



School of Information Management

**INFO241 INTRODUCTION TO DATABASE
MANAGEMENT AND PROGRAMMING**

Trimester 1 2008

COURSE OUTLINE

Contact Details

| | | Room | Tel. | E-mail |
|---------------------------|-------------------|-------------|-------------|-----------------------|
| Course Coordinator | Dr Tiong-Thye Goh | EA220 | 4636860 | tiong.goh@vuw.ac.nz |
| Senior Tutor | Ms Xiao Yi Guan | EA111 | 4636998 | xiaoyi.guan@vuw.ac.nz |

Class Times and Room Numbers

| | | | | | | | |
|-------------------|------------------------------|--|--|--|--|---|---|
| Lectures | HMLT 206 | Monday and Friday 3:10 – 4:00 pm | | | | | |
| Workshops | MY 201 | Session 1 Tuesday 3:00-4:00 | Session 2 Tuesday 4:00-5:00 | Session 3 Wednesday 1:00-2:00 | Session 4 Wednesday 2:00-3:00 | Session 5 Thursday 1:00-2:00 | Session 6 Thursday 2:00-3:00 |
| Final Exam | 6 June – 25 June 2008 | | | | | | |

Course Objectives

This course is designed to provide students with a complete introduction to the database concept, relational database model and application programming language. Topics include DBMS, database query language, normalisation, database design methodology, programming and database application development, database administration, and other emerging topics.

On satisfactory completion of this course, students should:

- be able to use more complex data modelling techniques to design and develop databases for business applications.
- be able to apply query language tools for efficient database development.
- be able to design and develop programs, including effective user interfaces, for practical database applications.
- have an understanding of database administration and security issues.
- have an understanding of emerging topics.

Course Content

| Week No. | Date | Lecture | Workshop | Tutorial | Readings | Tests, Quiz & Assignments |
|--------------|------|---|---------------|------------|------------|---------------------------|
| 1 | 25/2 | Database System | | | Ch 1 | |
| | 29/2 | Data Models | | | Ch 2 | |
| 2 | 3/3 | Relational Data Model | | | Ch 3 | |
| | 7/3 | Entity Relationship Modeling | | | Ch 4 | Lecture Quiz 1 |
| 3 | 10/3 | ER Diagram | Workshop 1 | Tutorial 1 | | |
| | 14/3 | Normalisation of Database Tables | | | Ch 5 | |
| 4 | 17/3 | Denormalisation | | | | |
| | 21/3 | No class | | | | |
| 5 | 24/3 | No class | | | | |
| | 28/3 | Introduction to SQL | | | | Lecture Quiz 2 |
| 6 | 31/3 | DDL | Workshop 2 | Tutorial 2 | Ch 7 | |
| | 4/4 | Advanced Queries | | | Ch 7 | |
| 7 | 7/4 | Database Application development & Programming - Overview | Workshop 3 | Tutorial 3 | Supplement | Assignment 1 Due |
| | 11/4 | Database Application development & Programming - forms | | | | |
| BREAK | | | | | | |
| 8 | 28/4 | Database Application development & Programming - controls | Workshop 4 | | Supplement | |
| | 2/5 | Database Application development & Programming - customizing form | | | | |
| 9 | 5/5 | Database Application development & Programming - forms events, error handling, validation | Workshop 5 | Tutorial 4 | | |
| | 9/5 | Database Application development & Programming - tab control, multiple forms | | | | |
| 10 | 12/5 | Advanced SQL | Workshop Test | Tutorial 5 | Ch 8 | Workshop Test |
| | 16/5 | SQL functions | | | | Lecture Quiz 3 |
| 11 | 19/5 | Transaction Management | Workshop 6 | Tutorial 6 | Ch 13 | Class Test |
| | 23/5 | Concurrency Control | | | | |
| 12 | 26/5 | Database Administration | | | Ch 15 | Assignment 2 Due |
| | 31/5 | Review | | | | |

Expected Workload

In terms of weekly course workload, expect to spend two hours in lectures, two hours in the workshops and tutorials and about seven to ten hours working on your own per week in preparation for lectures, workshops, assignments and exams.

Required Books

Students must obtain the required text book from the bookshop.

Rob, P., & Coronel, C. (2007). Database Systems: Design, Implementation, and Management, Seventh Edition. Publisher: Course Technology. ISBN 1-4188-3593-5.

Assessment Requirements

| | Weight % |
|---------------|----------|
| Class Test | 20 |
| Quizzes | 5 |
| Workshop Test | 10 |
| Assignment 1 | 10 |
| Assignment 2 | 15 |
| Final Exam | 40 |
| TOTAL | 100 |

Penalties

In fairness to other students, late work will incur a 10% penalty (of the value of the project/assignment) for each calendar day late. Work will not be accepted more than 3 days late without a granted extension. **Extensions to project/assignment deadlines are not ordinarily granted.** Discuss with the **Course Coordinator** any extraordinary personal circumstances which affect your ability to meet the deadline. You will be asked to verify your claim, e.g., produce medical certificates.

Mandatory Course Requirements

To pass INFO 241, students must have:

1. Attained at least 50% for the final examination, AND
2. Attained a weighted average of 50% over all other assessments (class test, workshop tests, quizzes and assignments).
3. Completed all the workshops and tutorials.
4. Attended at least 80% lectures, workshops and tutorials.

Attendance: The material covered in the lectures and workshops is designed to help students complete their assignments and exams. Students are expected to attend all lectures and workshops. Students are also expected to complete the readings and work through recommended examples in the readings and class handouts.

Workshops & Tutorials

Students are expected to sign up for ONE session of the workshop and tutorial through the tutorial sign-up system. Students should also prepare for the workshop/Tutorial prior to their allocated time.

Communication of Additional Information

All notices relating to this course will be posted on Blackboard.

www.blackboard.vuw.ac.nz

Faculty of Commerce and Administration Offices

Railway West Wing (RWW) - FCA Student and Academic Services Office

The Faculty's Student and Academic Services Office is located on the ground and first floors of the Railway West Wing. The ground floor counter is the first point of contact for general enquiries and FCA forms. Student Administration Advisers are available to discuss course

status and give further advice about FCA qualifications. To check for opening hours call the Student and Academic Services Office on (04) 463 5376.

Easterfield (EA) - FCA/Education/Law Kelburn Office

The Kelburn Campus Office for the Faculties of Commerce and Administration, Education and Law is situated in the Easterfield Building on the ground floor (EA005). This counter is the first point of contact for :

- Duty tutors for student contact and advice.
- Information concerning administrative and academic matters.
- Forms for FCA Student and Academic Services (e.g. application for academic transcripts, requests for degree audit, COP requests).
- Examinations-related information during the examination period.

To check for opening hours call the Student and Academic Services Office on (04) 463 5376.

Notice of Turnitin Use

Student work provided for assessment in this course may be checked for academic integrity by the electronic search engine <<http://www.turnitin.com>>. Turnitin is an on-line plagiarism prevention tool which identifies material that may have been copied from other sources including the Internet, books, journals, periodicals or the work of other students. Turnitin is used to assist academic staff in detecting misreferencing, misquotation, and the inclusion of unattributed material, which may be forms of cheating or plagiarism. You are strongly advised to check with your tutor or the course coordinator if you are uncertain about how to use and cite material from other sources. Turnitin will retain a copy of submitted materials on behalf of the University for detection of future plagiarism, but access to the full text of submissions will not be made available to any other party.

General University Policies and Statutes

Students should familiarise themselves with the University's policies and statutes, particularly the Assessment Statute, the Personal Courses of Study Statute, the Statute on Student Conduct and any statutes relating to the particular qualifications being studied; see the Victoria University Calendar or go to www.victoria.ac.nz/home/about/policy/students.aspx

For information on the following topics, go to the Faculty's website www.victoria.ac.nz/fca under Important Information for Students:

- Academic Grievances
- Student and Staff Conduct
- Meeting the Needs of Students with Impairments
- Student Support

Academic Integrity and Plagiarism

Academic integrity is about honesty – put simply it means *no cheating*. All members of the University community are responsible for upholding academic integrity, which means staff and students are expected to behave honestly, fairly and with respect for others at all times.

Plagiarism is a form of cheating which undermines academic integrity. The University defines plagiarism as follows:

The presentation of the work of another person or other persons as if it were one's own, whether intended or not. This includes published or unpublished work, material on the Internet and the work of other students or staff.

It is still plagiarism even if you re-structure the material or present it in your own style or words.

Note: It is however, perfectly acceptable to include the work of others as long as that is acknowledged by appropriate referencing.

Plagiarism is prohibited at Victoria and is not worth the risk. Any enrolled student found guilty of plagiarism will be subject to disciplinary procedures under the Statute on Student Conduct and may be penalized severely. Consequences of being found guilty of plagiarism can include:

- an oral or written warning
- cancellation of your mark for an assessment or a fail grade for the course
- suspension from the course or the University.

Find out more about plagiarism, and how to avoid it, on the University's website:

www.victoria.ac.nz/home/studying/plagiarism.html

Manaaki Pihipihinga Programme

Manaaki Pihipihinga is an academic mentoring programme for undergraduate Māori and Pacific students in the Faculties of Commerce and Administration, and Humanities and Social Sciences. Sessions are held at the Kelburn and Pipitea Campuses in the Mentoring Rooms, 14 Kelburn Parade (back courtyard), Room 109D, and Room 210, Level 2, Railway West Wing. There is also a Pacific Support Coordinator who assists Pacific students by linking them to the services and support they need while studying at Victoria. Another feature of the programme is a support network for Postgraduate students with links to Postgraduate workshops and activities around Campus.

For further information, or to register with the programme, email manaaki-pihipihinga-programme@vuw.ac.nz or phone (04) 463 6015. To contact the Pacific Support Coordinator, email pacific-support-coord@vuw.ac.nz or phone (04) 463 5842.