

# CS 448/648

## Introduction to Database Management

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## Objectives

- To study databases from four viewpoints, in particular, those of the database user, the database designer, the database manager, and the database system implementer.
- Sub-objectives
  - ① To understand the principles of relational database management systems and their languages – in particular **SQL**.
  - ② To learn the methodology for building applications on top of database management systems – the so called **data modeling** process.
  - ③ To investigate the internal operations of relational database management systems.

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## Course Documents

- Required textbook:
  - R. Ramakrishnan and J. Gehrke, Database Management Systems, 2<sup>nd</sup> edition, McGraw Hill, 2000.
- Other reference texts:
  - J. D. Ullman and J. Widom. *A First Course in Database Systems*. Prentice-Hall, 1997.
  - H. Garcia-Molina, J. D. Ullman and J. Widom. *Database System Implementation*. Prentice-Hall, 1999.
  - A. Silberschatz et al., Database System Concepts, 3<sup>rd</sup> edition, McGraw Hill, 1996.
- Course home page (for many things):
  - ➔ <http://db.uwaterloo.ca/~tozsu/courses/cs448>
- Course newsgroup
  - ➔ uw.cs.cs448

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## Administrivia

- Office Hours
  - Prof. Özsu: T 1:30 – 3:00; R 9:00 – 9:45
  - Prof. Tompa: M 9:00-11:00; W 1:00-2:00
  - Also by appointment
- Grading

● <u>CS 448</u>		<u>CS 648</u>
➔ Assignments	25%	20%
➔ Midterm	35%	25%
➔ Final	40%	40%
➔ Project		15%
- Announcements
  - ➔ In class; material will also be available electronically
- Collaboration
  - ➔ Collaborate on assignments, but do not merely copy.

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# Lab Component

- We will use DB2
  - Learning it is your own responsibility
  - Check out these sources
    - [http://www.student.math.uwaterloo.ca/~cs448/db2\\_doc.html](http://www.student.math.uwaterloo.ca/~cs448/db2_doc.html)
    - [http://www.student.math.uwaterloo.ca/~cs448/db2\\_doc.html/db2s0/frame3.htm#index](http://www.student.math.uwaterloo.ca/~cs448/db2_doc.html/db2s0/frame3.htm#index)
- There are two TAs
  - Paul Lo, [ccplo@math](mailto:ccplo@math)
    - Office: DC3335C, x. 5896
    - Office hours:
  - Lubomir Stanchev, [lp2stanc@math](mailto:lp2stanc@math)
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