

School of Information Management
INFO 102 BUSINESS APPLICATION PROGRAMMING
 Trimester Two 2011
COURSE OUTLINE

Lecture Time	Lecture Room
Monday & Wednesday 2.10pm-3pm	HULT 323

Mandatory Course Requirements

To pass this course, you must do all of the following:

1. Achieve an overall course mark of 50% or more.
2. Attend at least seven of the nine workshops and have your attendance recorded.
3. Have at least six workshop exercises marked and signed off.
4. Sit the final examination and achieve a mark of at least 40%.

Required textbook

Bradley, J. C., & Millspaugh, A. C. (2010) *Programming in Visual C# 2008*, Boston: McGraw Hill Higher Education

Assessment Requirements

Assessment	Topic	Contribution	Learning Objectives	Due Dates
Workshops	Workshop exercises	20% (Best 5)	1, 2, 4	Weekly
Assignment 1	C# fundamentals, decision structures	10%	1, 4	Friday 12 Aug. 5pm
Assignment 2	C# fundamentals, decision structures, methods, multiform projects	20%	1, 2, 4	Monday 12 Sep. 5pm
Assignment 3	Arrays and iteration, web applications, file I/O, business objects	20%	1, 2, 4	Friday 14 Oct. 5pm
Final Exam	A 2-hour examination covering all topics	30%	1, 2, 3, 4	
Total		100%		

Expected Workload

You are expected to spend about 12 hours per week to study INFO102. This includes lectures, reading the set material, preparing for and attending workshops and tutorials, assignment work, revision for exams, and time spent researching and practicing your programming skills.

During a teaching week you are expected to spend: 2 hours for reading lecture materials for each of the two weekly lectures and 2 hours to prepare for the workshop. For each assignment you are expected to spend 15 to 20 hours.

Workshop hopping is NOT permitted

Contact Details

Staff		Room	Email	Office Hours
Course Coordinator and Lecturer	Kevin Carillo	EA103	kevin.carillo@vuw.ac.nz	Monday & Wednesday 3pm – 4pm
Senior Tutor	Helen (Hai ping) Liu	EA116	Helen.liu@vuw.ac.nz	Monday to Friday 10am – 4pm

Course Information

Credit Value:	15 points
Prerequisites:	None
Teaching Period:	Monday 11th July 2011 – Friday 14th October
Study Period	Monday 17 October – Thursday 20 October
Examination Period:	Friday 21 October – Saturday 12th November (inclusive)

Course Content

This course provides an introduction to the fundamental concepts of programming for business application development. The course covers the program development lifecycle: gathering requirements, designing a solution, implementing a solution in a programming language, and testing the completed application. The programming language used is Visual C#.Net.

Course Delivery

This course involves the practical application of computer programming and learning material for this course is provided using:

1. Lectures
2. Workshops held in computer laboratories
3. The online learning support tool Blackboard

Lectures provide theory and demonstrate the concepts needed to cover the course objectives. Workshops provide material that extends the lectures and are designed to give you the experience needed to complete the practical assignments. Therefore attendance at the lectures and workshops is crucial for your success in the course. Blackboard will be used to support the course in a number of ways.

Course Learning Objectives

By the end of this course the student should be able to:

Objective	On completion of this course, students will be able to:	Graduate Attributes	Major Attributes
1	Perform requirements analysis for business systems	LG1, LG2	MA1, MA3, MA5
2	Develop data models using tools such as entity models	LG1, LG2	MA3, MA5
3	Develop process models using tools such as data flow diagrams	LG1, LG2	MA3, MA5
4	Understand and apply object oriented programming using C# as their programming platform.	LG1	MA3, MA5

APPENDIX 1 - Weekly schedule

This timetable may be adjusted as the course progresses to allow for visiting speakers, additional topics, or revision sessions.

Week	Beginning Date	Day	Lecture Workshop Tutorial	Topic	Required Reading	Optional Resources	Assignment due dates
1	11-Jul	Monday 2.10 - 3 pm	Lec 1	Introduction to course		Tier 1, Lesson 1	
		Wednesday 2.10 - 3 pm	Lec 2	Introduction to C#	Chap 1	Tier 1, Video: Intro to C# 2008	
		No Workshop					
2	18-Jul	Monday 2.10 - 3 pm	Lec 3	Visual C# IDE	Chap 1	Tier 1, Lesson 5	
		Wednesday 2.10 - 3 pm	Lec 4	Gathering requirements and user interface design	Chap2	Tier 2, Video 2	
		Wks 1 – no signoff		First program, forms and controls			
3	25-Jul	Monday 2.10 - 3 pm	Lec 5	Identifiers	Chap 3	Tier 1, Lesson 3	
		Wednesday 2.10 - 3 pm	Lec 6	Calculations	Chap 3		
		Wks 2 – signoff 1		Using variables, constants, and calculations			
4	1-Aug	Monday 2.10 - 3 pm	Lec 7	Algorithms and logic depiction	Chap 4	Tier 2, Lesson 4	
		Wednesday 2.10 - 3 pm	Lec 8	Decision structures	Chap 4	Tier 1, Lesson 4	
		Wks 3 – signoff 2		Using decision structures			
5	8-Aug	Monday 2.10 - 3 pm	Lec 9	Debugging & Exception handling	Chap 1		1 Fri 12 Aug 5pm
		Wednesday 2.10 - 3 pm	Lec 10	Methods and Parameters	Chap 5	Tier 2, Video 3	
		Assignment 1 - Student demo					
6	15-Aug	Monday 2.10 - 3 pm	Lec 11	Multiform projects, menus, dialog boxes	Chap 6		
		Wednesday 2.10 - 3 pm	Lec 12	Event handling			
		Wks 4 – signoff 3		Using methods and multiform projects			
Monday 22 Aug – Jan 4 Sept: Mid trimester break							
7	5-Sep	Monday 2.10 - 3 pm	Lec 13	Iteration 1	Chap 7	Tier 2, Video 5	
		Wednesday 2.10 - 3 pm	Lec 14	Iteration 2	Chap 7		
		Wks 5 – signoff 4		Using loops			

8	12-Sep	Monday 2.10 - 3 pm	Lec 15	Arrays	Chap 8		2 Mon 12 Sep 5pm
		Wednesday 2.10 - 3 pm	Lec 16	Software development methodologies	Chap 9	Tier 2, Lesson 1	
		Wks 6 – signoff 5		Using arrays			
9	19-Sep	Monday 2.10 - 3 pm	Lec 17	Web application programming and ASP.net	Chap 9	Web - Tier 2, Lesson 1	
		Wednesday 2.10 - 3 pm	Lec 18	Creating a website in Visual C#	Chap 9	Web -Tier 2, Lesson 2	
		Wks 7 – signoff 6		Designing a simple website			
10	26-Sep	Monday 2.10 - 3 pm	Lec 19	Laying out a website and CSS	Chap 9		
		Wednesday 2.10 - 3 pm	Lec 20	Data Files – File I/O	Chap 11	Tier 1, Lesson 2	
		Wks 8 – signoff 7		Using data Files – file I/O			
11	3-Oct	Monday 2.10 - 3 pm	Lec 21	Principles of object orientation	Chap 12		
		Wednesday 2.10 - 3 pm	Lec 22	Business objects	Chap 12	Tier 2, Lesson 6	
		Wks 9 – signoff 8		Using business objects			
12	10-Oct	Monday 2.10 - 3 pm	Lec 23	Business systems analysis			3 Fri 14 Oct 5pm
		Wednesday 2.10 - 3 pm	Lec 24	Exam preparation			
		Tut.		Revisions			

APPENDIX 2 – Additional Information

Withdrawal from Courses

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 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.

Blackboard

Blackboard is used as a repository for course materials such as lecture notes and workshop materials. Occasionally additional materials will be posted on Blackboard if extra explanatory information is needed to support the lecture topics. In addition, all class announcements are posted on the course Blackboard site. Because Blackboard is very important resource centre for this course it is important that you *check Blackboard frequently*, at least twice a week.

Lecture notes will usually be provided on Blackboard but there may also be additional explanatory material provided in the lectures that is not on Blackboard. Therefore the notes on Blackboard are not a substitute for attending lectures.

A Blackboard discussion forum will be made available and moderated. These forums are for general discussion, posing questions, and assignment work. Both students and staff may answer your questions. If a particular question has not been answered clearly on the discussion board, please make an appointment with either the lecturer or tutors, for further explanation.

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

Materials and Equipment

There is no requirement for equipment for this course. The workshops are open from 8am to 8pm each day every day, and are accessible by swipe card if you are enrolled in School of Information Management courses. The software you need to complete workshops and assignments is provided on these machines. However if you want to work on your own computer you will be able to install free versions of Visual C#.Net (2008 versions only). Details about this will be provided on Blackboard.

Note that the University cannot support your personal computer or any course related software installed on it even if it is supplied by the School. If you do work on your own computer you **MUST** test their work on the SIM laboratory computers before submitting your assignments. In addition, Visual C# is a Microsoft product and may require additional software to operate successfully on computers with non-Microsoft operating systems.

Recommended resources

- The Microsoft Beginner Developer Learning Center (BDLC) website has .Net and C# learning resources at: <http://msdn.microsoft.com/en-us/beginner/default.aspx>. This resource has sections you can study that complement the lecture topics.
- There are a number of books on C# in the library, however many of them are not suitable for this course, although they may be helpful for individual topics. The following book covers many of the topics covered in this course and in a similar order. Please note however, this is not a textbook and is not an adequate substitute for the required textbook.
 - Beginning Visual C# 2005 Express Edition From Novice to Professional / by Peter Wright. (online edition)
 - A Programmer's Introduction to C# 2.0 edited by Eric Gunnerson, Nick Wienholt. (online edition)

- Accelerated C# 2008 by Trey Nash (online edition)
- Beginning C# 2008 From Novice to Professional / by Christian Gross (online edition)

Extensions

Extensions must be sought from the Course Coordinator prior to the deadline for assessments. Extensions cannot be granted for workload reasons. You must verify your claim, that is, you must provide documents to support your application, such as a Medical Certificate. Your application may be verified by the Course Coordinator with any external parties.

In the event of bereavement or prolonged illness affecting your ability to meet the deadline, please discuss your situation with the Course Coordinator as early as possible.

Please note that certificates from the Student Counselling Service will be accepted as documentary evidence to support an extension.

Examinations

Students who enrol in courses with examinations are obliged to attend an examination at the University at any time during the formal examination period.

The final examination for this course will be scheduled at some time during the period from Friday 21 October – Saturday 21 November.

The examination will not require calculators or other electronic equipment.

Penalties

In fairness to other students, if your work is submitted after the deadline and without an extension granted or without a serious excuse (supported by medical certificate or other official documentation), you will incur a 10% penalty for each day that the work is late, weekends included. This is calculated based on the marks you achieved for the assignment. Penalties accrue each day at 1:00 pm.

Please note that certificates from the Student Counselling Service are no longer accepted as documentary evidence to support an extension.

Workshops

You will attend a 2 hour C# workshop each week where you work on a programming exercise. These exercises are primarily designed to give you the skills to complete your assignments. Workshop exercises are worth 20% of the total course mark. When you have completed the workshop exercise a tutor will review your work, give you a mark, and record a sign-off. You must achieve at least 6 signoffs in total (each sign-off is worth 4%). Once you have completed the workshop exercise you can then work on your C# assignments. Please follow the workshop sign up instructions given below.

Workshop exercises are made available on the Friday of the week before they must be signed off. This is so that some preparatory work can begin (i.e. C# Windows form development). After workshop 1, you are expected to begin working on the workshop exercises in your own time before the scheduled workshop time. The workshop session is for completing the exercise, having questions addressed, and achieving signoff.

There will be no signoff for the first workshop on Week 2. Only the best five sign-offs will be considered in the overall workshop mark.

Tutorials

A tutorial session will be organized in Week 12 to help students in preparing for the exam.

Quality Assurance

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.

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.

Special Notes

- **Books** – for this introductory level course, books on C# 2005 are also suitable for learning C# 2008.
- **Software** - do not write the code for the workshop exercises or the assignments using C# 2005 or 2010, you must use C# 2008. Submissions in 2005 or 2010 format cannot be marked.
- **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 (e.g. on CD, DVD, pen drive, or other external media). 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 your work 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 your work is 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 and write your assignment, the words, diagrams and code you use must be ENTIRELY your own. 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, in general, you will complete the work without recourse to other's code.

Signing up for your Workshop / Tutorial

You are required to sign up for, and attend, one workshop per week. Workshops last for two hours. In some weeks the workshop is replaced with a tutorial of one hour. Please check the timetable on page 2 for the workshop and tutorial schedule. All workshops are held in MY201. Your tutorial room will be allocated and announced on Blackboard once the workshop sign up is complete. Your allocated tutorial will be scheduled at the same time slot as your workshop.

Workshops start in Week 2. Therefore you need to sign up for a workshop/tutorial session by 5pm, Thursday 14 July (Week 1). The workshop signup system is called S-cubed. Instructions for using S-cubed are available on Blackboard. S-cubed is available at: <https://signups.victoria.ac.nz/>

Workshop and tutorial hopping is not allowed.

If you need to temporarily change to another workshop, please print and fill out the Workshop Change Form (can be found under Course Information tag on Blackboard). Please note:

1. You must provide valid reasons (i.e. a doctor's appointment) and provide documents to support your application (i.e. medical certificate).
2. The form must be signed by the Course Coordinator. You will only be signed off from the replacement workshop or tutorial if you show the class tutor the signed change form at the beginning of the workshop or tutorial.
3. Certificates from the Student Counselling Service are no longer accepted as documentary evidence.

Faculty of Commerce and Administration Offices

Railway West Wing (RWW) - FCA Student Administration Office

The Student & Academic Services Office is located on the first floor of the Railway West Wing. The ground floor counter at Rutherford House is the first point of contact for general enquiries and FCA forms. Student 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, Education and Law is situated on level 1 of the Easterfield Building EA 121. 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.

The Faculty web site is at: <http://www.victoria.ac.nz/fca/studenthelp/>

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 formal notices relating to this course will be posted on the Blackboard website.

To ensure that individuals and the whole class can be contacted speedily please check that we have your correct email address or addresses on the Student Records system. This can be checked and updated using the myVictoria web portal (My Study tab, Personal Information section, Update Email Addresses).

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

APPENDIX 3 – Assignment 1 Marking Guide



Assignment 1 - Marking Guide

GUIDELINES			Mark	Student Mark
Demo	1	Student is able to: <ul style="list-style-type: none"> • Explain the functionalities of the application. • Explain the overall structure of the program. 	3	
	2	Student is able to make minor modifications in the code in response to tutor request.	2	
Project Assessment	3	Program executes on opening.	2	
	4	Form layout follows requirements <ul style="list-style-type: none"> • Controls (including correct location). • Image correctly displayed and hot keys are set. • Date displays correctly. 	5	
	5	Calculate button works <ul style="list-style-type: none"> • Correct calculation of BMI. • Correct calculation of number of calories. • Number of simulations correctly increases. 	5	
	6	Clear button works <ul style="list-style-type: none"> • All controls cleared except date/time and simulation number. 	2	
	7	Exit button works and code is correct.	1	
	8	Code comments are present and appropriate <ul style="list-style-type: none"> • Main comment • Method comments 	2	
	9	Naming standards correct and consistent throughout <ul style="list-style-type: none"> • Form and other controls • Variables • Constant 	3	
	10	Clean code <ul style="list-style-type: none"> • Correct layout (indentation) • No empty events 	2	
	11	Extra feature <ul style="list-style-type: none"> • The suggested extra feature is relevant. • The suggested extra feature provides value to the application. 	3	
Total			30	

10% of total course mark