

School of Information Management

INFO102 Information Systems Development

Trimester Three 2009

COURSE OUTLINE

Contact Details

	Staff	Room	Email & Telephone	Contact
Course Co-ordinator & Lecturer	David Johnstone	EA218	David.Johnstone@vuw.ac.nz Ph. 463-5877	By appointment
Course Lecturer	Diane Strobe	EA207	diane.strobe@vuw.ac.nz Ph. 463 5504 or 463-8902	By appointment

Dates, Times and Room Numbers

Credit Value: 15 points
Co-requisite: INFO101
Restrictions: INFO212 (prior to 2005)

Trimester Dates: Mon 16 November 2009 – Fri 12 February 2010

Mid Trimester (Christmas) Break: Saturday 19 December 2009– Monday 4 January 2010

Lectures: Tuesday & Thursday 11am - 12:50pm at MY632

Tutorials/Workshops: See **Tutorial/Workshop Signup Instructions**.

Withdrawal Dates: 24 November 2009 (last day to withdraw with refund)

Late Withdrawal: Requires Associate Dean (Students) permission. See Section 8 of the Personal Courses of Study Statute:

(<http://policy.vuw.ac.nz/Amphora!~policy.vuw.ac.nz~POLICY~000000001743.pdf>)

Course Objectives

- a) Introduce students to the stages of the SDLC and their relevance to the creation of effective information systems;
- b) Enable students to understand and apply requirements analysis, data modelling and process modelling;
- c) Provide students with an understanding of relevant design issues, including user interfaces, physical and logical design, data storage, and implementation; and
- d) Enable students to understand and apply object oriented programming using C# as their programming platform.

INFO 102 – Lectures, Tutorials & Workshops			2009 / 3
DATE	TOPIC	Rec Read	Assessment Due
WEEK: 16 – 20 November			
Tues 17 Nov	Introduction to IS development Requirements determination	(DWR) – 1 (DWR) – 4	
	No tutorials		
Thur, 19 Nov	Data modelling (Entity relationship diagrams)	(DWR) – 7 pp. 211-229	
	TUTORIAL 1: ERD exercises		
WEEK: 23 – 27 November			
Tues, 24 Nov	Data modelling (Normalisation)	(DWR) – 7 pp. 230-237	Lunch 2 U – ERD (Hand in 1)
	TUTORIAL 2: Normalisation exercises		
Thur, 26 Nov	No lecture		Lunch 2 U – Normalisation (Hand in 2) <u>For Feedback only</u>
	OPTIONAL TUTORIAL BEFORE TEST 1		
WEEK: 30 November – 4 December			
Tues, 1 Dec	TEST 1		TEST 1 (20%) – 2 HOURS
	No tutorials		
Thur, 3 Dec	Process modelling (Use case analysis/Data flow diagrams)	(DWR) – 6 (DWR) – 5	
	TUTORIAL 3: Use case analysis		
WEEK: 7 – 11 December			
Tues, 8 Dec	Process modelling (Data flow diagrams) System Design	(DWR) – 6	Lunch 2 U – Use Case (Hand in 3)
	TUTORIAL 4: Data flow diagrams		
Thur, 10 Dec	No Lecture		Lunch 2 U – DFD (Hand in 4)
	OPTIONAL TUTORIAL BEFORE TEST 2		
WEEK: 14 – 18 December			
Tues, 15 Dec	TEST 2		TEST 2 (20%) – 2 HOURS
	No tutorials		
Thur, 17 Dec	No Lecture		
	No tutorials		
WEEKS: 11 January – 12 February TRIMESTER BREAK			
WEEK 6: 11 – 15 January			
Tues, 12 Jan	Introduction		
	WORKSHOP 1: Hello World		
Thur, 14 Jan	Building blocks		
	WORKSHOP 2: Event driven programming		
WEEK 7: 18 – 22 January			
Tues, 19 Jan	Decision structures, classes, objects, and methods		
	WORKSHOP 3: Using decision and methods		
Thur, 21 Jan	No lecture		Assignment 1 Due Friday 22 Jan 12 noon
	No workshop		
WEEK 8: 25 – 29 January			
Tues, 26 Jan	Loops, arrays, and collections		
	WORKSHOP 4: Using loops, arrays, collections		
Thur, 28 Jan	No lecture		
	No workshop		
WEEK 9: 1 – 5 February			
Tues, 2 Feb	Data validation and exception handling		
	WORKSHOP 5: Handling exceptions & file IO		
Thur, 4 Feb	No lecture		Assignment 2 Due Friday 5 Feb 12 noon
	WORKSHOP 6: Optional		
WEEK 10: 8 – 12 February			
Tues, 9 Feb	Object orientation		
	No workshop		
Thur, 11 Feb	TEST 3		TEST 3 (20%) – 1 HOUR
	No workshop		

Delivery Method

Learning materials for this course are delivered in two complementary ways: through (i) lectures, tutorials, and workshops; and (ii) resources on the (Blackboard) website. Each method is both important and necessary to achieve the course objectives.

Expected Workload

As a 15-point course, students are expected to invest approximately 150 hours worth of effort to complete the course successfully. These hours include time preparing for and participating in: lectures, tutorials, workshops, tests and assignments. They include time spent at the university and any time spent on the course off campus.

Use of Blackboard

Course Material

All course material and announcements will be published on Blackboard on a regular basis. **Students are expected to download these materials from Blackboard.**

Announcements

The announcements page for the course will be used to distribute course announcements. It will be updated periodically. You are expected to check the announcements regularly.

Discussion Board

Moderated discussion forums will be provided for general discussion, tutorials, and assignment work. Staff members will attempt to answer all reasonable questions. If a particular question has not been answered clearly on the discussion board, please make an appointment with either the lecturers or tutors, for further explanation.

Lectures

Lectures will compliment the on-line material, but may NOT necessarily cover exactly the same material.

Recommended Readings

There are no set textbooks for this course. However, the following are recommended for further help in both understanding and applying the topics covered in the course.

Dennis, Wixom & Roth (2006). Systems Analysis & Design. Wiley. 3ed.

This book covers the material from the first half of the course. It is available from Victoria Books. There are also copies available on closed reserve in the Central Library. Chapter readings from this book are provided in the course schedule above (as "DWR" in the third column), should students wish to target specific areas where they would like help.

Murach, J. (2006). Murach's C# 2005. Mike Murach and Associates.

This book is recommended for the second half of the course and is available on 3 day loan from the Central Library.

Bradley & Millspaugh (2010). Programming in Visual C# 2008.

This excellent beginner's book is recommended for the second half of the course and is available on 3 day loan from the Central Library.

C# for Sharp Kids

This e-book, and its associated sample C# code, is available on the Virtual Machines in MY201 Labs. A copy of the book is also available on Blackboard.

Further books on introductory C# are also available on 3 day loan. Please note that for this introductory level course, books on C# 2005 are also suitable for learning C# 2008.

Assessment Details

Note that there is no final examination for this course. Course assessment will be based on the following:

		<u>Due Date</u>
Test 1 (Data Modelling)	20%	
Test 2 (Process Modelling)	20%	
Tutorial submissions (max 4)	5%	see Lecture Schedule (p2)
Tutorial participation (max 4)	5%	
Assignment 1 (C# Programming)	10%	see Lecture Schedule (p2)
Assignment 2 (C# Programming)	20%	see Lecture Schedule (p2)
Test 3 (Programming concepts)	20%	see Lecture Schedule (p2)
TOTAL	100%	

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.

Mandatory Course Requirements

To pass this course, students must, in addition to getting a course mark of 50% or more,

1. Attend at least three out of four designated tutorials (optional tutorials do not count);
2. Obtain four out of five workshop exercise signoffs;
3. Sit all three tests.

Please note: To pass INFO102 you must attend at least three designated tutorials and obtain four workshop exercise signoffs. Do not take chances by missing tutorials unnecessarily – you may later become ill or be otherwise forced to miss some tutorials/workshop signoffs, and then find that you have not accumulated enough tutorial attendance/workshop signoffs.

Tutorials and Workshops

Students are required to register for **one** 2 hour tutorial/workshop. Tutorials will run for the first half of the course. Tutorials will then be converted into workshops for the last half of the course. During the conversion, the times will remain the same, but the workshop will be held in **MY201**.

Tutorial/Workshop Sign-up

Please signup for a tutorial/workshop session by **5pm, Thursday of Week 1** as tutorials will start in Week 2. A new tutorial/workshop signup system has been put into place (S-cubed; <https://signups.victoria.ac.nz/>). Instructions are available on Blackboard.

Tutorial/Workshop hopping is not permitted

Tutorial/Workshop hopping is not allowed. If you need to temporarily change to other tutorial / workshop, please print and fill out the Tutorial/Workshop Change Form (can be found under Course Information tag on Blackboard). Please note, you must provide valid reasons (i.e. doctor appointment) and provide documents to support your application (i.e. medical certificate). Please note: Certificates from the Student Counselling Service are no longer accepted as documentary evidence

This form must be signed by Senior Tutor or Course Co-ordinator. You will only be signed off from the replacement workshop or get attendance from the replacement tutorial if you show the tutor of the class the signed change form at the beginning of the tutorial.

Tutorials

For each tutorial, students are required to submit their submission to the tutors at the beginning of the tutorial. Each submission is worth 1% of your final grade. A Bonus 1% will be given if you submit all four.

You **must** attend your allocated tutorials. To pass the course you must attend at least three of the four designated tutorials. If you wish to switch tutorials, you must seek prior permission from the Senior Tutor (refer to 'Tutorial/Workshop hopping is not permitted' above).

Workshops

After the Christmas break you will attend a 2 hour C# workshop each week. Workshop exercises are primarily designed to give you the skills to complete your assignments.

When you have completed the workshop exercise a tutor will review your work and record a sign-off. To pass the course you need to have four out of five exercises signed-off. Once you have completed the workshop exercise you can then work on your C# assignments.

Workshop exercises are made available on the week before they must be signed off. After workshop 1, students are expected to begin working on the workshop exercises in their own time before the scheduled workshop time. The workshop session is for completing the exercise, having questions addressed, and achieving signoff.

Tests

The tests reflect the two halves of the course. The first two tests provide students the opportunity to demonstrate what they have learned about both the creation of data models from a set of data requirements (Test 1), and the creation of process models from a set of process requirements (Test 2). Test 3 focuses on programming topics covered in the second half of the course.

Examination

The course is internally assessed through class participation, the programming assignments and section tests. **There is no examination** in the final exam period for this course.

Scaling

To obtain a fair and consistent distribution of marks relative to assessment difficulty, scaling of marks may be employed on some or all assessments.

Communication of Additional Information

All formal notices relating to this course will be posted on the Blackboard website - you are expected to log on and check for announcements on a regular basis, at least two or three times a week. Final grades will be posted on the Information Systems noticeboard located on the ground floor of the Easterfield Building, opposite the lifts (elevators).

The INFO102 website can be accessed at: <http://blackboard.vuw.ac.nz>

Penalties

In fairness to other students, work submitted after the deadline will incur a 10% penalty (of the marks achieved for the project) for each working day (prior to 1:00 pm) late. In the event of bereavement or prolonged illness affecting your ability to meet the deadline, discuss your situation with the Course Coordinator. You must verify your claim, e.g., produce a medical certificate. By doing so you agree to verification of documentation. ***Please note: Certificates from the Student Counselling Service are no longer accepted as documentary evidence to support an extension.**

Extension

Extensions must be sought **prior** to the deadline from the Course Coordinator. You must provide documents to support your application for extension, such as a Medical Certificate. The Course Coordinator reserves the right and you consent to the verification of your documents with third parties.

Important Notes:

- **No extension is possible based on a student's workload.** You are expected to manage your workload to ensure there is sufficient time to complete assessments as required.
- **You are expected to back up your work** – From time to time files are lost, computers crash, etc., so it is critical that you get into the habit of backing up important files (on floppy/CD disk or flash drive, for example). Extensions will **not** be granted due to files lost and not backed up!
- **Do not leave submitting your work to the last minute** – technology problems do occur (especially on the day an assignment is due). Printers may be overloaded, servers may be slow, etc. Be smart and submit it in plenty of time. Extensions will **not** be granted due to problems with submitting work.
- **Be careful to submit your assignment according to instructions given.** If it is placed in the wrong box, or submitted using a method that has not been specified, it will **not** be marked.
- **Working together** – You are encouraged to discuss aspects of assignment work with others. However, when it is time to develop your solution & write your assignment, **the words, diagrams and code you use must be ENTIRELY your own.** In this way, we will have your perspective on the topic - **not** someone else's! Markers have been instructed to check for signs of plagiarism and joint efforts.
- **Using other's work in programming** – You are encouraged to use on-line resources to help you learn. However when you include other's work within your own work (e.g. method code provided by an on-line user group) you must acknowledge the source you used. You can place that acknowledgement in a comment within your code. If you do not acknowledge the contribution of others to your work then you have **plagiarised** that work and will be penalised according to the University Statute on student conduct, discussed below. You are not required to cite algorithms, data structures or source code from lecture notes or the recommended text. Note that in this course it is expected that you will complete the work without recourse to other's code.

Faculty of Commerce and Administration Offices

Railway West Wing (RWW) - FCA Student Administration Office

The Student Administration Office is located on the ground and first floors of the Railway West Wing. The ground floor counter is the first point of contact for general enquiries and FCA forms. Student Administration Advisers are available to discuss course status and give further advice about FCA qualifications.

Easterfield (EA) - FCA/Law Kelburn Office

The Kelburn Campus Office for the Faculties of Commerce & Administration and Law is situated in the Easterfield Building - it includes the ground floor reception desk (EA005) and offices 125a to 131 (Level 1). The office offers the following services:

- Duty tutors for student contact and advice.
- Information concerning administrative and academic matters.
- FCA Student Administration forms (e.g. application for academic transcripts, requests for degree audit, COP requests).
- Examinations-related information during the examination period.

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

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. http://www.victoria.ac.nz/home/about_victoria/avcacademic/Publications.aspx

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.

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:

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

Manaaki Pihipihinga Programme

This is a mentoring service for Maori and Pacific students studying at all levels. Find out more at:

http://www.victoria.ac.nz/st_services/mentoring/