HKU BUSINESS SCHOOL
港大經管學院

Inspire·Empower·Lead

1. General Information	
Course Subject	IIMT
Course Number	3601
Course Title	Database Management
Academic Years	2023-2024
Grading Method	Letter

2. Instructors

Professor Mao,Shengjun
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Subclasses: 2A

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4. Course Description

Course Description	This course studies the principles of design, development and administration of database managementsystems for business applications. Emphasis will be placed on the user, developer, and administrator pointsof view.
Mutually exclusive	COMP3278: Introduction to database management systems

5. Course Objectives

1. Provide students with the opportunity to learn the basic concepts of database development and management.

2. Provide students with hands-on experience in designing, developing, and maintaining database systems.

3. Help students understand the role of database in various types of information systems and its importance in real world applications.

6. Faculty Learning Goals

Goal 1: Acquisition and internalization of knowledge of the programme discipline

Goal 2: Application and integration of knowledge

Goal 3: Inculcating professionalism

Goal 4: Developing global outlook

6. Faculty Learning Goals
Goal 5: Mastering communication skills
Goal 6: Cultivating leadership

7. Course Learning Outcomes						
Course Teaching and Learning Activities	Aligned Faculty Learning Goals					
	1	2	3	4	5	6
CLO1. Define and explain the characteristics, advantages and disadvantages of databases.	✔			✔		
CLO2. Describe the importance of data modeling concepts and use these effectively.	✔			✔	✔	
CLO3. Describe the tools that comprise a modern database management system like Access and MySQL.	✔					
CLO4. Plan and design a database.	✔	✔	✔		✔	
CLO5. Write queries using the Structured Query Language (SQL).	✔	✔				

8. Course Teaching and Learning Activities		
Course Teaching and Learning Activities #	Expected Study Hours	Study Load (% of study)
T&L1. Lectures Lectures: basic concepts and knowledge will be presented in-class through PowerPoint slides. In-class exercises: basic concepts and techniques are illustrated using examples. Students work along with the lecturer to solve the problems. These exercises help students follow the lectures closely and actively. Demonstration: live demonstrations of database systems will be given in class to show students how they work.	36	30
T&L2. Tutorial and online discussions Tutorial lab sessions: students practice concepts learned in class in the computer lab and work on examples with the tutor. Online discussions: students express and share their ideas and questions online. These discussions encourage students to think about the class materials after class.	12	10
T&L3. Assignments Assignments: students accomplish tasks using technologies covered in class. Through the assignments they can acquire hands-on experience using these technologies.	36	30
T&L4. Written examination The exam will test students' knowledge of the topics covered in class and their application of the knowledge.	36	30
	Total: 120	Total: 100

9. Assessment Methods

Assessment Methods	Description	Weight %	Aligned Course Learning Outcomes
A1. Assignments	Two individual assignments will be given. Students will have approximately two weeks to complete each assignment. Make sure to work on the assignments individually and do not share with others. Please be prompt in submitting assignments. If a submission is late for 24 hours or less, 20% will be deducted. If a submission is late for more than 24 hours, no credit will be given.	30%	1,2,3,4,5
A2. Class Participation	Class participation will be assessed based on both participation and online discussion.	20%	1,2,3,4,5
A3. Final Exam	There will be one written exam. The written exam will be closed book, closed notes. Students must receive permission to take an exam at a different time at least one week prior to the scheduled date and have a documented emergency. Failure to do so will result in a zero for the exam. Other exams/projects during the same week do not constitute a valid excuse.	50%	1,2,3,4,5

10. Course Grade Descriptors

A+,A,A-	demonstrate a clear understanding of and high ability to apply the theory, concepts and issues relating to the topic
B+,B,B-	demonstrate a good understanding and some application of the theory, concepts and issues relating to the topic
C+,C,C-	demonstrate a good understanding of the theory, concepts and issues relating to the topic but limited application relating to the topic
D+,D	demonstrate mainly description showing basic understanding of the topic but no application
F	demonstrate limited understanding of the topic and draw conclusions unrelated to the topic

11. Course Content and Tentative Teaching Schedule

Topic/ Session	Date	Time	Content	Readings	Assignments	Other information
1			Course Introduction The Database Environment (Ch. 1)			
2			The Database Development Process (Ch. 2)			
3			The Enhanced ER Model (Ch. 3-4)			
4			The Enhanced ER Model (Ch.			

11. Course Content and Tentative Teaching Schedule						
			3-4)			
5			----Lunar New Year Holiday ---			
6			Logical Database Design and Normalization (Ch. 5)			
7			Logical Database Design and Normalization (Ch. 5)		Assignment 1	
8			-- Reading Week --			
9			Physical Database Design (Ch. 6)			
10			Introduction to SQL (Ch. 7)			
11			Introduction to SQL (Ch. 7)			
12			Advanced SQL (Ch. 8)		Assignment 2	
13			NoSQL Database and MongoDB (Ch. 10)			
14			Written Exam			

12. Required/Recommended Readings & Online Materials	
Reading	*The Analytics Edge*. Dimitris Bertsimas, Allison K. O'Hair, and William R. Pulleyblank. Dynamic Ideas LLC., 2016.

13. Means / Processes for Student feedback on Course	
✔	Conducting mid-term survey in additional to SETL around the end of the semester
	Online response via Moodle site
	Others

14. Course Policy

1. Academic dishonesty includes cheating, plagiarism, unauthorized collaboration, falsifying academic records, and any act designed to avoid participating honestly in the learning process. Academic dishonesty also includes, but is not limited to, providing false or misleading information to receive a postponement or an extension on an exam or other assignment.
2. An orderly learning environment is extremely important for this course. Disruptive behaviors are inconsiderate to other students as well as to the instructor, and are absolutely unacceptable. Talking during lectures, arriving to class late, and any other disruptions of mobile devices are not allowed; students who are responsible for any of these actions will be subject to academic penalty and will be asked to leave the classroom.

15. Additional Course Information

1. Lecture notes and self-learning materials will be uploaded on Moodle.
2. No late assignment submission will be accepted.
3. The instructor reserves all the rights to make necessary changes to the syllabus. If so, the changes will be announced as soon as possible.