MS5411: HEALTHCARE MANAGEMENT

Effective Term
Semester A 2025/26

Part I Course Overview

Course Title
Healthcare Management

Subject Code
MS - Decision Analytics and Operations
Course Number
5411

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
NIL

Exclusive Courses
NIL

Part II Course Details

Abstract
This course aims to provide students with a broad view of the healthcare delivery system in Hong Kong, worldwide and the operational management issues for service delivery at hospital and clinics. Students' analytic ability will be developed

to integrate and apply the knowledge, learning and generative AI tools in the course to tackle management and operational problems in healthcare organizations.

Course Intended Learning Outcomes (CILOs)

	CILOs	Weighting (if app.)	DEC-A1	DEC-A2	DEC-A3
1	Demonstrate the capacity for self-directed learning of the healthcare delivery systems local and worldwide.	10	x		
2	Describe the nature of operational practices and challenges currently being encountered in healthcare organizations.	15	x		
3	Define and formulate management and operational problems in healthcare organizations.	25		x	
4	Demonstrate critical thinking skills in evaluating different alternatives to these problems with AI-assisted tools.	25		x	
5	Design suitable operational processes with ethical considerations for healthcare organizations in both local and global frameworks.	25			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	Lectures introduce subject-specific knowledge and generative AI tools to enhance efficiency and decision support.	2, 3, 4, 5	
2	Assignments and case studies	Students are required to apply knowledge and computer tools in solving problems and analyse one or more cases.	1, 2, 3, 4, 5	

3	Group project	Students are required to work in group to explore a new idea, conduct a corresponding pilot study using computer and/or generative AI tools with judgment and ethical considerations.	1, 2, 3, 4, 5	
4	Presentation	Students are required to present their case study and/or project results effectively in written and/or oral format.	1, 2, 3, 4, 5	

Assessment Tasks / Activities (ATs)

	ATs	CILO No.	Weighting (%)	Remarks ("-" for nil entry)	Allow Use of GenAI?
1	Assignments and case studies	1, 2, 3, 4, 5	25	-	Yes
2	Group project	1, 2, 3, 4, 5	20	-	Yes
3	Presentation	1, 2, 3, 4, 5	10	-	Yes

Continuous Assessment (%)

55

Examination (%)

45

Examination Duration (Hours)

2

Minimum Continuous Assessment Passing Requirement (%)

35

Minimum Examination Passing Requirement (%)

20

Assessment Rubrics (AR)

Assessment Task

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

Criterion

These activities allow students to apply subject-specific knowledge gained from lectures in problem-solving, analyze literature and case studies.

Excellent

(A+, A, A-) Strong evidence of understanding the key concepts and definitions of the learned subject; capacity to analyse and synthesize; superior grasp of subject matter; evidence of extensive knowledge base.

Good

(B+, B, B-) Good 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; having sufficient familiarity and understanding of the subject to enable the student to progress further.

Marginal

(D) Limited evidence of familiarity and understanding of the subject matter. Student could benefit from repeating the course to enhance better understanding of the subject knowledge.

Failure

(F) Little evidence of familiarity with the subject matter; limited or irrelevant use of literature.

Assessment Task

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

Criterion

To encourage improvement of service delivery or developing a prototype of a new product/service in teamwork.

Excellent

(A+, A, A-) Strong evidence of understanding the key concepts and definitions of the learned subject; capacity to analyse and synthesize; superior grasp of subject matter; evidence of extensive knowledge base.

Good

(B+, B, B-) Good evidence of grasp of subject, some evidence of critical capacity and analytic ability; reasonable understanding of issues; evidence of familiarity with literature.

Fair

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Failure

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Assessment Task

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

Criterion

To assess students' effectiveness in oral/written communication skills.

Excellent

(A+, A, A-) Strong evidence of understanding the key concepts and definitions of the learned subject; capacity to analyse and synthesize; superior grasp of subject matter; evidence of extensive knowledge base.

Good

(B+, B, B-) Good evidence of grasp of subject, some evidence of critical capacity and analytic ability; reasonable understanding of issues; evidence of familiarity with literature.

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Assessment Task

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

Criterion

To assess students' understanding of core concepts and ideas; use of appropriate methods in analysing and problem-solving.

Excellent

(A+, A, A-) Strong evidence of understanding the key concepts and definitions of the learned subject; capacity to analyse and synthesize; superior grasp of subject matter; evidence of extensive knowledge base.

Good

(B+, B, B-) Good evidence of grasp of subject, some evidence of critical capacity and analytic ability; reasonable understanding of issues; evidence of familiarity with literature.

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Assessment Task

Assignments and case studies (for students admitted from Semester A 2022/23 to Summer Term 2024)

Criterion

These activities allow students to apply subject-specific knowledge gained from lectures in problem-solving, analyze literature and case studies.

Excellent

(A+, A, A-) Strong evidence of understanding the key concepts and definitions of the learned subject; capacity to analyse and synthesize; superior grasp of subject matter; evidence of extensive knowledge base.

Good

(B+, B) Good evidence of grasp of subject, some evidence of critical capacity and analytic ability; reasonable understanding of issues; evidence of familiarity with literature.

Marginal

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Assessment Task

Group project (for students admitted from Semester A 2022/23 to Summer Term 2024)

Criterion

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Part III Other Information

Keyword Syllabus

- Healthcare organizations and structures

  Generative AI tools: Summarize healthcare policy documents, as symptom checker for understanding patient pathways and healthcare service needs, as health assessment tool for exploring patient data patterns and healthcare demand, as medical assistant for streamlining clinical workflows and understanding organizational efficiency
- Integrated healthcare management

  AI-assisted tools: Perform Strengths-Weaknesses-Opportunities-Threats (SWOT) analysis and strategic planning
- Healthcare management for elderly

  Generative AI tools: From general purpose providing information and support to applications with AI-powered features
- Process improvements and lean enterprise

  AI-assisted tools for improving processes like documentation, patient engagement and workflow automation
- Healthcare information technology, data and analytics
- Quality improvement and risk management

  Large Language Models (LLMs) for analysis, drafting report of quality issues and brainstorming improvement initiatives; risk identification, assessment and drafting risk mitigation plans
- Managing primary and acute care

  Selected case studies in managing primary case (e.g., integrated care models, chronic disease management, access and equity in primary care) and acute care (e.g., critical care and intensive care management, patient safety and risk management in acute settings)
- Ethics, law and conflict of interest

  AI ethics case study analysis

Reading List

Compulsory Readings

	Title
1	Karuppan, C. M., Waldrum, M. R., Dunlap, N. E. (2021). Operations management in healthcare: strategy and practice, 2nd ed. Springer Publishing Company, Incorporated.
2	Ozcan, Y. A. (2017). Analytics and decision support in health care operations management, 3rd ed., John Wiley & Sons, Incorporated.

3	Ehsani, S., Plugmann, P., Thieringer, F. M. (2022), The future circle of healthcare: AI, 3D printing, longevity, ethics, and uncertainty mitigation. Springer Cham.

Additional Readings

	Title
1	World Health Organization https://www.who.int/
2	World Economic Forum https://agenda.weforum.org/stories/health-and-healthcare-systems/
3	Fong, B. Y. F., Law, V. T. S., Lee, A. (2025). The handbook of primary healthcare: the case of Hong Kong. Springer Nature Singapore, Singapore.
4	Purushotham, S., Prabu, S. (2024). Machine learning and generative AI in smart healthcare. IGI Global Scientific Publishing, Hershey, PA.
5	Martin, B. C. (2019). Strategic planning in healthcare: an introduction for health professionals. Springer Publishing Company, LLC, New York, N.Y.
6	Buchbinder, S. B., Shanks, N., Buchbinder, D. (2022). Cases in health care management. Jones & Barlett Learning, LLC, Burlington, Massachusetts.
7	McAlearney, A. S., Kovner, A. R. (2018). Health services management: a case study approach, 11th ed., Health Administration Press, Chicago, Illinois, US.
8	Ross, T. K. (2014). Health care quality management: tools and applications, John Wiley & Sons, US.
9	Kros, J. F., Rosenthal, D. A. (2016). Statistics for health care management administration: working with Excel, 3rd edition, Wiley, US.
10	Quirk, T. J., Cummings, S. M. (2020). Excel 2019 for health services management statistics, 2nd ed. Cham, Switzerland: Springer.