

Overview

Welcome to CSCD43H Database Systems Technology. This course consists of two lecture hours and one hour of tutorial each week; three assignments; a midterm; and a final exam.

Topics

Implementation of database management systems. Storage management, indexing, query processing, concurrency control, transaction management. Database systems on parallel and distributed architectures. Modern database applications: data mining, data warehousing, OLAP, data on the web. Object-oriented and object-relational databases.

Course Schedule

Lecture: Monday 10AM-12 (BV355)

Tutorial: Wed 11AM-12 (BV355)

Staff Information

Instructor: Wael Aboulsaadat

Email: wael@cs.toronto.edu

Office: PO103, Office #118

Office hours: Wed 10AM-11

TA: Monia Ghobadi

Email: monia@cs.toronto.edu**Course Prerequisites**

Exclusion: CSC443H

Prerequisites: [CSCC43H or (CSCD34H)] & CSCC69H & [CSCC73H or (CSCC64H)] & [GPA 3.0 or enrolment in a CSC subject POST]

Marking

Item	Weight	Due Date
Assignment 1	10 %	Oct 15, 11:59PM
Midterm	20 %	Nov 1
Assignment 2	15 %	Nov 5, 11:59PM
Assignment 3	20 %	Dec 6, 11:59PM
Exam	35 %	

Textbook

Database Systems: the Complete Reference, (2nd Edition) by Hector Garcia-Molina, Jeffrey D. Ullman, and Jennifer Widom. ISBN-13: 978-0131873254, Prentice Hall.

Software

We will be using PostgreSQL 8.3.10 DBMS from <http://www.postgresql.org/ftp/binary/v8.3.10>

For Mac users, check <http://www.postgresqlformac.com/>. The DBMS administration tool is available here: <http://www.pgadmin.org/>

Course Website

The course web site will use the blackboard system at: <http://portal.utoronto.ca>. Important information and announcements will be posted there. You are responsible for checking the web page regularly (At least a few times a week). The bulletin board for this course is also accessed

through the blackboard system. Your TA will be monitoring the bulletin board. There will be a 12 hour blackout prior to the due date whereby the TA will not answer your questions.

Lecture Notes

Lecture notes will usually be posted on the course website prior to lecture. This will give you the opportunity to print them off and annotate them as necessary.

Assignments and Late Submissions

The due dates for each assignment will be as listed above. All files must be submitted electronically via blackboard. You have to use one of the following accepted formats: plain ASCII file, Postscript, or PDF. Handwritten assignments will not be marked. Penalties for late homework: 10% for each day (00:01a.m. counts as one day late and no more than 3 penalty days). If your assignment is late you must email it as attachment to the TA and cc the instructor.

Remarking Requests

For all the assignments, and the midterm: once your assignments/midterm have been marked and distributed in class, you have ONE WEEK to submit a written remarking request (form online).

Topic Schedule

Date	Topic (<i>subject to change</i>)
Sept 13	Conceptual Design, Entity/Relationship Model
Sept 20	Physical Design, Disks and Files, File Organizations and Indexing
Sept 27	Tree-Structured Indexes, Transactions
Oct 4	PL/SQL, JDBC, Security
Oct 11	Query Processing
Oct 18	Query Processing
Oct 25	Query Processing
Nov 1	External Sorting
Nov 8	Transaction Management
Nov 15	Concurrency Control
Nov 22	Crash Recovery
Nov 29	OLAP and Review

Email

Do not expect the instructor to be always available by email. Responses may take 24 hours or more. If you are working on an assignment, try to ask any questions that you may have in advance during office hours (i.e., plan ahead). Questions emailed the night before an assignment is due may not receive a timely response. Email should be used only in cases of emergency, or when you have exhausted all other venues of investigation on your own. If you must communicate via email, please follow these rules: 1) use your UofT email address. 2) The Subject line must contain "csc43". 3) Write short messages. 4) If you send a program and ask "what is wrong with it?" - do not expect a reply. 5) No attachments and no HTML.

Academic Offences

<http://www.cs.toronto.edu/~fpitt/documents/plagiarism.html> !