
School of Information Management

INFO 341 ADVANCED DATABASE MANAGEMENT AND PROGRAMMING

Trimester Two 2011

COURSE OUTLINE

Class Times and Room Numbers

Lecture: RHLT03 Wednesday 10:30 -11:20

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	Ms Xiaoyi Guan	RH501	4636998	xiaoyi.guan@vuw.ac.nz

Assessment Requirements

Tasks	Learning Objectives	Due Date	Percentage
Assignment 1	LO1, LO3, LO4	22/8 11am	20
Class Test	LO1, LO2, LO3, LO4, LO5	13/10	30
Workshop Test	LO2, LO3	Week 11	10
Final Project	LO1, LO2, LO3, LO4, LO5	18/10 11am	30
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

From Monday 11 July to Wednesday 19 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	13/7	Introduction to SQL2008 server			PT Ch 1
2	20/7	Programming T-SQL		Revision	PT Ch 2,4, 9
3	27/7	User-Defined Functions	Tutorial 1	Workshop 1	PT Ch5
4	3/8	Triggers 1	Tutorial 2	Workshop 2	PT Ch 7
5	10/8	Triggers 2	Tutorial 3	Workshop 3	
6	17/8	Stored Procedure 1			PT Ch 6
	22/8			Assignment 1	
		BREAK			
7	7/9	Stored Procedure 2			
8	14/9	Integrated Full-Text Search	Tutorial 4	Workshop 4	PT Ch 10
9	21/9	ASP.NET & Web	Tutorial 5	Workshop 5	SUP
10	28/9	Web form & Controls	Tutorial 6	Workshop 6	SUP
11	5/10	Reporting Service & Report		Workshop 7 (Test)	AC Ch 19
12	12/10	Security			
	13/10			Class Test	
13	18-19/10	Project Presentation and marking			

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 and workshop test 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.

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 22 July 2011.
2. The standard last date for withdrawal from this course is Friday 23 September 2011. 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 and Administration Offices

<http://www.victoria.ac.nz/fca/studenthelp/>

Te Pūtahi Atawhai

Maori and Pacific Mentoring Programme

http://www.victoria.ac.nz/st_services/tpa/index.aspx

Assignment 1 Rubric – 20% contribution towards overall assessment		
<i>Aspect</i>		<i>Marks</i>
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		
<i>Aspect</i>		<i>Marks</i>
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	20
Integrated Full-Text Search	Correctly write full text script and understand the theory of full text search	15
ASP.Net technology	Correctly write ASP.net script and understand the technology of ASP.net	10
	Total	100

Workshop Test Rubric – 10% contribution towards overall assessment		
<i>Aspect</i>		<i>Marks</i>
User-Defined Functions	Write and test the correct UDF	10
	Correctly deploy UDF and integrate with visual studio form	10
Triggers	Write and test the correct Triggers	10
	Correctly deploy Triggers and integrate with visual studio form	10
Stored Procedure	Write and test the correct Stored Procedure	10
	Correctly deploy SP and integrate with visual studio form	10
Integrated Full-Text Search	Write and test the correct Full Text search script	10
	Correctly deploy IFTS and integrate with visual studio form	10
	Total	80

Project Rubric – 30% towards overall assessment		
<i>Aspect</i>		<i>Marks</i>
1 ERD diagram	Correctly design effective ERD that meets project requirements.	20
2 Front page design	Correctly design a front ASP interface that meets project requirements.	10
3 Front page Datagrid	Correctly developed and deploy a datagrid interface that meets project requirements.	20
4 User login design	Correctly design a secured and effective login control that meets project requirements.	20
5 Add concept page	Correctly design and developed a add concept interface with ASP.net that meets project requirements.	30
6 Response page	Correctly design and developed a response interface with ASP.net that meets project requirements.	30
7 Bonus Reply page	Correctly design and developed a Reply interface with ASP.net that meets project requirements.	10
8 Reporting service	Correctly design and developed a reporting service with ASP.net that meets project requirements.	30
9 Overall Quality of the project design & Q & A	Correctly produce high quality design and delivery and answer questions concisely and accurately.	10
10 Documentation	All database objects, sql scripts, ERD and form designs are well documented with high presentation quality.	20
	Total	190(10)