

# **Introduction**

## **CS3402 Database Systems**

# Course Lecturer

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# Course Syllabus

- Course Intended Learning Outcomes (CILOs)

No.	CILOs
1	Design a database schema database schema using the entity-relationship and relational data models.
2	Improve an existing database schema through the normalization process.
3	Use SQL as a Data Definition Language (DDL) and a Data Manipulation Language (DML) effectively.
4	Demonstrate good understanding of database management techniques and concepts.

- Details: <https://www.cityu.edu.hk/catalogue/ug/201920/course/CS3402.pdf>

# Assessment

- **Continuous assessment: 40%**
  - 3 Assignments: 15%
  - Midterm: 25%
- **Final examination: 60%**
  - For a student to pass the course, at least 30% of the maximum mark for the examination must be obtained.

# Tentative Schedule

Week No.	Date	Topic
1	Jan 11	Introduction & ER Model
2	Jan 18	Relational Model
3	Jan 25	Relational Algebras
4	Feb 01	SQL
5	Feb 08	SQL
6	Feb 22	SQL
7	Mar 01	Mid-term
8	Mar 08	Constraints
9	Mar 15	Normal Forms
10	Mar 22	File Organization
11	Mar 29	Indexing
12	Apr 12	Transaction Management
13	Apr 19	Concurrency Control

# Course Materials

- Elmasri R. and Navathe S. B. (2016) Fundamentals of Database Systems. Addison Wesley, 7<sup>th</sup> edition
- Lecture slides
- Tutorial slides (solutions will be uploaded to CityU Canvas after we finish all the sections of a tutorial)
- Notations may be different in different books. Please stick to the notations used in our lecture and tutorial slides.