



School of Information Management

INFO 341 ADVANCED DATABASE MANAGEMENT AND PROGRAMMING

Trimester 1 2005

COURSE OUTLINE

Contact Details

| | | Room | Tel. | E-mail |
|---------------------------|-----------|-------------|------------------|---------------------|
| Course Coordinator | T.T. Goh | EA220 | 4636860 | Tiong.goh@vuw.ac.nz |
| Senior Tutor | Hugo Gong | EA111 | 4635233x 8915 | Hugo.gong@vuw.ac.nz |

Class Times and Room Numbers

| | | | |
|-------------------|------------------------------|----------------------------------|--------------------------------|
| Lecture | HU LT 323 | Tuesday Friday | 11:00 -11:50 13:10 -14:00 |
| Workshop | MY 201 | Session 1 | Session 2 |
| | | Wednesday 9:00-11:00am | Thursday 4:00-6:00pm |
| Final Exam | 30 May – 18 June 2005 | | |

Course Objectives

This is an advanced enterprise level database management and programming course. Students will acquire the knowledge needed to develop a business solution using an enterprise level database server, and an appreciation of the issues and trade-offs relevant to practical solutions in the real life environment.

On satisfactory completion of this course, students should be able to:

- Design, specify and implement a working business solution using an enterprise level database.
- Apply data modelling techniques for relational design.
- Apply advanced query language, views, triggers, users defined function, and stored procedures.
- Enhance business rules and data integrity.

- Apply database security, backup and recovery.

Course Content

| Wk | Date | Topic | Reading | Assignment | Lab |
|----|------|---|---------|---------------------------|-----------------------------|
| 1 | 22/2 | Introduction to Databases and SQL 2000 Server | Ch 1 | | |
| | 25/2 | Review Database Design | Ch 2 | | |
| 2 | 1/3 | Physical Database Design | Ch 3 | | Lab 1 |
| | 4/3 | Physical Database implementation | | | Lab 2 |
| 3 | 8/3 | Advanced SQL I | Ch 4 | | Lab 3 |
| | 11/3 | Advanced SQL II | Ch 5 | | Lab 4 |
| 4 | 15/3 | Special Functions | Ch 5 | | Lab Test 1 (8%) |
| | 18/3 | Programming SQL 2000 | Ch 6 | | Lab 5 |
| 5 | 22/3 | View | Ch 7 | | Lab 6 |
| | 25/3 | NO Class | | A1 Due 10% | Lab 7 |
| | | BREAK | | | |
| 6 | 12/4 | Triggers in Databases | Ch 8 | | Lab 8 |
| | 15/4 | Stored Procedure I | Ch 9 | | Lab 9 |
| 7 | 19/4 | Stored Procedure II | Ch 9 | | Lab Test 2 (8%) |
| | 22/4 | Project Briefing | Project | | signed off - terms |
| 8 | 26/4 | Introduction to VB.Net | Notes | | Lab with VB |
| | 29/4 | ADO.Net | Notes | | Start Project |
| 9 | 3/5 | VB and SQL 2000 Application | Notes | | Lab with Access application |
| | 6/5 | Access and SQL 2000 application | Notes | Project Part 1 5% | Work on Project |
| 10 | 10/5 | Web and SQL 2000 Application | Notes | | Lab with ASP application |
| | 13/5 | SQL 2000 Database Administration | | | Work on Project |
| 11 | 17/5 | Database Security | | | Lab Test 3 (4%) |
| | 20/5 | Monitoring Database | | | Work on Project |
| 12 | 24/5 | Backup and Recovery | Ch 10 | Present your Project (5%) | |
| | 27/5 | Review | | Project Due (20%) | |
| - | Tba | External exam 2 hour | 40% | | |

Readings

Refer to schedule.

Required Text

Moore, T. (2002). *MCAD/MCSD/MCSE Training Guide (70-229): SQL Server 2000 Database Design and Implementation*. USA:Que Publishing.

References

Buczek, G. (2001). *Instant SQL Server 2000 Applications*. Berkely:Osborne-McGraw-Hill.
Bordoloi, B., & Bock, D. (2004) *SQL for SQL Server*. USA: Pearson Prentice Hall.

Assessment Requirements

| Task | Percentage |
|----------------------------|------------|
| Assignment | 10 |
| Workshops signed off (1-9) | terms |
| Lab tests | 20 |
| Project | 30 |
| 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 341, students must have:

1. Correctly enrolled in the course,
2. Attained at least 50% for the final examination, AND
3. Attained a weighted average of 50% over all other assessments (Project, Lab tests, and assignment).
4. Collected terms for all 9 Lab sessions.

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

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

Workshops

Students are *expected to have the following* for each computer workshop

- A computer account by the first week of the term
- A storage device to save all work
- Read the workshop requirement prior to their allocated workshop time

Communication of Additional Information

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

www.blackboard.vuw.ac.nz

General University Policies and Statutes

Students should familiarise themselves with the University's policies and statutes, particularly those regarding assessment and course of study requirements, and formal academic grievance procedures.

Student Conduct and Staff Conduct

The Statute on Student Conduct together with the Policy on Staff Conduct ensure that members of the University community are able to work, learn, study and participate in the academic and social aspects of the University's life in an atmosphere of safety and respect. The Statute on Student Conduct contains information on what conduct is prohibited and what steps can be taken if there is a complaint. For queries about complaint procedures under the Statute on Student Conduct, contact the Facilitator and Disputes Advisor. This Statute is available in the Faculty Student Administration Office or on the website at:

www.vuw.ac.nz/policy/StudentConduct.

The policy on Staff Conduct can be found on the VUW website at:

www.vuw.ac.nz/policy/StaffConduct.

Academic Grievances

If you have any academic problems with your course you should talk to the tutor or lecturer concerned or, if you are not satisfied with the result of that meeting, see the Head of School or the Associate Dean (Students) of your Faculty. Class representatives are available to assist you with this process. If, after trying the above channels, you are still unsatisfied, formal grievance procedures can be invoked. These are set out in the Academic Grievances Policy which is published on the VUW website:

www.vuw.ac.nz/policy/AcademicGrievances.

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. Plagiarism is **prohibited** at Victoria.

The University defines plagiarism as follows:

Plagiarism is presenting someone else's work as if it were your own, whether you mean to or not.

'Someone else's work' means anything that is not your own idea, even if it is presented in your own style. It includes material from books, journals or any other printed source, the work of other students or staff, information from the Internet, software programmes and other electronic material, designs and ideas. It also includes the organization or structuring of any such material.

Plagiarism is not worth the risk.

Any enrolled student found guilty of plagiarism will be subject to disciplinary procedures under the Statute on Student Conduct (www.vuw.ac.nz/policy/studentconduct) and may be penalized severely. Consequences of being found guilty of plagiarism can include:

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

Find out more about plagiarism and how to avoid it, on the University's website at: www.vuw.ac.nz/home/studying/plagiarism.html.

Students with Disabilities

The University has a policy of reasonable accommodation of the needs of students with disabilities. The policy aims to give students with disabilities an equal opportunity with all other students to demonstrate their abilities. If you have a disability, impairment or chronic medical condition (temporary, permanent or recurring) that may impact on your ability to participate, learn and/or achieve in lectures and tutorials or in meeting the course requirements, then please contact the Course Coordinator as early in the course as possible. Alternatively you may wish to approach a Student Adviser from Disability Support Services to confidentially discuss your individual needs and the options and support that are available. Disability Support Services are located on Level 1, Robert Stout Building, or phoning 463-6070, email: disability@vuw.ac.nz. The name of your School's Disability Liaison Person can be obtained from the Administrative Assistant or the School Prospectus.

Student Support

Staff at Victoria want students' learning experiences at the University to be positive. If your academic progress is causing you concern, please contact the relevant Course Co-ordinator, or Associate Dean who will either help you directly or put you in contact with someone who can.

The Student Services Group is also available to provide a variety of support and services. Find out more at www.vuw.ac.nz/st_services/ or email student-services@vuw.ac.nz.

VUWSA employs two Education Coordinators who deal with academic problems and provide support, advice and advocacy services, as well as organising class representatives and faculty delegates. The Education Office is located on the ground floor, Student Union Building, phone 463 6983 or 463 6984, email education@vuwsa.org.nz.