

**Brock University
Computer Science
COSC 2P32 - File and Database Systems
Winter 2012**

Instructor: Cale Fairchild (cfairchild@brocku.ca), MCJ305

Office Hours: Monday & Thursday 16:00-17:00 or by appointment.

Prerequisite: COSC 2P03 (minimum of 60% or permission of instructor for APCO)

Course Description

File organizations and access methods, fundamental data base concepts: specification and design of databases and applications, various database models including the relational model, processing with SQL, database administration and security.

Course Content

- Introduction to Database Systems
- The Entity-Relationship (ER) Model
- Introduction to the Relational Model
- Schema Refinement and Normal Forms
- Query Languages: Relational Algebra and SQL
- Database Application Development
- Storage and Indexing
- Transaction Management
- Optional Topics, including, but not limited to: Security, File Organizations and Indexing, Object-Database Systems.

Textbook

Database Management Systems, 3rd edition,

Raghu Ramakrishnan & Johannes Gehrke, McGraw-Hill, ISBN: 0-07-246563-8

The authors have a website where they place resources related to the textbook. You can find this site at: <http://www.cs.wisc.edu/~dbbook/>.

Additional Documentation

Oracle's software documentation is available on the web at: <http://docs.oracle.com>. The last time I checked you need to sign up for a free account, but the documentation is very worthwhile.

Mark Distribution

Assignments (3):	3 * 8%
Group Project:	15%
Term Tests (2):	2 * 13%
Final Exam:	35%

Notes:

- Questions during class are encouraged and greatly appreciated.
- Assignments will be posted on the course website. Due dates for the assignments will be printed on the assignment text, late assignments will be accepted up to 3 days late with a one-time penalty of 25%. You are strongly encouraged to hand in all assignments even if incomplete. Generally it is to your advantage to hand in assignments on time, even if incomplete. All assignments must be submitted in the official 2P32 assignment box.
- All assignments are to be **completed individually**.
- The department views plagiarism as a serious issue. Students are encouraged to visit <http://www.cosc.brocku.ca/about/policies/plagiarism> and read the department's policies regarding plagiarism.
- A cover page available from <http://www.cosc.brocku.ca/coverpage> must be submitted with each assignment.
- A mark of at least 40% on the final exam is required in order to pass the course.
- If you do not complete required work due to illness, you must submit a medical form available from <http://www.cosc.brocku.ca/forms/medical>. This form must be submitted **within 3 days of the missed work**, at the main office in the Computer Science department.
- The last day for withdrawal without academic penalty is March 9th, therefore it is expected that at least 15% of your mark will be available to you by March 2nd.
- As part of Brock University's commitment to a respectful work and learning environment, the University will make every reasonable effort to accommodate all members of the University community with disabilities.
- If you require academic accommodations related to a permanent disability to participate in this course, you are encouraged to contact the Student Development Centre Services for Students with Disabilities (4th Floor Schmon Tower ext. 3240) and also to discuss these accommodations(s) with the instructor.