

# CS 338 – Computer Applications in Business: Databases Winter 2006

## Instructor:

Trevor Grove  
DR Cheriton School of Computer Science  
Davis Centre 2562  
E-mail: [trg+cs338w2006@cs.uwaterloo.ca](mailto:trg+cs338w2006@cs.uwaterloo.ca)  
Voice: (519) 888-4679 (UW ext 4679)

Office hours: to be determined

## Lecture hours:

Thursday, 7:00-9:50 PM; MC 2038

## Teaching assistants:

To be determined.

## Prerequisites

Prereq: One of CS 230, 246, 330  
Antireq: CS 448

CS 338 cannot be counted for credit in a Computer Science Major program. CS 448 should be taken instead.

## Course objectives

- Become familiar with key concepts of database management systems (DBMS)
- Understand data modeling tools and methodology
- Learn to use a relational database system
- Learn to express queries against a relational database, and manipulate its contents
- Become familiar with underlying structures and implementation features of a DBMS

## Lecture topics

- Overview of database technology
- The relational model; SQL language
- Data modelling
- DB design
- DBMS architecture (distributed DBMSs)
- Transaction management
- DBMS physical organization
- Query processing

## Grading

- The marking schemes for the course this term is based on the best combination of assignments, a midterm and a final:

I will compute each person's "best of" one of the following:

1. Assignments(5, not equal weight)	30%
Midterm	30%
Final:	<u>40%</u>
	100%
2. Assignments	30%
Final:	<u>70%</u>
	100%
3. Midterm	30%
Final:	<u>70%</u>
	100%
4. Final:	100%

**Note: Final exam grade must exceed 50% to pass.**

## Assignment policy

Assignments will use a combination of electronic submission and paper submission. Details will be provided with each assignment.

Unless otherwise indicated, assignments are to be done individually. Informal collaboration is acceptable, but work submitted for marking must be an individual effort.

The School's penalty for plagiarism is severe. See <http://www.cs.uwaterloo.ca/undergrad/programs/policies/cheating.shtml>

## Textbook

The text is recommended and not required.

*Fundamentals of Database Systems, Fourth Edition*; Elmasri and Navathe; Addison Wesley, 2004. The *Third Edition (2000)* is also acceptable.

## Reference material

Lecture Notes for CS338, Winter 2006 (available online as PDF & HTML files)

Mailing list:

<https://lists.uwaterloo.ca/mailman/listinfo/cs338>.

Web page:

<http://www.student.cs.uwaterloo.ca/~cs338>