TE WHARE WĀNANGA O TE ŪPOKO O TE IKA A MĀUI
VICTORIA
UNIVERSITY OF WELLINGTON

School of Information Management

INFO241 INTRODUCTION TO DATABASE MANAGEMENT AND PROGRAMMING

Trimester One 2012

COURSE OUTLINE

Class Times and Room Numbers

Lecture: RHLT01 Thursday 3:40 -4:30
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	26/4 11am	20
Workshop Test	LO2,3	Week 10	10
Class Test	LO1,2,3,4,5	31/5 evening	30
Assignment 2	LO1,2,3	15/6 11am	30
Six Workshops submission	LO2,3	Following Monday 11am	5
Six Tutorials submission	LO1,2,3,4,5	Following Monday 11am	5
Total			**100**

Trimester Dates
Teaching Period: Monday 5 March – Friday 15 June*

Examinations
There is no final exam.

Mandatory Course Requirements
To pass INFO 241, students must have:

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

Readings
The following textbook is required and can be purchased from Vic bookshop.

Coronel, C. Morris, S. & Rob, P. (2013). Database Systems: Design, Implementation, and Management, 10th Edition. Publisher: Course Technology. ISBN-13:978-1-111-96960-8.

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

Week No.	Date	Lecture	Workshop	Tutorial	Readings	Tests & Assignments
1	8/3	Database Management System			Ch 1 & Ch 2	
2	15/3	Relational Database Model	Workshop 1	Tutorial 1	Ch 3	
3	22/3	ER Model	Workshop 2	Tutorial 2	Ch 4	
4	29/3	Normalisation	Workshop 3	Tutorial 3	Ch 6	
5	5/4	Structure Query Language (DDL/DML)			Ch 7	
BREAK						
6	26/4	Select Queries	Workshop 4	Tutorial 4	Ch 7	Assignment 1 Due
7	3/5	Database Application Development – Overview data objects	Workshop 5	Tutorial 5	Supplement	
8	10/5	Database Application Development– Controls	Workshop 6	Tutorial 6	Supplement	
9	17/5	Database Application Development – ADO			Supplement	
10	24/5	Advanced SQL & Functions	Workshop Test		Ch 8	Workshop Test
11	31/5	Review				Class Test
12	7/6	Database Admin & Security			Ch 15	
	15, 18, 19/6	Student presents Assignment 2 for marking				Assignment 2 Due 15/6

Course Learning Objectives

Learning objectives	By the end of this course, students should be able to:	Graduate Attributes	Major Attributes
LO1	use complex data modelling techniques to design and develop databases for business applications.	LG1 LG2 LG4 LG5	MA3 MA4
LO2	apply query language tools for efficient database	LG1	MA3

	development.	LG2 LG5	
LO3	design and develop programs, including effective user interfaces, for practical database applications.	LG1 LG4 LG5	MA3
LO4	explain database administration and security issues.	LG1 LG5	MA6
LO5	assess the importance of emerging topics.	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 database business application solution.

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, tutorials, assignment, 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 16 March 2012.

2. The standard last date for withdrawal from this course is *Friday 18 May*. 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		
Topic		*Marks*
Database Management System	Correctly write and explain the issues and provide solution	20
ERD	Correctly present an effective model and solution	20
Relational model	Correctly identify the relationships and solution	20
Normalisation	Correctly present an effective solution	20
SQL	Correctly generate the solution	20
	Total	100

Class Test Rubric – 30% contribution towards overall assessment		
Topic		*Marks*
Application development	Correctly explain theory and application code	20
DBMS & Relational model	Correctly write and explain DBMS and relation model theory	20
ERD	Correctly present and understand the theory of ERD	20
Normalisation	Correctly normalise and understand theory	20
SQL queries and advanced SQL	Correctly write SQL/DDL/DML	20
	Total	100

Workshop Test Rubric – 10% contribution towards overall assessment		
Topic		*Marks*
Database design	Correctly design database that meets requirements	20

Application	Correctly design application with visual form	30
SQL	Correctly apply SQL and integrate with application	20
Advanced SQL and control	Correctly apply advanced SQL/functions and form control	30
	Total	100

Assignment 2 Rubric – 30% towards overall assessment		
Aspect		*Marks*
1 Database design	Correctly design effective database and relationship that meets project requirements.	30
2 Menu design	Correctly design user interface that meets project requirements.	20
3 Add/Edit/delete design	Correctly developed and deploy an Add/Edit/delete interface that meets project requirements.	30
4 Admin login design	Correctly design a secured and effective admin login control that meets project requirements.	20
5 Play app	Correctly design and developed a playing application that meets project requirements.	30
6 Email interface	Correctly design, developed and validate an email record interface that meets project requirements.	10
7 Ranking design	Correctly design and developed a ranking interface that meets project requirements.	20
8 Overall Quality of the project design & Q & A	Correctly produce high quality design and delivery and answer questions concisely and accurately.	10
9 Documentation	All database objects, SQL scripts, ERD, C# code and form designs are well documented with high presentation quality.	10
	Total	180