

Chapter 0

Course Information

COMP3278C

Introduction to Database Management Systems

Dr. CHEN, Yi

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School of Computing & Data Science, The University of Hong Kong

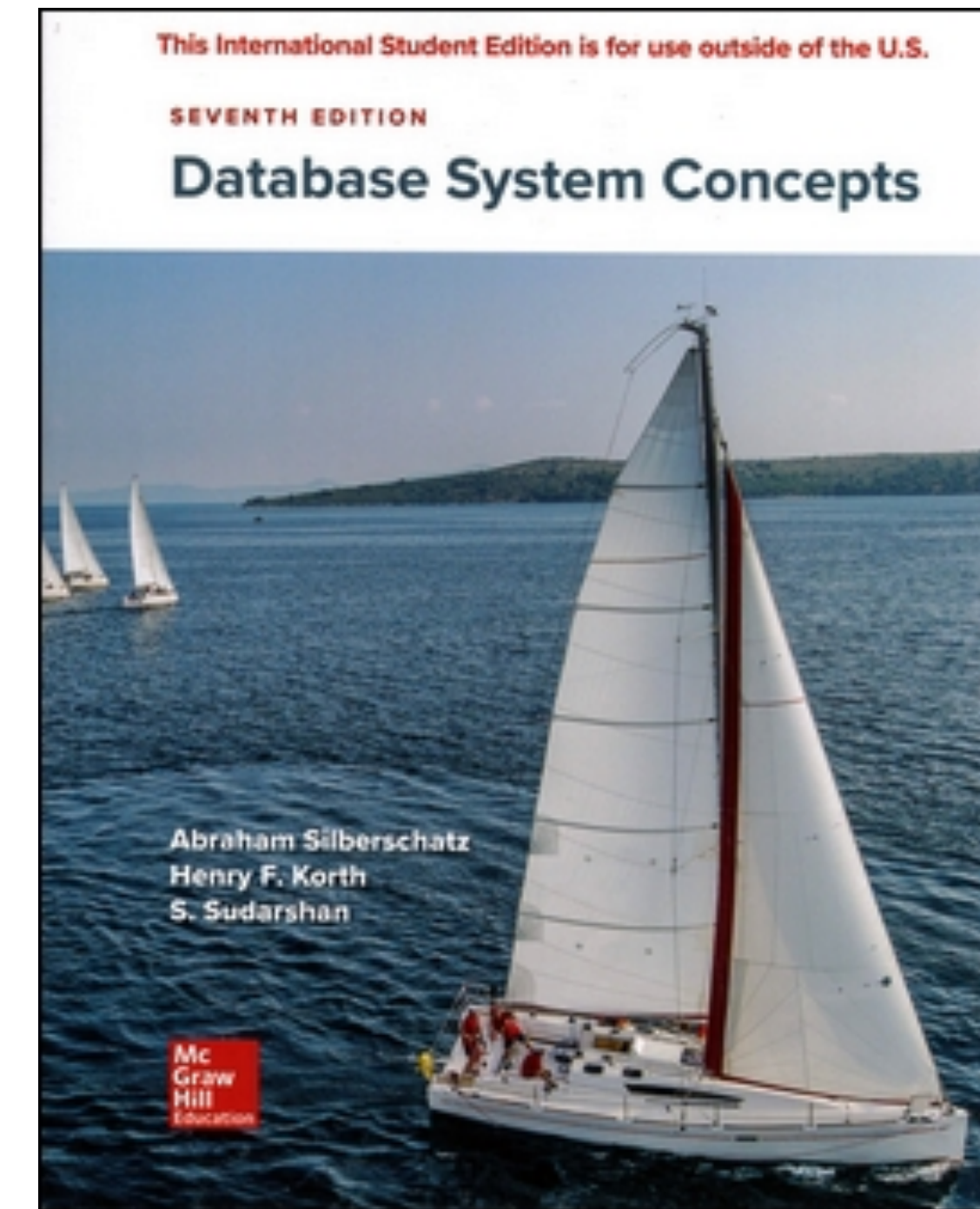
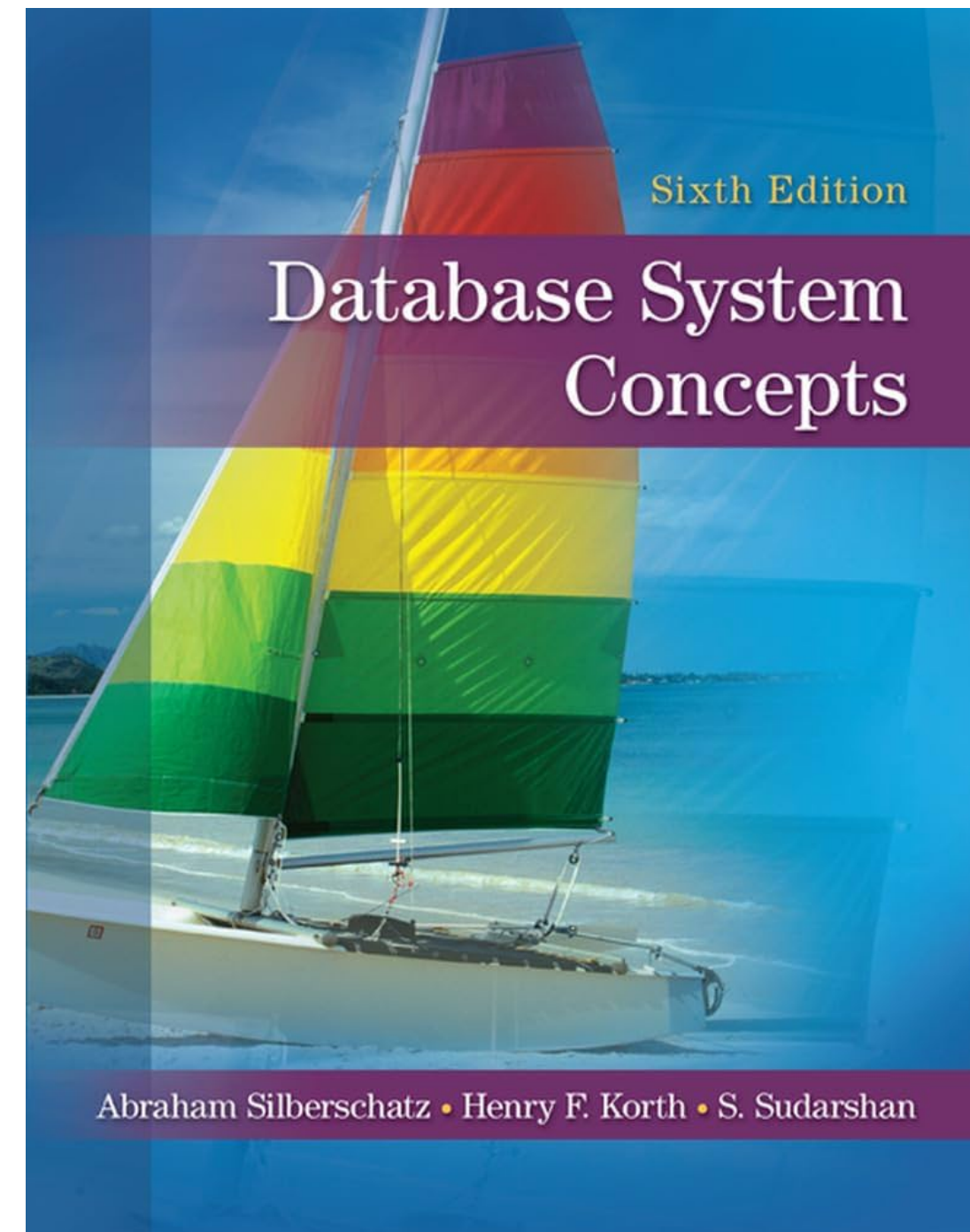
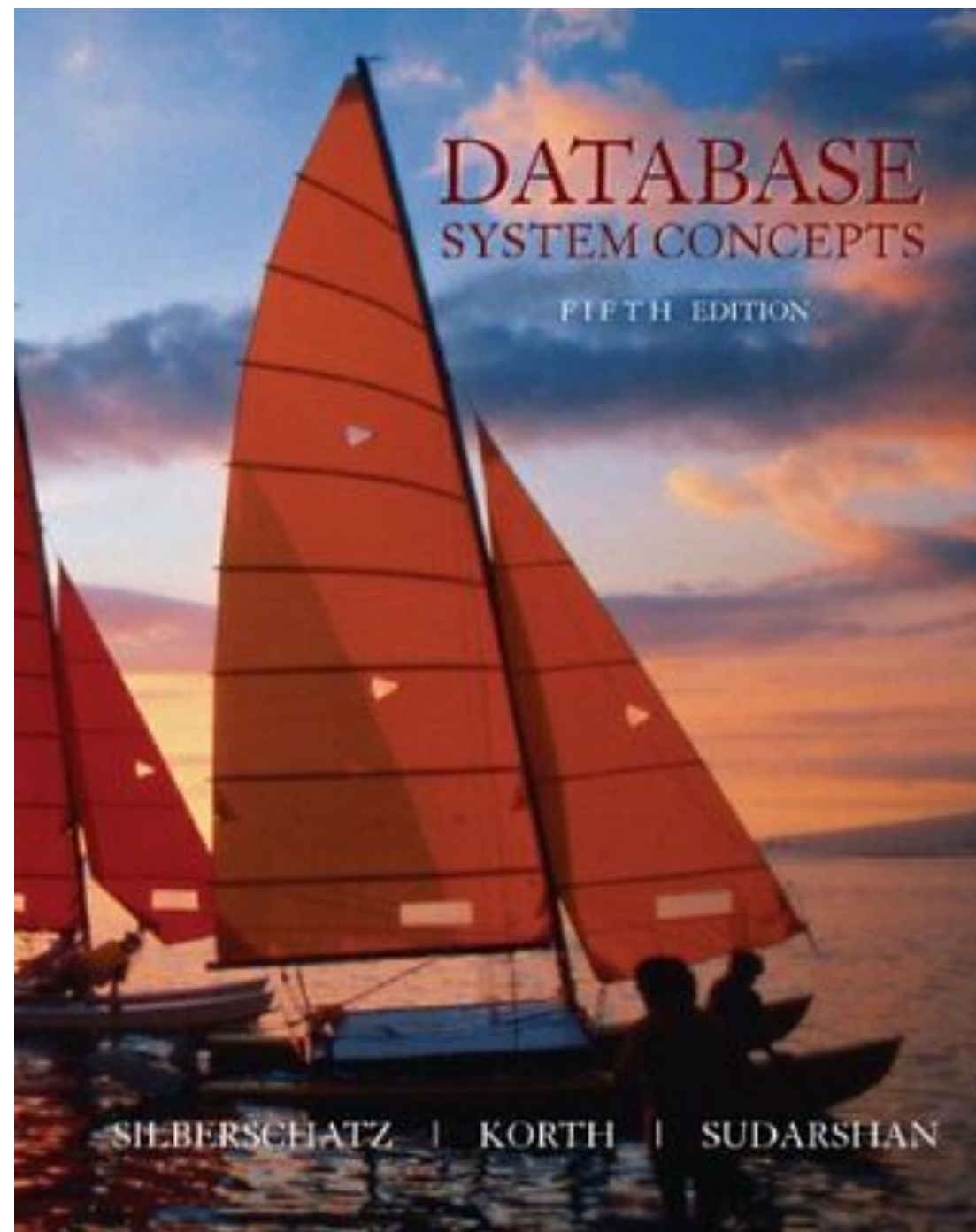
Acknowledgement: Dr. Chui Chun Kit, Dr. Reynold Cheng, Dr. Ping Luo

Today's Agenda

- Introduction to Course Information
- Introduction to Database Management Systems

Reference books

- Abraham Silberschatz, Henry F. Korth, S. Sudarshan. “**Database System Concepts**”, 5th/6th/7th Edition, McGraw Hill



The slides include as many materials as possible.

Learning Outcomes

- Outcome 1: Information Modeling
 - Able to understand the modeling of real-life information in database systems.
 - e.g., student data -> tables/database
 - We study **entity-relationship (E-R) model** to design a database considering the user requirements.
- Outcome 2: Query Languages
 - Able to use the languages designed for data access.
 - We study **SQL** and **relational algebra** for accessing data in a convenient and systematic ways.

Learning Outcomes

- Outcome 3: **System Design**
 - Able to design an efficient and reliable database system.
 - We study various topics, e.g., **normalization, storage, indexing**
- Outcome 4: **Application Development**
 - Able to implement a practical application on a real database.
 - Able to finish an assignment that includes the use of a real open source database system (MySQL).

Assessments

- 3 Written Assignments (35%)
- Quiz (15%)
 - Tentative date: March 21
- Final Examination (50%)

Policy

- Late assignments
 - 15% mark deduction per day, and we do not accept submissions after 2 days.
- Collaboration in study groups discussing course materials is encouraged. Learning from AI is encouraged, too. However, **YOU SHOULD WRITE YOUR OWN ASSIGNMENTS.**
- Plagiarism detection software will be used in every assignment.
 - Similarity + AI Generation
 - 0 marks for assignment/project
 - Serious cases will be reported to university, possibly resulting in disqualification.

About us

- **TA AN, Chenxin**
 - Office: Chow Yei Ching Building, CB 430
 - Email: cxan23@connect.hku.hk (For making consultation appointments)
- **TA CHEN, Niehao**
 - Office: TBA
 - Email: 3010267@connect.hku.hk (For making consultation appointments)
- **TA XIE, Zerong**
 - Office: TBA
 - Email: zerong@connect.hku.hk (For making consultation appointments)

About us

- **Dr. Yi CHEN (Instructor)**
 - Email: chenyi1@hku.hk
 - Office: Chow Yei Ching Building, CB 306
 - Research: Cybersecurity

Schedule

Date	Venue	Description	Date	Venue	Description
Jan 21	CPD-3.28	Course Information & Introduction	Jan 24	CPD-3.28	Introduction & ER Modeling
Jan 28	CPD-3.28	Cancel	Jan 31		Lunar New Year
Feb 4		Lunar New Year	Feb 7	CPD-3.28	ER modeling
Feb 11	CPD-3.28	ER modeling	Feb 14	CPD-3.28	ER modeling & Design
Feb 18	CPD-3.28	Design	Feb 21	CPD-3.28	SQL I
Feb 25	CPD-3.28	Building database application I	Feb 28	CPD-3.28	SQL II (written assignment)
Mar 4	CPD-3.28	Building database application II	Mar 7	CPD-3.28	Relational Algebra
Mar 11		Reading Week	Mar 14		Reading Week
Mar 18	CPD-3.28	Relational Algebra Practices on Relational Algebra	Mar 21	CPD-3.28	Quiz
Mar 25	CPD-3.28	Database Design I	Mar 28	CPD-3.28	Database Design I
Apr 1	CPD-3.28	Database Design II	Apr 4		Public Holiday
Apr 8	CPD-3.28	Database Design II & Database Storage (written assignment)	Apr 11	CPD-3.28	Database Storage
Apr 15	CPD-3.28	Database Storage	Apr 18		Public Holiday
Apr 22	CPD-3.28	Database Indexing	Apr 25	CPD-3.28	Database Indexing (written assignment)
Apr 29	CPD-3.28	Database Security	May 2	CPD-3.28	Recap

The teaching plan maybe rescheduled according to the actual progress of the course.

Contact hours

	Monday	Tuesday	Wednesday	Thursday	Friday
9:30 - 10:00					
10:00 - 10:30	Consultation hour AN, Chenxin CB 430				
10:30 - 11:00					
11:00 - 11:30					
11:30 - 12:00					
12:00 - 12:30		Lecture/Tutorial CPD-3.28			Lecture/Tutorial CPD-3.28
12:30 - 13:00					
13:00 - 13:30					
13:30 - 14:00					
14:00 - 14:30			Consultation hour XIE, Zerong TBA	Consultation hour CHEN, Niehao TBA	
14:30 - 15:00					
15:00 - 15:30					
15:30 - 16:00					
16:00 - 16:30	Consultation hour CHEN, Yi CB 306				
16:30 - 17:00					

Please send us email in advance before your visit, so that we can schedule a personal consultation time slot for you. Zoom is acceptable!

Reminder

- This course does not require prior knowledge in database.
- Knowledge in algorithms, data structures, discrete mathematics, and programming skills are assumed.
- **Dedication and time are needed!**
- All materials for lectures, tutorials, and assignments will be posted on Moodle.
- **AI is encouraged to use for course learning.**

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END

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