# VICTORIA UNIVERSITY OF WELLINGTON Te Whare Wānanga o te Ūpoko o te Ika a Māui



# School of Information Management

# INFO341 ADVANCED DATABASE MANAGEMENT AND PROGRAMMING

Trimester 2 2009

# **COURSE OUTLINE**

# **Contact Details**

Role	Name	Room	Tel.	E-mail
<b>Course Coordinator</b>	Dr Tiong T. Goh	EA220	4636860	Tiong.goh@vuw.ac.nz
Senior Tutor	Ms Xiaoyi Guan	EA111	4636998	<u>xiaoyi.guan@vuw.ac.nz</u>

#### **Class Times and Room Numbers**

Lecture	HMLT104 Friday 1:10 -3:00		
Office Hours	Monday 9am – 11am		
Labs	MY219 <u>https://signups.victoria.ac.nz</u>		

#### **Trimester Dates**

Teaching Period: Monday 13 July to Friday 16 October 2009 End of Year Study Period: Monday 19 October to Monday 26 October 2009

#### Withdrawal Dates

Information available via <a href="http://www.victoria.ac.nz/home/admisenrol/payments/withdrawlsrefunds.aspx">http://www.victoria.ac.nz/home/admisenrol/payments/withdrawlsrefunds.aspx</a>

# **Course Learning Objectives**

By the end of this course, students should be able to:

- **LO1:** design, specify and implement a working business solution using an enterprise level database
- LO2: develop effective interfaces for data queries and reports
- **LO3:** apply advanced query language, views, triggers, user defined functions, and stored procedures
- **LO4:** enhance business rules and data integrity
- **LO5:** apply security measures to a database.

#### **Course Content**

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.

Wk	Date	Торіс	Tutorial	Workshop	Readings
1	17/7	Introduction			Pro_T Ch 1
		Programming T-SQL			Pro_T Ch2
2	24/7	Enhancement and New Features			Pro_T Ch 2,Ch 9
		Procedural code and case expression			Pro_T Ch 4
3	31/7	User-Defined Functions	Tutorial 1	Workshop 1	Pro_T Ch5
		Stored Procedure I			Pro_T Ch 6
4	7/8	Stored Procedure II			
		Triggers			Pro_T Ch 7
5	14/8	Integrated Full-Text Search	Tutorial 2	Workshop 2	Pro_T Ch 10
		CLR			Pro_T Ch 14
6	21/8	Class test #1			
7	11/9	ASP.NET			supp
		Creating Web Site			
8	18/9	Webform	Tutorial 3	Workshop 3	supp
		Server Controls			
9	25/9	Reporting Service			Accel Ch 19
		Creating & Managing Report			
10	2/10	Analysis Service	Tutorial 4	Workshop 4	Accel Ch 20
		Business Intelligence Development			
11	9/10	Integration Services	Tutorial 5	Workshop 5	Accel Ch 21
12	16/10	Class test #2			
13		Project Presentation and marking			

# **Course Delivery**

Students are expected to complete the weekly assignments in order to understand the concepts and theories taught during lectures. Students should also prepare for the workshop/tutorial prior to their allocated time. Two class tests will evaluate and assess your understanding about the theories, concepts and technologies learnt throughout the course. Project assignment will assess your integrated knowledge in implementing a working business solution using an enterprise level database. The essay and presentation assignment will enhance your communication, writing and presentation skills. The bonus component is to encourage you to participate in discussion and obtain timely feedback to clarify doubts.

# 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

Tasks	Learning Objectives	Due Date	Percentage
Weekly Assignments	LO2, LO3, LO4, LO5	Every Friday, 11am	15
Essay and Presentation	LO1, LO2	11/9 11am	15
Class Test #1	LO3	21/8	15
Class Test #2	LO2, LO4	16/10	15
Final Project	LO1, LO2, LO3, LO4, LO5	19/10 11am	30
Workshop + Tutorial	LO2, LO3, LO4, LO5	Every Monday 11am	10
Bonus- class participation and obtaining feedback	LO1, LO2, LO3, LO4, LO5	On going	5
Total			100+5

#### **Assessment Requirements**

Note: Your assessed work may also be used for quality assurance purposes, such as to assess the level of achievement of learning objectives as required for accreditation and audit purposes. The findings may be used to inform changes aimed at improving the quality of FCA programmes. All material used for such processes will be treated as confidential, and the outcome will not affect your grade for the course.

# Examinations There is no final exam.

#### 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 that is more than 3 days late will not be accepted 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.

#### **Practicum Arrangements**

Workshop and tutorial slot will be available on the sign-up system: <u>https://signups.victoria.ac.nz</u> You must select only one time slot that fits your timetable.

# Mandatory Course Requirements

To pass INFO 341, students must have:

- 1. Attained a weighted average of 50% over all assessments.
- 2. Attended at least 80% lectures.

3. Attended all workshops and tutorials.

# **Expected Workload**

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

# Readings

The following textbooks are required and can be downloaded from the library.

Coles, M. (2008). Pro T-SQL 2008 Programmer's Guide [electronic resource] Publisher: Berkeley, CA : Apress, 2008. ISBN: 9781430210023

Walters, R. E., Coles, M., Rae, R., Ferracchiati, F., Farmer, D. (2008) Accelerated SQL Server 2008 [electronic resource] Publisher: Berkeley, CA: Robert Walters, 2008. ISBN: 9781430206064

# **Communication of Additional Information**

All notices relating to this course will be posted on Blackboard. www.blackboard.vuw.ac.nz

# For the following important information follow the links provided:

# Academic Integrity and Plagiarism

http://www.victoria.ac.nz/home/study/plagiarism.aspx

# Use of Turnitin

Student work provided for assessment in this course may be checked for academic intergrity by the electronic search engine<http://www.turnitin.com> Turnitin is an on-line plagiarism prevention tool which compares submitted work with a very large database of existing material. At the discretion of the Head of School, handwritten work may be copy-typed by the School and subject to checking by Turnitin. Turnitin will retain a copy of submitted materials on behalf of the University for dection 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**

http://www.victoria.ac.nz/home/about/policy/academic.aspx

#### Faculty of Commerce and Administration Offices

http://www.victoria.ac.nz/fca/studenthelp/Contactus.aspx

#### Manaaki Pihipihinga Programme

http://www.victoria.ac.nz/st\_services/mentoring/