

Faculty of Commerce and Administration

School of Information Management

**ELCM 351 Advanced Internet Design and
Development**

Trimester One 2008

COURSE OUTLINE

Contact Details

Course Coordinator/Instructor

Dr. William Yu Chung Wang

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Senior Tutor

Ms. Xiaoyi Guan

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Workshop Tutor

TBA

(Please make an appointment if you wish to see any of the staff involved in this course.)

Notes

- Please contact the Senior Tutor (Xiaoyi Guan) if you have any enquiries regarding administration of the course. Xiaoyi Guan is responsible for the day-to-day administration of the course, including:
 - record keeping and administrative queries
 - assessment queries
 - workshop attendance, illness, due dates, etc.
- All questions about software applications and the practical techniques of building pages should be directed to the lab instructors/tutors of the course, during the workshop.
- If you have questions about lecture content or readings, please raise them with the Lecturer during lecture sessions on Fridays. The Lecturer will generally be happy to answer questions during lectures (if time permits) or afterwards.

- All queries related to project submissions, extensions, project/test remarking, and lab and workshop allocations should be directed to Xiaoyi Guan in the first instance.

Class Times and Room Numbers

LECTURES (2 hours/week) **MC LT102**

Wednesday 4.10- 6:00 pm

WORKSHOPS (2 hours/week) **MY201**

The workshop timeslots will be announced in the Blackboard
(Sign-up and attend one workshop only)

Course Objectives

This course introduces the advanced principles, theory and practice of Web application design and development. Students will learn the advanced techniques of creating, managing and delivering integrated information for e-business applications.

At the conclusion of this course students will:

1. Understand the concepts of Web architecture and design.
2. Understand the technologies required to design and develop Web-based applications.
3. Be able to develop, test and deploy Web applications with multimedia content, including the required forms to allow user interaction with the data objects.
4. Have an understanding of how server-side script and components allow flexible production of web pages on demand to suit user requests.
5. Be able to connect the Web pages to a database file or server that allows the user to view and update data.
6. Understand the concepts of Internet security and multimedia in e-business applications.
7. Understand the future trends in modern e-business application development.

This course assumes some prior programming experience. It also assumes knowledge of some fundamental database principles.

Students are expected to complete the weekly workshop exercises in order to apply the theories and concepts taught during lectures. This will help them to work on their project work. The project is aimed at testing the students in applying the design principles for Web applications (Part 1) and the ability to develop, test and deploy them (Part 2). The two class tests (conducted during lectures L6 and L10) evaluate students' understanding of the principles, theories and technologies of Web application design and development.

Prerequisite

Students are expected to have passed, and be familiar with the material from ELCM251 (or INFO202 prior to 2006).

Restrictions

You may not be enrolled in ELCM351 if you have already passed ELCM302.

Course Content

Schedule

Date	Lecture/ Workshop	Topic	Evaluation/ Deliverables
WEEK 1			<i>Participation 10%</i>
27 Feb	Lecture 1	Introduction to Web Programming and Course Outline	
	<i>Reading</i>	Chapter 1 (Textbook)	
	Workshop	No Workshop	
WEEK 2			
5 March	Lecture 2	Web Architecture and Web Design	
	<i>Reading</i>	Chapters 1 & 2 (Textbook); Chapter 1 (Workbook)	
	Workshop 1	An Introduction to ASP.NET Web Programming	
WEEK 3			
12 March	Lecture 3	Developing Web Applications	
	<i>Reading</i>	Chapters 2 & 3 (Textbook); Chapter 2 (Workbook)	
	Workshop 2	Designing a Web Application + Understanding your Project	
WEEK 4			
19 March	Lecture 4	Datasets and Cookies	
	<i>Reading</i>	Chapter 4 (Textbook); Chapter 3 & 4 (Workbook)	
	Workshop 3	Develop a Multi-Page Web Application / Using Datasets and Cookies	
WEEK 5			
26 March	Lecture 5	Working with Server Controls / Testing and Debugging Web Applications	
	<i>Reading</i>	Chapter 5 & 7 (Textbook); Chapter 5 (Workbook)	
	Workshop 4	Testing and Debugging an ASP.NET Application + Project Part1	
WEEK 6			
2 April	Lecture 6	MID TERM TEST 1 (20%)	
	<i>Reading</i>	Chapter 1 -7	
	Workshop 5	Submission of Project – Part 1	Project Part 1 5pm (30%)
WEEK 7			
9 April	Lecture 7	Using Validation Controls and Managing State	
	Reading	Chapters 8 & 9 (Textbook); Chapter 7 (Workbook)	
	Workshop 6	Working with Server Controls	

14/04 – 27/04		Mid-trimester break	
Date	Lecture/ Workshop	Topic	Evaluation/ Deliverables
WEEK 8			
30 April	Lecture 8	Working with Databases	
	<i>Reading</i>	Chapters 11 & 12 (Textbook); Chapter 8 & 9 (Workbook)	
	Workshop 7	Using Validation Controls and Managing State	
WEEK 9			
7 May	Lecture 9	Advanced Data Manipulations / Multimedia in Web Applications	
	<i>Reading</i>	Chapters 13&14 (Textbook); Chapter 12 (Workbook)	
	Workshop 8	Working with Relational Databases and ADO.NET	
WEEK 10			
14 May	Lecture 10	Securing and Deploying a Web Application	MID TERM TEST 2 (20%)
	<i>Reading</i>	Chapters 15&20 (Textbook); Chapter 13&14 (Workbook)	
	Workshop 9	Advanced Data Manipulations	
WEEK 11			
21 May	Lecture 11	Future Trends and Course Review	
	<i>Reading</i>	TBA	
	Workshop 10	Completing Your Project Part 2	Project Part 2 5pm (30%)
27 May		Submission of Project – Part 2: Due 5:00pm	
WEEK 12			
28 May	Lecture 12	Project Part 2 Demo and Evaluation	Project Part2 Demo (30%)
	Workshop 11	Project Part 2 Demo and Evaluation	Project Part 2 Demo (30%)

Expected Workload

You are expected to devote a total of 12 hours per week for this course. This is an average workload, and the workload will vary from week to week during the trimester.

Attendance: Students are expected to attend all lectures and workshops and to complete the recommended readings, weekly.

Readings

Lecture Text Book (Suggested to buy – MATERIAL REQUIRED for lab exercises): Doug Lowe and Anne Prince (2003). Murach's ASP.NET Web Programming with VB.NET; Mike Murach & Associates. ISBN 1-890774-20-0.

Workshop Reference (Available online): Student Workbook for Murach's ASP.NET Web Programming with VB.NET (2004); Mike Murach & Associates. Available as a PDF file in Blackboard (Downloaded from <http://www.murach.com/books/vasp/download.htm>).

Materials and Equipment

Students are expected to have the following for each workshop:

- A computer account by the 1st week of the term
- An USB drive/ CD to save all work
- Have read the chapter(s) and workshop materials prior to their allocated workshop time so that you are ready to begin work as soon as you arrive
- **Your text book, student workbook and copies of the exercises posted on Blackboard must be brought to the lab.**

Assessment Requirements

The assessments are tied with the topics covered during lectures and workshops.

<u>Assessment Components</u>	<u>%</u>	<u>Note</u>
Course Participation	10	
Tests (Two x 20 marks)	40	Conducted during lectures: L6 & L10
Project – Part 1	20	
Project –Part 2	30	Deadline:TBA
TOTAL	100	

There is no final exam.

Project: The project consists of two phases – the design phase (Part 1) and the implementation phase (Part 2) of a specific Web application. The complete details will be made available in the assignment document (released in the Lecture).

Tests: There will be 2 tests (multiple choices mostly) conducted during lectures L6 and L10. Unless otherwise stated, all material covered during the course will be assessable. Details will be advised closer to the date.

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 CD or USB drive, for example). You should upload “work in progress” to your course web-site regularly.*
- *Do not leave submitting your work to the last minute – technology problems do occur (especially on the day an project is due). Be smart and submit it in plenty of time. Extensions will not be granted due to problems with submitting work.*
- *Working together – You are encouraged to discuss aspects of your projects with others. I would like to see the synergy of group work as well as the evidence of your individual output in the project.*

Assessment Submission

The Project Part 1 will be submitted as a hardcopy at the Tutor Locker (details would be announced in Blackboard). The Project Part 2 will be submitted as a softcopy to the SIM student S: drives. A protected directory will be made available for every student. You will be shown how to access the S: drives in your scheduled lab sessions.

An automatic 10% penalty per day will be applied to projects that are not submitted correctly, or that do not open correctly from the starting page, regardless of the circumstances. Project submission details will be covered in scheduled lab sessions.

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 day (within 24 hours) late. In the event of bereavement or prolonged illness affecting your ability to meet the deadline, discuss your situation with the Senior Tutor / Course Coordinator as soon as you are able to. You must verify your claim, e.g., produce a medical certificate. By doing so, you agree to the Senior Tutor seeking verification of your documentation. Extensions will only be granted under these conditions.

Plagiarism and Cheating

Plagiarism is not acceptable in any form by any university. Plagiarism takes many forms and includes:

- Submitting for one course, a piece of your own work which has been written or submitted for another course;
- Copying text, diagrams, images, or code directly from textbooks, the Internet, and other sources without using quotation marks or otherwise acknowledging your source.
- Not acknowledging the sources you have used in your work (i.e., you must cite all references);
- Deliberately copying another student's work.

Work, that shows evidence of plagiarism, will be penalised in line with the seriousness of the case. Minor breaches will result in lowered grades. Deliberate cheating will result in University academic disciplinary procedures being invoked with possible expulsion from the course.

Responsibilities for Practicum Arrangements

Workshop Allocation Procedure

Sign-up sheets for each time slot will be available on Blackboard. You must sign up for the workshop sessions yourself in the first week. Please contact **Xiaoyi Guan** if you have not signed up at that time. Detailed instructions for signing up your workshop sessions will be announced on Blackboard and discussed at the first lecture. You must select a time slot that fits your timetable and enter your name on only one of the lists provided. Once you have been allocated to a workshop, it is your responsibility to know where and when your workshop is scheduled.

Warning

- * Make sure you bring your personal timetable with you, so that your selected workshop time does not clash with other classes. It will not be easy to change your selection once accepted.
- * If your name appears on more than one workshop list, the Senior Tutor reserves the right to put you in the workshop of his choice.
- * Each workshop can take up to 50 students. When a list is full, it is removed from circulation. As the names are entered on a first-come-first-served basis, it is strongly recommended that you attend to this early, otherwise you may be allocated to a less desirable time slot.
- * If you have any serious problems about the allocations, see the Senior Tutor.

Lab Access

Information Systems and Electronic Commerce students have access to a range of computer lab facilities. This means that you can still undertake this course even if you don't have a computer at home.

Like all university students you are able to use any SCS computer lab throughout the University (this includes labs in the Murphy building, the Library and in the Law School) as long as you have a current SCS account. If you don't have a current SCS account, contact either of the SCS helpdesk in the library or the Murphy building.

In addition, INFO and ELCM students have access to the purpose built school lab MY201. This lab is located on the second floor of the Murphy building. **Please note that specialist software found in the SIM labs is not available in all the SCS labs.**

There are two kinds of lab access provided for this course:

- 1) Scheduled lab sessions: Lab supervisors will be in attendance, and formal instruction that is a part of the course requirements will be offered during these scheduled sessions. At other times during the scheduled sessions, you will have the opportunity to work independently, and a lab supervisor will be available to assist you and to answer questions. This is your main opportunity to obtain technical help. Your lab supervisors are not obliged to assist you if you have not attended your scheduled sessions. Lab attendance is not compulsory but will be regularly monitored.
- 2) Ad-hoc access: The lab offers 24-hour access via student ID cards unless booked for another class. Students should check the booking schedules on the lab doors before entering a laboratory to ensure
 - (a) they are not interrupting a class and

- (b) they can finish their work before the next scheduled class. You may be asked to leave by the lab supervisor if the machine you are using is required for a scheduled class.

Mandatory Course Requirements

To pass this course, students must have:

1. correctly enrolled in the course
2. participate in at least 7 out of 10 lectures/workshops
3. attained a weighted average over all assessments of at least 50% - there is no final exam.

Workload

You are expected to devote a total of 12 hours per week to this course. This is an average workload, and the workload will vary from week to week during the trimester.

Attendance

Students are expected to attend all lectures and workshops and to complete the recommended readings, weekly.

Communication of Additional Information

All formal notices relating to this course will be posted on the Blackboard system, <http://blackboard.vuw.ac.nz>. You are expected to check for announcements on Blackboard on a regular basis. Please contact the Senior Tutor in order to have a user ID and a password to log in.

Faculty of Commerce and Administration Offices

Railway West Wing (RWW) - FCA Student and Academic Services Office

The Faculty's Student and Academic Services 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. To check for opening hours call the Student and Academic Services Office on (04) 463 5376.

Easterfield (EA) - FCA/Education/Law Kelburn Office

The Kelburn Campus Office for the Faculties of Commerce and Administration, Education 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 is available for the following:

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

To check for opening hours call the Student and Academic Services Office on (04) 463 5376.

General University Policies and Statutes

Students should familiarise themselves with the University's policies and statutes, particularly the Assessment Statute, the Personal Courses of Study Statute, the Statute on Student Conduct and any statutes relating to the particular qualifications being studied; see the Victoria University Calendar or go to www.vuw.ac.nz/policy.

For information on the following topics, go to the Faculty's website www.vuw.ac.nz/fca under Important Information for Students:

- Academic Grievances
- Academic Integrity and Plagiarism
- Student and Staff Conduct
- Meeting the Needs of Students with Impairments
- Student Support

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. The University defines plagiarism as follows:

The presentation of the work of another person or other persons as if it were one's own, whether intended or not. This includes published or unpublished work, material on the Internet and the work of other students or staff.

It is still plagiarism even if you re-structure the material or present it in your own style or words.

Note: It is however, perfectly acceptable to include the work of others as long as that is acknowledged by appropriate referencing.

Plagiarism is prohibited at Victoria and is not worth the risk. Any enrolled student found guilty of plagiarism will be subject to disciplinary procedures under the Statute on Student Conduct and may be penalized severely. Consequences of being found guilty of plagiarism can include:

- an oral or written warning
- cancellation of your mark for an assessment or a fail grade for the course
- suspension from the course or the University.

Find out more about plagiarism, and how to avoid it, on the University's website: www.victoria.ac.nz/home/studying/plagiarism.html

Manaaki Pihipihinga Programme

Manaaki Pihipihinga is an academic mentoring programme for undergraduate Māori and Pacific students in the Faculties of Commerce and Administration, and Humanities and Social Sciences. Sessions are held at the Kelburn and Pipitea Campuses in the Mentoring Rooms, 14 Kelburn Parade (back courtyard), Room 109D, and Room 210, Level 2, Railway West Wing. There is also a Pacific Support Coordinator who assists Pacific students by linking them to the services and support they need while studying at Victoria. Another feature of the programme is a support network for Postgraduate students with links to Postgraduate workshops and activities around Campus.

For further information, or to register with the programme, email manaaki-pihipihinga-programme@vuw.ac.nz or phone (04) 463 5233 ext. 8977. To contact the Pacific Support Coordinator, email pacific-support-coord@vuw.ac.nz or phone (04) 463 5842.