# Welcome to Database Systems – CO2013

Assoc. Prof. Dr.techn. DANG TRAN KHANH (Đặng Trần Khánh)

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## Lecturers

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  - URL: <a href="http://www.cse.hcmut.edu.vn/~khanh">http://www.cse.hcmut.edu.vn/~khanh</a>
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Tutors: Dr. Nhan, Mr. Nam, Mr. Thai

## **Module Contents**

Credits: 4(3.2.8)

W1,2: Administrative Issues + Database System

Concepts & Architecture

W2,3,4: Entity-Relationship Model

W5,6: Relational Model & Mapping

W7,8: Structured Query Language (SQL)

W9: Database Design Theory & Methodology

W10: Data Storage, Indexing, Query Processing &

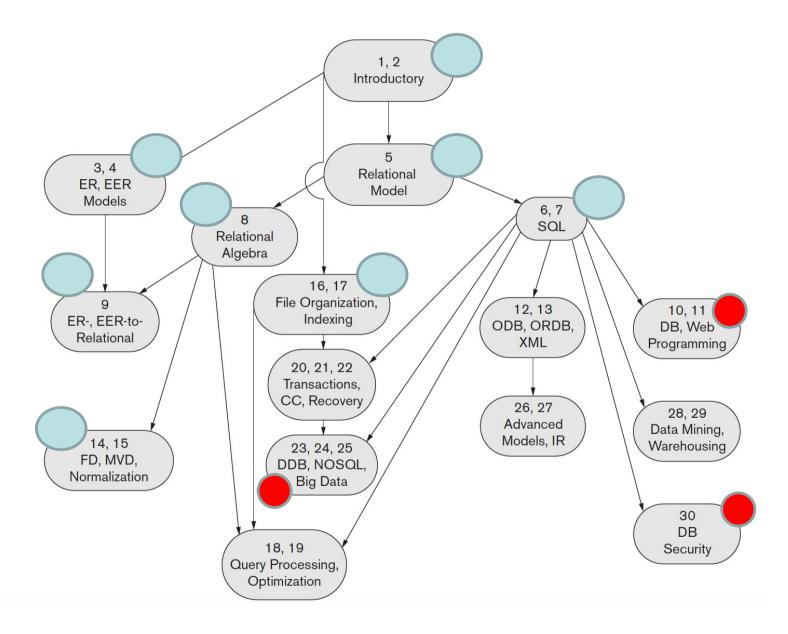
Physical Design

W11: Introduction to Database Security

W12: Big Data Concepts & Applications

Revision & Related Research Directions

## **Module Contents**



## **Assessments**

All open-book-exams\*

Assign 1: 10%

Assign 2: 20%

Presentations: 20% (2 x 10%)

Final exam: 50%

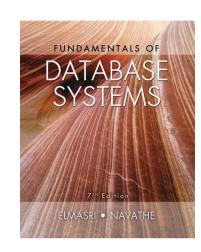
• 90': test (multiple choices) & small exercises

Contents: to be revised in the last week of teaching

Bonus: unlimited %!

## **Core Textbook**

[1] R. Elmasri & S.B. Navathe (2016): Fundamentals of Database Systems, 7th Edition, Addison-Wesley

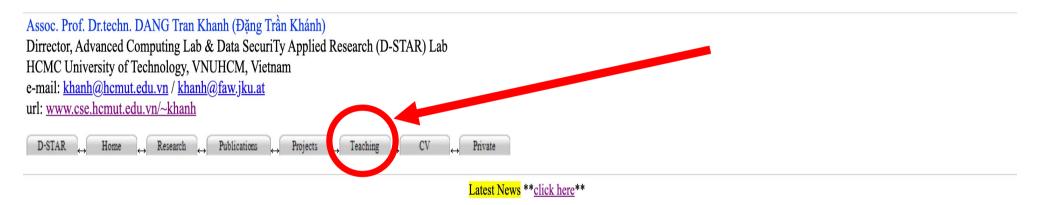


#### Other references:

- [2] A. Silberschatz, H. F. Korth, S. Sudarshan (2019): *Database System Concepts*, **7**<sup>th</sup> Ed., McGraw-Hill
- [3] Internet

# **Teaching Schedule**

- See my HP for the details
  - http://www.cse.hcmut.edu.vn/~khanh/



I got my first degree, Engineer in Information Technology, from HCMC University of Technology (<u>HCMUT</u>) in December 1997 and had been working for the <u>Faculty of Information Technology</u> until March 2000. Then I was awarded a PhD scholarship from the Austrian Exchange Service (<u>ÖAD</u>) and had been studying at the Institute for Applied Knowledge Processing (<u>FAW</u>), <u>University of Linz</u>, until May 2003 under the supervision of <u>Prof. Dr. Roland Wagner</u> and <u>A.Prof. Dr. Josef Küng</u>. My PhD research topic related to "<u>semantic-based similarity searches in database systems</u>". I received the PhD degree in Computer Science in May 2003.

Since August 2003, I moved to London to work for the School of Computing Science, Middlesex University as a senior lecturer and Global campus link tutor between HCMUT and Middlesex University. I was affiliated with Business Information Systems (BIS) group at Hendon campus.

In October 2005 I returned home, and has been working at the <u>Faculty of Computer Science & Engineering</u> in <u>HCMUT</u>. Early in 2006, I did set up <u>D</u>-STAR Lab - Data SecuriTy Applied Research Lab - at the faculty. I was promoted to Associate Professor of Computer Science in 2010.

My research interests span database/information systems security & privacy, data management, and smart device security & applications. See my publication list here.

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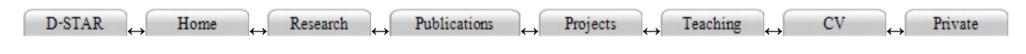
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Classes (since 10/2005)

- My postgrad students
- Semester 1, 2021/2022
  - 1. CO2013 Database Systems (High Quality Program-HCMUT) (English)
  - 2. Fundamental Concepts of Data Security (Data Science Program, IU) invited lecturer (English)
- Semester 2, 2020/2021
  - 1. CO5226 Database Security (Master IMP) (English)
  - 2. CO5240 Data Engineering (Master-CS)

## **Other Notes**

- Mobile: off or vibration mode
- Question: any time
- Presentation:
  - English, by group
  - Mandatory in this class (2 times each & 1 seminar)
  - Bonus marks to be added for good solutions to exercises, additional presentations, etc.
  - Topics: students can propose more topics related to DBs/ISs (not only confined to the lecture contents) for bonus marks!

## Q&A

