



School of Information Management

ELCM 351 ADVANCED INTERNET DESIGN AND DEVELOPMENT

Trimester One 2010

COURSE OUTLINE

Names and Contact Details

Role	Name	Room	Phone	E-mail
Course Coordinator	A/Prof Sebastian Link	EA 214	463 6813	Sebastian.Link@vuw.ac.nz
Lecturer	Dr Flavio Ferrarotti	EA 236	463 6857	Flavio.Ferrarotti@vuw.ac.nz
Senior Tutor	Ms Xiaoyi Guan	EA 111	463 6998	Xiaoyi.Guan@vuw.ac.nz

Sebastian is the Associate Professor of e-Commerce at the School of Information Management and also a member of the Centre for Logic, Language and Computation. His main research interests focus on conceptual modelling, database design and theory, XML, and their applications to e-Commerce.

Flavio is a Postdoctoral Fellow at the School of Information Management. His main research interests focus on database systems and their foundations. Flavio has extensive experience in developing Web and e-Commerce applications.

All questions related to the content of this course should be directed to either Sebastian or Flavio. They are happy to answer relevant questions during or after lectures, via e-mail or in face-to-face meetings.

Please contact Xiaoyi if you have any enquiries regarding the administration of this course, including:

- record keeping and administrative queries,
- assessment queries, illness and extensions,
- workshop allocation and attendance, due dates, etc.

Questions about software applications and the practical techniques of building pages should be directed to the workshop instructors of the course, during the workshop.

Trimester Dates

The first trimester of 2010 commences on Monday 01 March 2010, and concludes on Sunday 06 June 2010 (inclusive). The mid-trimester break starts on Monday 05 April and ends on Sunday 18 April.

Withdrawal from Courses

Information regarding late withdrawals with permission of the Associate Dean (Students) is available at the following URL:

<http://policy.vuw.ac.nz/Amphora!policy.vuw.ac.nzPOLICY000000001743.pdf>

Information regarding the withdrawal from this course is available at the following URL:

<http://www.victoria.ac.nz/home/admisenrol/payments/withdrawlsrefunds.aspx>

Class Times and Room Numbers

- LECTURES: Wednesdays, 11:00-12:50pm, Hugh Mackenzie LT104
- WORKSHOPS: 2hours in each of the weeks2-11, times and venues will be announced on Blackboard during the first week of lectures

Course Content

A tentative schedule of lectures, readings and assessment components is illustrated in the following table. Notice that the course coordinator reserves the right to make changes during the trimester.

Week Date of lecture	Topics Readings	Complete project thread of
1 03 March	Introduction to the course Introduction to E-commerce applications Reminder: HTML and CSS <i>Chapters 1, 2; Appendix A</i>	Chapter 1
2 10 March	Forms and Form validation JavaScript <i>Chapter 3</i>	Chapter 2
3 17 March	CGI Programming Chapter 4	Chapter 3
4 24 March	Dynamic HTML <i>Chapter 5</i>	Chapter 4
5 31 March	Processing Forms <i>Chapter 6</i>	Chapter 5 submission for feedback
2 Weeks of Mid-trimester Break		
6 21 April	Test 1 during lecture Maintaining State <i>Chapter 7</i>	Chapter 6
7 28 April	Cookies Site Preferences <i>Chapter 8</i>	Chapter 7
8 05 May	Modules and E-mail utilities <i>Chapter 9</i>	Chapter 8
9 12 May	The Data Tier Database interfacing <i>Chapter 10</i>	Chapter 9
10 19 May	Regular expressions <i>Chapter 11</i>	Chapter 10
11 26 May	Searching in E-commerce applications <i>Chapter 12</i>	due date for project: Friday 28 May
12 02 June	Test 2 during lecture Summary <i>Chapter 13</i>	

Course Learning Objectives

E-commerce is aimed at enhancing the competitiveness of an organization by deploying innovative information and communication technology throughout an organisation and beyond, through links to partners and customers.

This course builds on ELCM 251 -Introduction to Internet Design and Development -and continues to teach the technical and practical skills required for designing, programming and administering dynamic e-commerce enabled websites. In this rapidly evolving field both e-commerce developers and managers must have an in-depth understanding of current web programming languages and the latest database techniques.

The main objective of this course is to convey the core theoretical concepts central to Web applications. This approach facilitates the students' understanding of how HTML, JavaScript, a server-side programming language, and databases work together to enable three-tier Web applications. It further demonstrates that the core concepts do not rely upon a particular programming language or environment.

A solid foundation in the core fundamentals leaves the successful student armed to apply that knowledge easily in diverse environments. It is not the aim of this course to teach you how to use a certain tool since this will only adept you with that tool. Instead, you will be taught a craft such that you can adeptly apply whatever your future tool will be.

More specifically, at the conclusion of this course students should be able to:

LO1: describe the concepts of Web architecture and design.

LO2: use the technologies required to design and develop Web-based applications.

LO3: develop, test and deploy Web applications with multimedia content, including the required forms to allow user interaction with the data objects.

LO4: explain how server-side script and components allow flexible production of web pages on demand to suit user requests.

LO5: connect Web pages to a database file or server in order to allow the user to view and update data.

LO6: apply the concepts of Internet security and multimedia in e-business applications.

LO7: summarise and discuss the future trends in modern e-business application development.

Course Delivery

The delivery style of this course allows you to put into practice in the workshops the skills you are learning during the lectures and from the textbook. Two class tests (conducted during lectures L6 and L12) will evaluate your understanding of the core principles that underly modern E-commerce applications. The project thread will test your ability to implement E-commerce applications in a real environment. At the end of the course you should have the skills required of a professional Website developer, and the confidence to put your skills into practice in the workplace. There is no final exam for this paper.

Expected Workload

You are expected to devote a minimum of 12 hours a week to this course. This is an average, and the workload is likely to vary from week to week during the trimester. As a guide you may choose to spend the following time on the following course components:

Lectures	2 hours
Workshops	2 hours
Reading & Understanding Course Notes and Reading Material	4 hours
Exercises & Project thread	<u>4 hours</u>
	12 hours

Note that students are expected to attend all lectures. *Failure to do so will, most likely, limit your ability to perform well in any of the assessment components.*

It is strongly recommended to work on the project thread continuously. A timely completion of your work on the project will allow you to focus exclusively on the preparation for the second class test.

Readings

The following textbook is mandatory to buy (available at Vicbooks www.vicbooks.co.nz):

Craig Knuckles, David Yuen (2005). *Web applications - Concepts & Real World Design*. John Wiley. ISBN: 0-471-20458-7.

The following textbook is prescribed textbook for ELCM251 - Introduction to Internet Design and Development. The book covers the background material that is needed for ELCM351. Terry Felke-Morris (2009). *Web Development & Design Foundations with XHTML*. Edition

4. Pearson. ISBN-13: 978-0-321-53019-6. ISBN-10: 0-321-53019-5.

Materials and Equipment

- Lectures:
Students are expected to prepare for lectures by reading the relevant book chapters in advance. The chapters must be reviewed again after the lectures. Each chapter of the textbook contains exercise questions that help to validate and deepen your knowledge of the subject. It is recommended to attempt answers to all these questions. This will result in an excellent preparation for the class tests and the project thread.
- *Workshops and Project Thread:*
The time in the workshops is mainly used to make progress on your project thread as described in the textbook. You are expected to have read the relevant chapter and the instructions for the project thread prior to the allocated workshop time so that work can start as soon as you arrive. Please double-check that you do have a valid computer account. You must use the **ELCM351 Virtual PC** environment to work on your project. This environment can be accessed in any SIM Lab, i.e., in MY-201, MY-211 and MY-219. Your project will be marked after the due date based on the content you provide in this environment. Apart from the feedback during the workshop hours you will also have the opportunity to ask for feedback on the work you have done prior to the mid-trimester break. The software required for the project thread is provided within the ELCM351 Virtual PC environment. Note the **Reset button** which will delete all your work in case you confirm to reset your ELCM351 Virtual PC environment. It is your responsibility to use this button with caution. Claims that you have accidentally pressed the reset button will not be considered. You can also install the software on your own computer by

following the guides that are made available to you. However, no technical support will be provided for issues that relate to your own computer.

Assessment Requirements

The assessment is based on the following individual components:

Assessment Component	Date and time	Learning objectives	Contribution to Final Grade
Class test 1	21 April,	LO1, LO2, LO3,	30%
Project thread	11:00am-12:00pm	LO4 LO2, LO3,	40%
Class test 2	28 May, 05:00pm (due)	LO5, LO6 LO4,	<u>30%</u>
	02 June,	LO5, LO6, LO7	100%
	11:00am-12:00pm		

The two *class tests* will be conducted during the first hour of lectures in week 6 and week 12, respectively. Unless otherwise stated, all material covered up to the week prior to the class test can potentially be assessed. Details will be advised closer to the date.

For the *project thread* you will work on constructing a Web site where a description of, and link to, all applications created are collectively added to a homework page within your ELCM351 Virtual PC environment. The project thread runs throughout the course. At the end of each textbook chapter you will find detailed instructions about the project thread. You are expected to complete all the instructions for the project thread described in Chapter 1 through to and inclusive of Chapter 10. After the due date, the contents of your ELCM351 Virtual PC environment will be marked for the quality of the functionality, code and documentation that you provide. A detailed marking sheet will be made available to you at the beginning of the course.

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.

Examinations

There is no final exam.

Penalties

Access to the ELCM351 Virtual PC environment will only be granted until the deadline of the project thread. In fairness to other students, project threads submitted outside your ELCM351VirtualPCenvironment will not be accepted. It is your responsibility to complete the project thread in time within your ELCM351 Virtual PC environment. For the same reason, failure to sit the class tests will automatically result in zero marks for the test.

In the event of bereavement or prolonged illness affecting your ability to meet the project deadline or sit the class tests, discuss your situation with the 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 course coordinator seeking verification of your documentation. Extensions to the project thread or alternative arrangements for a test will only be granted under these conditions.

Practicum Arrangements

Workshop Allocation Procedure

Sign-up to your workshop slot will be available on the sign-up system:

<https://signups.victoria.ac.nz>

You must sign up for the workshop sessions yourself in the first week. Please contact Xiaoyi if you have not signed up at that time. 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.

Hints

- Make sure you consult your personal timetable, 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 her choice.
- Each workshop slot can take up to 28 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 do not 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 do not have a current SCS account, contact either of the SCS helpdesk in the library or the Murphy building. However, the ELCM351 Virtual PC environment is not accessible from the SCS labs.

In addition, INFO and ELCM students have access to the purpose built school lab MY-201. 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:

- a) Scheduled workshop sessions: Workshop supervisors will be in attendance and available to assist you and to answer questions. This is your main opportunity to obtain technical help. Your workshop supervisors are not obliged to assist you if you have not attended your scheduled sessions. Workshop attendance is not compulsory but will be monitored.
- b) 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 they are not interrupting a class and 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

Students must meet the following requirements in order to pass the course:

- be correctly enrolled in the course, and
- obtain at least 50 percent of the maximum number of available marks.

As pointed out before, your attendance of lectures is required to perform well in all the assessment components of this course.

Class Representative

A class representative will be elected in the first lecture. The name and contact details of the representative will be 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 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.

Use of Turnitin

Student work provided for assessment in this course may be checked for academic integrity by the electronic search engine (<http://www.turnitin.com>). Turnitin is an on-line plagiarism prevention tool which compares submitted work with a very large database of existing material. At the discretion of the Head of School, handwritten work may be copy-typed by the School and subject to checking by Turnitin. You are strongly advised to check with your course coordinator if you are uncertain about how to use and cite material from other sources. Turnitin will retain a copy of submitted materials on behalf of the University for detection of future plagiarism, but access to the full text of submissions will not be made available to any other party.

For the following important information follow the links provided:

Academic Integrity and Plagiarism

www.victoria.ac.nz/home/study/plagiarism.aspx

General University Policies and Statutes

www.victoria.ac.nz/home/about/policy

AVC(Academic) Website: information including Conduct, Academic Grievances, Students with Impairments, Student Support

www.victoria.ac.nz/home/about/victoria/avcacademic/Publications.aspx

Faculty of Commerce and Administration Offices

www.victoria.ac.nz/home/fca/studenthelp/

Manaaki Pihipihinga Programme

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