Excellent
(A+, A, A-) High

Good
(B+, B) Significant

Marginal
(B-, C+, C) Basic

Failure
(F) Not even reaching marginal levels

Part III Other Information

Keyword Syllabus

operations strategy, managing strategic capacities, production processes and facility layout, service design and processes, process design and analysis, queue management, location, logistics and distribution, forecasting, inventory management, MRP, global sourcing and supply chain management

Reading List

Compulsory Readings

	Title
1	Operations and Supply Chain Management(17th Edition), by F. Robert Jacobs, Richard B. Chase
2	Matching Supply with Demand: An Introduction to Operations Management, by Gerard Cachon and Christian Terwiesch, 5th edition, McGraw-Hill, 2024.

Additional Readings

	Title
1	Nil