Introduction to Databases
Spring 2018

School of Computer Science
University of Waterloo

Databases CS348
This course is designed primarily to meet the needs of students who are interested in using database technology in system development. The course presents methods used for the storage, retrieval, and organization of data.
Topics

1. Why do we use databases?
   ⇒ Functionality provided by a Database Management System

2. How do we use a Database Management System?
   ⇒ Relational model
   ⇒ Foundational query languages and SQL
   ⇒ Transactions, concurrency, and recovery

3. How do we design a database?
   ⇒ Entity-Relationship (ER) modeling
   ⇒ Accommodating and enforcing constraints
Organization

- Lectures:
  - LEC 001 10:00–11:20MW RCH 308 Weddell, Grant
  - LEC 002 11:30–12:50MW RCH 308 Weddell, Grant
  - LEC 003 02:30–03:50MW RCH 306 Toman, David

- Class web site:
  ⇒ cs.uwaterloo.ca/~david/cs348/
  syllabus, schedule of classes, policies, etc.

- Textbook:
  Database Management Systems, 3rd ed., Ramakrishnan & Gehrke, (optional)
Assignments

- Four assignments throughout term
  - Sample solutions released on *due date*
- Goal is to give you practice with material
  - 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
Instructor and TA office hours

⇒ Instructors:
   David Toman: Tuesday 10:30-12:00 am, DC 3344
   Grant Weddell: Monday 2-3 pm DC 3346

⇒ TA hours: See the web site
Evaluation/Assessment

1. Assignments: 20%
2. Midterm exam: 30%
3. Final exam: 50%
Summary

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

- Material builds 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!
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!
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!