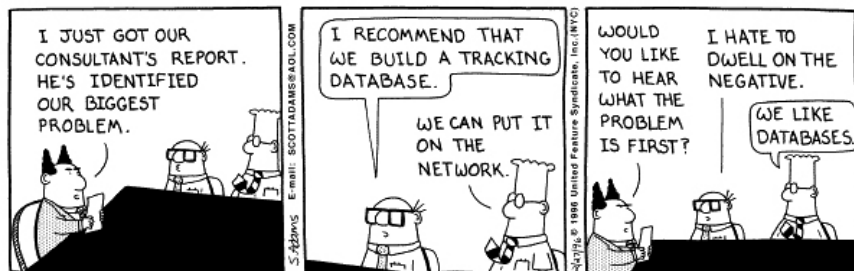# Computer Applications in Business: Databases

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Databases CS338

Computer Applications in Business: Databases

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This course is designed primarily to meet the needs of students who are interested in the business or public sector of the economy.

The course presents methods used for the storage, selection, and presentation of data.

Topics

1 Why do we use databases?

$\Rightarrow$ Functionality provided by a Database Management System

2 How do we use a Database Management System?

$\Rightarrow$ Relational model

$\Rightarrow$ Foundational query languages and SQL

$\Rightarrow$ Transactions, concurrency, and recovery

3 How do we design a database?

$\Rightarrow$ Entity-Relationship (ER) modeling

$\Rightarrow$ Accommodating and enforcing constraints

Organization

- Lectures:
    - $\Rightarrow$ Tue-Thu at 2:30pm in QNC2502

- Office hours:
    - $\Rightarrow$ Thu at 10:30pm in DC 3344

- Class web site:
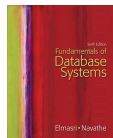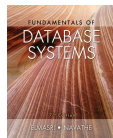   - $\Rightarrow$ `cs.uwaterloo.ca/~david/cs338/`

        syllabus, schedule of classes, policies, etc.

- Textbook (optional):

    R. Elmasri and S. Navathe:
    Fundamentals of Database Systems
    Addison Wesley

Assignments

- Four assignments throughout term

    $\Rightarrow$ Sample solutions released on *due date*

- Goal is to give you practice with material

    in order to provide self-assessment and guidance

- Assignment performance not part of evaluation

    $\Rightarrow$ You need not polish a submission.

    $\Rightarrow$ You can work alone or with others.

    $\Rightarrow$ You can seek help from TAs.

- You will have more trouble learning the material (and passing the course) if you do not attempt the assignments

Getting help

1. Piazza (https://piazza.com/uwaterloo.ca
/fall2015/cs338/home)

   ⇒ Messaging forum

   ⇒ Ask public questions here

   ⇒ Assignments and model solutions posted

   ⇒ Announcements posted (as well as on website)

   ⇒ TAs will monitor this.

2. Also instructor and TA office hours

   ⇒ Instructor: Thursdays 11:30-12:00 am, DC 3344

   ⇒ TA hours: See the web site

Evaluation/Assessment

1. First midterm exam: 25%

2. Second midterm exam: 25%

3. Final exam: 50%

Summary

- Look at Web site:
  - ⇒ course schedule and all slides.
  - ⇒ all relevant information and announcements

- Material build on itself (like most other courses in Math)
  - ⇒ Initial lectures: terminology and background knowledge
  - ⇒ May be an *overwhelming amount of details*

- Don't fall behind!

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