MS4227: PRICING AND REVENUE MANAGEMENT

Effective Term

Semester B 2024/25

Part I Course Overview

Course Title

Pricing and Revenue Management

Subject Code

MS - Department of Decision Analytics and Operations

Course Number

4227

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

MS3261 Business Modeling with Spreadsheets or CB2011 Solving Business Problems with Spreadsheets or CB2203 Data-driven Business Modeling

Precursors

Nil

Equivalent Courses

Νi

Exclusive Courses

Nil

Part II Course Details

Abstract

This course provides students with a comprehensive understanding of revenue management and its strategic importance in optimizing revenue and profitability for organizations. Through lectures, case studies, discussions, and group exercises, students will learn how to identify and exploit opportunities for revenue optimization across various business contexts, from service industries to airlines. Students will learn to build quantitative models and solve the models using Microsoft Excel. We will also explore real-world examples and best practices across different industries. The course aims to equip students with the necessary tools and insights to excel in revenue management roles or enhance their decision-making capabilities in a business environment.

Course Intended Learning Outcomes (CILOs)

	CILOs	Weighting (if app.)	DEC-A1	DEC-A2	DEC-A3
1	Explain the role and value of revenue management in different organizational contexts.	20	x		
2	Demonstrate proficiency in applying key concepts and techniques used in revenue management.	20		x	
3	Utilize a range of appropriate quantitative models to solve pricing and capacity allocation problems, with the support of Microsoft Excel.	30		x	x
4	Integrate revenue management strategies with other business functions to support a coherent corporate strategy.	15	x		
5	Analyze contemporary issues in revenue management and discuss their implications.	15		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	Lectures	Students will participate in discussions to deepen understanding of quantitative and qualitative challenges in pricing.	1, 2, 3	
		Students will investigate different models that can be used for pricing optimization, and determine their pros and cons relative to other models that can be used.		
2	Case studies	Students will engage in case studies and problem-solving exercises to apply key revenue management techniques and concepts.		
		Students will build quantitative models using data from cases to solve pricing and capacity allocation problems.		
		Students will utilize Microsoft Excel to build and analyze the models.		
3	Project	Students will collaborate in group project to study a pricing issue in a real-world business, by researching a desired company or taking experiences from past internships.	2, 3, 4, 5	

Assessment Tasks / Activities (ATs)

	ATs	CILO No.	Weighting (%)	Remarks (e.g. Parameter for GenAI use)
1	Individual Assignments	1, 3, 4, 5	20	
2	In-class Participation	1, 2, 3, 4, 5	10	
3	Team Assignments	1, 2, 3, 4, 5	40	

Continuous Assessment (%)

70

Examination (%)

30

4

Examination Duration (Hours)

3

Assessment Rubrics (AR)

Assessment Task

Individual Assignments

Criterion

Examples include case preparation memos, homework assignments, etc.

Excellent (A+, A, A-)

Strong evidence of knowing how to apply the key concepts revenue management in different settings.

Good (B+, B, B-)

Evidence of knowing how to apply the key concepts of revenue management in different settings.

Fair (C+, C, C-)

Some evidence of knowing how to apply the key concepts of revenue management in different settings.

Marginal (D)

Sufficient familiarity with the subject matter to enable the student to progress without repeating the assignment.

Failure (F)

Little or no evidence of familiarity with the subject matter.

Assessment Task

In-class Participation

Criterion

Examples include involvement in in-class case discussions, etc.

Excellent (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.

Good (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.

Fair (C+, C, C-)

Student who is profiting from the university experience; understanding of the subject; ability to show some evidence of familiarity with literature.

Marginal (D)

Sufficient familiarity with the subject matter to enable the student to progress without repeating the course.

Failure (F)

Little evidence of familiarity with the subject matter; weakness in critical and analytic skills; limited or irrelevant use of literature.

Team Assignments

Criterion

Examples include team case reports and final project

Excellent (A+, A, A-)

Strong evidence of knowing how to apply the key concepts of revenue management into real life business scenarios.

Good (B+, B, B-)

Evidence of knowing how to apply the key concepts of revenue management into real life business scenarios.

Fair (C+, C, C-)

Some evidence of knowing how to apply the key concepts of revenue management into real life business scenarios.

Marginal (D)

Sufficient familiarity with the subject matter to enable the student to progress without repeating the assignment.

Failure (F)

Little or no evidence of familiarity with the subject matter.

Assessment Task

Final Examination

Criterion

Written examination

Excellent (A+, A, A-)

Strong evidence of knowing how to apply the key concepts revenue management in different settings.

Good (B+, B, B-)

Evidence of knowing how to apply the key concepts of revenue management in different settings.

Fair (C+, C, C-)

Some evidence of knowing how to apply the key concepts of revenue management in different settings.

Marginal (D)

Sufficient familiarity with the subject matter to enable the student to progress without repeating the assignment.

Failure (F)

Little or no evidence of familiarity with the subject matter.

Part III Other Information

Keyword Syllabus

Price optimization; pricing analytics and market segmentation; revenue management with constrained supply; quantitative models of consumer demand; network revenue management; revenue management and contract management; markdown management and dynamic pricing

Reading List

Compulsory Readings

6 MS4227: Pricing and Revenue Management

	Title
1	At least 4 business cases assigned by the course instructor, and additional readings assigned by the English workshop instructor/tutor

Additional Readings

	Title
1	Philips, R., "Pricing and Revenue Optimization," 2ed, Stanford Business Books, 2021.
2	Boyd, A., "The Future of Pricing: How Airline Ticket Pricing has Inspired a Revolution," Palgrave macmillan, 2007.