

# School of Information Management

# ELCM 251 Introduction to Internet Design and Development

Trimester Two, 2014

# **COURSE OUTLINE**

## Names and Contact Details

	Staff	Room	Email & Telephone	Office Hours
Course Lecturer & Coordinator	Pedro Antunes	RH526	pedro.antunes@vuw.ac.nz 04 463 5525	Send email to arrange an appointment.
Senior Tutor	Weiwei Li	RH502	weiwei.li@vuw.ac.nz 04 463 6998	

## **Trimester dates**

From Monday 14<sup>th</sup> July to Friday 17<sup>th</sup> October.

#### Withdrawal from Course

- 1. Your fees will be refunded if you withdraw from this course on or before Friday 25<sup>th</sup> July 2014.
- 2. The standard last date for withdrawal from this course is Friday 26<sup>th</sup> September 2014.

After the date stated in 2, 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.

## **Class Times and Room Numbers**

ſ	Lecture times	Lecture Room	
	Friday, 12:40 - 14:30	RHLT2	

## **Course Delivery**

This course involves theory and practice of User Experience (UX) through:

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

The course is delivered over 12 weeks of work. Each week consists of a 2-hour lecture and a 1-hour workshop.

## **Group Work**

You are encouraged to discuss and share aspects of assignment work with others. However, when it is time to submit your assignment, the materials you use must be entirely your own.

## Expected Workload

This is a 15-point course. One point should equate to 10 hours of work, which means a total of 150 hours for a 15-point course. Each week, students are expected to spend about:

- 2 hours in the lecture
- 4 hours preparing for the lecture
- 1 hour in the workshop
- 2 hours preparing for the workshop
- 3-5 hours preparing the course assignments

## Prescription

An introduction to principles of good website design in e-business applications. This course gives students initial experience in developing practical end-to-end web-based information systems appropriate for supporting modern e-businesses applications.

## **Course Learning Objectives**

CLO	On completion of this course students should be able to	
1	Create and refine website and application designs based on industry's usability standards	
2	Conceive, specify, prototype, and evaluate design artefacts addressing the business case and	
	the user experience requirements	
3	Assess the suitability of various design principles for websites and applications	
4	Apply the skills necessary for large-scale project development on the Web	
5	Apply the technologies required to design and prototype Web-based information systems	

#### **Relationships to Assessment Items**

Item	CLO
Personas	2
Essential use cases	2
Low-fidelity prototype	2,4,5
High-fidelity prototype	1,4,5
Demo	4
USE questionnaire	3
Mid course test	1,2,3
Final test	1,2

## **Course Content**

See Weekly Schedule.

## Readings

Required reading:

• The UX Book - Process and Guidelines for Ensuring a Quality User Experience. Rex Hartson, Pardha Pyla. Elsevier Science & Technology. 2012. 978-0-12-385241-0.

Other suggested readings:

- Universal Principles of Design, Revised and Updated: 125 Ways to Enhance Usability, Influence Perception, Increase Appeal, Make Better Design Decisions, and Teach through Design. William Lidwell, Kritina Holden, Jill Butler. Rockport Publishers. Second Edition (2010). ISBN: 9781592535873.
- The Design of Everyday Things. Don Norman. Basic Books. First Edition (2002).

## **Materials and Equipment**

Students should use the computer labs provided by SIM for this course. The computer labs are open from 8am to 8pm each day every day, and are accessible by swipe card if you are enrolled at SIM. The software you need to complete workshops and assignments is provided on these machines. You will be able to work on your own computer but note that the <u>demo sessions will have to use SIM's computers</u>. Details about installing course related software on personal computers are provided on Blackboard.

NOTE: VUW cannot support your personal computer or any course related software installed on it even if it is supplied by VUW. If you do work on your own computer you <u>must</u> test your work on SIM's lab computers before submitting your assignments.

## Assessment

From Trimester 1, 2014, a revised Assessment Handbook will apply to all VUW courses: see <a href="http://www.victoria.ac.nz/documents/policy/staff-policy/assessment-handbook.pdf">http://www.victoria.ac.nz/documents/policy/staff-policy/assessment-handbook.pdf</a>.

In particular, there will be a new grade scheme, in which the A+ range will be 90-100% and 50-54% will be a C-.

#### Assessment Items

	Item <sup>1)</sup>	Weight
	Personas	5%
	Essential use cases	5%
Accianmonto	Low-fidelity prototype	15%
Assignments	High-fidelity prototype	25%
	Demo	5%
	USE questionnaire	5%
Tests	Mid course test (50 min.)	20%
16313	Final test (50 min.)	20%

NOTES: 1) Due dates are described in the Weekly Schedule.

**Assignments.** Students will accomplish several assignments related to the development of a commercial website prototype using principles, recommendations and best practices established by User Experience (UX). Students will be involved in the full lifecycle of interactive website development, from user-requirements to final evaluation:

- The development of <u>personas</u> and <u>essential use cases</u> require analysing who will use the website and how the website prototype will be used, respectively.
- The low-fidelity prototype requires using Justinmind Prototyper, a graphical prototyping tool.
- The <u>high-fidelity prototype</u> requires developing a semi-functional website prototype using the HTML5 markup language and CSS.
- <u>Demo</u> sessions are intended to demonstrate and provide in-depth explanations about the high-fidelity
  prototype. Demo sessions will span the weeks indicated on the Weekly Schedule, and the available time
  slots will be announced on Blackboard. Students will have to signup for a time slot. A demo session is
  expected to take no more than 20 minutes.
- The <u>USE questionnaire</u> requires preparing an online questionnaire about the high-fidelity prototype and gathering responses from colleagues.

**Tests.** The tests are intended to evaluate theoretical knowledge related to UX and prototype development for the web. The <u>mid course test</u> will focus on UX, while the <u>final test</u> will focus on HTLM5 and CSS.

#### Grading Assignments

This course involves design—<u>this is very different from solving problems with correct answers</u>. During design, students decide on issues with no right answer, for which greater latitude of decision is assumed. For that reason the assessment of design usually involves the appreciation of a wide range of conflicting criteria. The mark allocation scheme is described in the assignment handouts. Nevertheless, consider that the quality of design will be primarily assessed using subjective criteria.

#### Scaling

To obtain a fair and consistent distribution of marks relative to assessment difficulty, scaling of marks (up or down) may be employed on some or all assessment items.

#### Penalties

Your assignments <u>must</u> be submitted before the deadlines specified in the Weekly Schedule. 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, and <u>after 5 working days (by 00:00) we will NOT accept the late submission</u>. The penalty is calculated based on the marks you achieve for the assignment. Penalties accrue each day at 00:00.

You must verify your claim when requiring an extension, e.g. produce a medical certificate. By submitting evidentiary documents to support your claim, you consent for the Course Coordinator to verify the authenticity of such documents by contacting the relevant parties. Extensions will only be granted under these conditions. You must also apply for extensions <u>before</u> the due date unless there is an exceptional circumstance warranting the relaxation of this rule.

In the event of bereavement or a prolonged illness affecting your ability to meet deadlines, discuss your situation with the Course Coordinator.

#### **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 submitted to Turnitin. A copy of submitted materials will be retained 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.

#### **Important Notes**

- Do not leave submitting your assignments to the last minute. Technology problems do occur, especially
  on the day an assignment is due. <u>Extensions will not be granted due to problems with submitting work</u>.
- Be careful to submit your assignments according to the given instructions. <u>Your work will not be marked</u> if the submission instructions are not followed.
- Ensure <u>compatibility</u> between the assignments developed with a personal computer and the software installed in SIM's labs.
- You are expected to back up your work. From time to time computer files are lost, computers crash, etc., so it is critical that you frequently back up your important files.
- You are encouraged to use on-line resources to help you learn and develop your assignments. However, when you include other's work within your own work (e.g. a piece of code provided by an online user group) you must acknowledge the source you used. You can place that acknowledgement in a comment within your work. 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.

#### **Examinations**

This course does not involve examinations. The final test for this course will be held on the 12<sup>th</sup> week of the trimester.

#### **Mandatory Course Requirements**

To pass the course, you must attend at least six workshops and get a sign-off.

#### Workshops

You will attend weekly workshops where you gain practical knowledge on UX principles and methods, and also work on your assignments. Workshops are not marked, but as stated above you are required to attend a minimum number of workshops and get a sign-off.

You are expected to work on the workshop exercises in your own time before the scheduled workshop time. The workshop sessions only allow time for discussing problems and getting feedback. Please note that workshops are also particularly important to get critical comments and suggestions on how to improve the quality of your assignments.

You must sign up for workshops by via <u>https://signups.victoria.ac.nz/</u>. The deadline for sign up is specified in the Weekly Schedule and announced on Blackboard.

When you have completed your participation in a workshop, a tutor will record a sign-off. Do not forget that you need to collect sign-offs.

If you cannot complete an assignment or sit a test or examination, refer to www.victoria.ac.nz/home/study/exams-and-assessments/aegrotat

## **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**

Email may also be used as a form of communication; hence it is vital that students check their email regularly. The University has provided each student with a student email address and all email correspondence will be sent to that email address. Should a student forward his/her email to another email provider, it is her/his responsibility to ensure that that forwarded mailbox is capable of receiving the emails. Students must check their student records and ensure the appropriate email address is set. You can do this through My Victoria  $\rightarrow$  Student records. Not receiving an email will not be a valid excuse for missing information.

<u>Email should not be used to ask questions about the course</u>. The Discussion Forum is a very useful tool to raise questions about the course, since other students can also see your question and the responses to it.

- Make sure you regularly check the Discussion Forum to see what has been asked and what has been answered.
- If you do not find the answer to your query, post your question on the Discussion Forum.
- If you think you know the answer to some other student's question, do not hesitate to post a response.
- Make sure that all questions are relevant to the course.
- The use of appropriate language is expected at all times. All students are expected to respect one another while using the Discussion Forum.

## Student feedback

Student feedback on University courses may be found at www.cad.vuw.ac.nz/feedback/feedback\_display.php

## Link to general information

For general information about course-related matters, go to <u>http://www.victoria.ac.nz/vbs/studenthelp/general-course-information</u>

## Note to Students

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 academic audit. The findings may be used to inform changes aimed at improving the quality of VBS programmes. All material used for such processes will be treated as confidential, and the outcome will not affect your grade for the course.

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# ELCM251 / T2 / 2014 — Weekly Schedule

NOTE: Small adjustments to this schedule may be accomplished to reflect the course dynamics. Such changes will be published on Blackboard.

Wk	L/W	Day	Торіс	Critical Actions
1	L	18/7 Course details and arrangements. User Experience, User Experience lifecycle (UX.2).		Ws sign up: Before Friday
				17:00.
	L	18/7	Eliciting user requirements: Contextual inquiry, contextual analysis, defining	
			user requirements (UX.3,4,5).	
			From user requirements to design: <b>Personas</b> , <b>essential use cases</b>	
			(UX.6,7).	
	-		No workshop.	
2	L	25/7	Design principles: Gestalt (UPD).	Submit personas and
	L	25/7	Design principles: Affordances (UX.20, UPD).	essential use cases:
	W		Developing personas and essential use cases.	Before Monday 00:00, on Blackboard.
3	L	1/8	Design heuristics: 80/20 rule, confirmation, control, flexibility-usability trade-	
			off, recognition over recall, form follows function, chunking, signal-to-noise- ratio, progressive disclosure (UPD).	
	L	1/8	Design thinking: Storyboarding, <b>low-</b> and <b>high- fidelity prototyping</b> (UX.7,8).	
	W		Developing low-fidelity prototypes.	
4	L	8/8	Design rules: Accessibility, performance load, performance versus preference (UPD).	
	L	8/8	Design rules: Fitts' law, Hick's law, law of Pragnanz, golden ratio (UPD).	
	W		Applying design principles.	
5	L	15/8	Design guidelines: Goals and action planning (UX.22).	Submit low-fidelity
	L	15/8	Design guidelines: Action, outcomes and assessment (UX.22).	prototype: Before Monday
	W		Applying design heuristics.	00:00, on Blackboard.
6	L	22/8	Mid-term test.	Mid-term test: during
	L	22/8	High-fidelity prototyping with HTML5: Elements, attributes and blocks.	lecture (at 12:40, unless a room
	W		Applying design guidelines.	is not available).

Wk	L/W	Day	Торіс	Critical Actions
7	L	29/8	HTML5: CSS.	
	L	29/8	HTML5: UI layout.	
	W		HTML5.	
8	L	19/9	HTML5: Forms.	
	L	19/9	HTML5: Javascript.	
	W		HTML5.	
9	L	26/9	Design evaluation: Rapid evaluation methods, wizard of Oz, design	
			walkthroughs, scenario based evaluation, guerrilla usability testing (UX.13).	
	L	26/9	Design evaluation: Usability inspection, heuristic evaluation (UX.13).	
	W		High-fidelity prototyping	
10	L	3/10	Design evaluation: Rigorous evaluation methods, formative/summative	Submit high-fidelity
			evaluation, think aloud protocol, <b>USE questionnaire</b> (UX.12).	prototype and USE
	L	3/10	Design evaluation: KLM evaluation, cognitive walkthrough, (UX.12).	questionnaire: Before
	W		Evaluation.	Monday 00:00.
11	L	10/10	Design production: Real-world constraints, production process, design	<b>Demos:</b> Select time slot for
			philosophies (UX.9).	20 min. demo.
	L	10/10	Design practice: Standards (UX.24).	
	-		No workshop. Demos.	Evaluate colleagues'
				prototypes: Before Monday
12	1	17/10	Design practice: Ethical issues (LIX 24)	00:00.
12			Design practice: Ethical issues (UX.24). Final test.	Final test: during lecture (at 12:40, unless a room is not
	L	17/10		- available).
	-		No workshop. Demos.	
				<b>Demos:</b> Select time slot for
				20 min. demo.
				Submit USE evaluation:
				Before Monday 00:00, on
				Blackboard.