VICTORIA
UNIVERSITY OF WELLINGTON

School of Information Management

INFO341 ADVANCED DATABASE MANAGEMENT AND PROGRAMMING

Trimester Two 2012

COURSE OUTLINE

Class Times and Room Numbers

Lecture: RHLT03 Wednesday 1:40 -2:30
Office Hours: Thursday & Friday 9am – 10am
Workshop: RWW415 https://signups.victoria.ac.nz

Names and Contact Details

Role	Name	Room	Tel.	E-mail
Course Coordinator	Dr Tiong T. Goh	RH403	4636860	Tiong.goh@vuw.ac.nz
Senior Tutor	Mr. Alex Zhang	RH502	4636998	Alex.Zhang@vuw.ac.nz

Assessment Requirements

Tasks	Learning Objectives	Due Date	Percentage
Assignment 1	LO1, LO3, LO4	24/8 11am	20
Class Test	LO1, LO2,LO3, LO4, LO5	18/10 evening	30
Assignment 2-Q1	LO1, LO2, LO3, LO4, LO5	15/10 11am	16
Assignment 2-Q2	LO1, LO2, LO3, LO4, LO5	29/10 11am	24
Six Workshop submission	LO1, LO2, LO3, LO4, LO5	Every Monday 11am	5
Six Tutorial submission	LO1, LO2, LO3, LO4, LO5	Every Monday 11am	5
Total			**100**

Trimester Dates
Teaching Period: Monday 16 July to Monday 29 October

Examinations
There is no final exam.

Mandatory Course Requirements
To pass INFO 341, students must have:

1. Attended at least 10 lectures.
2. Attended at least 5 workshops and 5 tutorials.

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

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	Topic	Tutorial	Workshop	Readings
1	18/7	DB Files			PT Ch 1
2	25/7	Programming T-SQL			PT Ch 2,4, 9
3	1/8	User-Defined Functions	Tutorial 1	Workshop 1	PT Ch5
4	8/8	Triggers 1	Tutorial 2	Workshop 2	PT Ch 7
5	15/8	Triggers 2	Tutorial 3	Workshop 3	
6	22/8	Stored Procedures		Assignment 1 due 24/8 11am	PT Ch 6
		BREAK			
7	12/9	Integrated Full-Text Search			PT Ch 10
8	19/9	Integrated Full-Text Search			
9	26/9	Data interaction: ASP.NET & Web	Tutorial 4	Workshop 4	SUP
10	3/10	Data interaction: ASP.NET & Web	Tutorial 5	Workshop 5	SUP
11	10/10	Data Analytics	Tutorial 6	Workshop 6	SUP
				Assignment 2 Q1 due 15/10 11am	
12	17/10	Data Analytics/ Review		Class Test	
				Assignment 2 Q2 due 29/10 11am	

Course Learning Objectives

Learning objectives	By the end of this course, students should be able to:	Graduate Attributes	Major Attributes
LO1	design, specify and implement a working business solution using an enterprise level database	LG1 LG2 LG4 LG5	MA3 MA4
LO2	develop effective interfaces for data queries and reports	LG1 LG2 LG5	MA3
LO3	apply advanced query language, views, triggers, user defined functions, and stored procedures	LG1 LG4 LG5	MA3
LO4	enhance business rules and data integrity	LG1 LG5	MA6
LO5	apply security measures to a database	LG1 LG5	MA6

Course Delivery

Students are expected to complete the assignments in order to understand the concepts and theories taught during lectures. Students should also prepare for the workshop and tutorial prior to their allocated time. Class test will evaluate and assess your understanding about the theories, concepts and technologies learnt throughout the course. Assignment will assess your knowledge in implementing a working solution using an enterprise level database and tools.

Expected Workload

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

Materials and Equipment

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

Withdrawal from Course

1. Your fees will be refunded if you withdraw from this course on or before Friday 27 July 2012.

2. The standard last date for withdrawal from this course is Friday 27 July 2012. After this date, students forced to withdraw by circumstances beyond their control must apply for permission on an '*Application for Associate Dean's Permission to Withdraw Late'* including supporting documentation.

The application form is available from either of the Faculty's Student Customer Service Desks.

Quality Assurance 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.

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

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.

Class Representative
A class representative will be elected in the first class, and that person's name and contact details made available to VUWSA, the Course Coordinator and the class. The class representative provides a communication channel to liaise with the Course Coordinator on behalf of students.

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

General University Policies and Statutes
Find key dates, explanations of grades and other useful information at
www.victoria.ac.nz/home/study
Find out about academic progress and restricted enrolment at
http://www.victoria.ac.nz/home/study/academic-progress.aspx
The University's statutes and policies are available at www.victoria.ac.nz/home/about/policy,
except qualification statutes, which are available via the Calendar webpage at
http://www.victoria.ac.nz/home/study/calendar.aspx (See Section C).
Further information about the University's academic processes can be found on the website of the Assistant Vice-Chancellor (Academic) at
www.victoria.ac.nz/home/about_victoria/avcacademic/default.aspx

AVC (Academic) Website: information including: Conduct, Academic Grievances, Students with Impairments, Student Support
http://www.victoria.ac.nz/home/about_victoria/avcacademic/Publications.aspx

Faculty of Commerce Office
http://www.victoria.ac.nz/vbs/studenthelp

Te Putahi Atawhai
Maori and Pacific Mentoring Programme
http://www.victoria.ac.nz/tpa/

Assignment 1 Rubric – 20% contribution towards overall assessment		
Aspect		*Marks*
Question 1	Correct SQL script for PIVOT table	5
	Resulting output from SQL2008 server	5
	Correctly deploy into window form and screenshot	5
Question 2	Correct recursive script	5
	Correct cursor script	10
Question 3	Correct scalar UDF	5
	Correctly show all outputs with all inputs	5
	Correct inline UDF	5
	Correctly show all outputs with all inputs	5
	Correct multi-statement UDF	5
	Correctly show all outputs with all inputs	5
Question 4	Correct table script	5
	Correct stored procedure	5
	Correctly tested with executing SP and screenshot	5
	Correctly deployed and developed window form and Show critical C# code	5
Question 5	Correct table and insert script	5
	Correct stored procedure script	5
	Correct trigger script	5
	Correct T-sql script	5
	Total	100

Class Test Rubric – 30% contribution towards overall assessment		
Aspect		*Marks*
Introduction to SQL2008 server and database files	Correctly write and explain database features and DDL script	10
Programming T-SQL	Correctly write effective advanced T-sql scripts	10
User-Defined Functions	Correctly write UDF script and understand the theory of UDF	15
Triggers	Correctly write triggers script and understand the theory of triggers	20

Stored Procedure	Correctly write SP script and understand the theory of SP	15
Integrated Full-Text Search	Correctly write full text script and understand the theory of full text search	15
Interaction technology	Correctly write ASP.net script and understand the technology of ASP.net and Analytics	15
	Total	100

Assignment 2 Rubric – 40% towards overall assessment		
Aspect		*Marks*
1 ASP.Net	Correctly design and developed a add concept interface with ASP.net that meets requirements.	20
2 ASP.Net	Correctly design and developed a search/response interface with ASP.net that meets requirements.	20
3 Analytics	Correctly using a set of analytics tool to analyse data that meets requirements.	40
4 Analytics	Effectively communicate and report findings	20
	Total	100