



School of Information Management

INFO 246 – USER EXPERIENCE DESIGN

Trimester Two, 2016

COURSE OUTLINE

Prescription

Introduces fundamental principles, standards and best practices of human-computer interaction, usability and user experience. Advanced software tools enable students to create low-fidelity and high-fidelity userinterfaces for business websites and applications and covers the full lifecycle of user-interface design, from requirements specification to design, prototyping, and evaluation.

Course Learning Objectives

CLO	On completion of this course students should be able to
1	Use the fundamental principles, standards and best practices of human-computer interaction, usability and user experience
2	Recognise the cognitive principles and constraints involved in human-computer interaction
3	Apply a number of user experience design techniques necessary to specify user requirements, propose a design solution and develop a low-fidelity prototype of a user-interface
4	Apply a number of user experience design techniques to develop a high-fidelity prototype of a business website or application
5	Apply a variety of user experience evaluation methods, including both rapid and rigorous evaluation methods

Course Content

See detailed information in the Weekly Schedule.

Trimester Dates

From Monday 11th July –Sunday 16th October.

Withdrawal from Course

- 1. Your fees will be refunded if you withdraw from this course on or before Friday 22nd July 2015.
- 2. The standard last date for withdrawal from this course is Friday 23rd September.

After the date stated in 2, 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 or <u>online</u>.

	Staff	Room	Email & Telephone	Office Hours
Course Coordinator and Lecturer	Pedro Antunes	RH526	pedro.antunes@vuw.ac.nz 04 463 5525	Please email to arrange an appointment
SIM Undergraduate Support team	Anette Klaassen Duncan Inkster	RH521	simstudents@vuw.ac.nz 04 463 6998	Mon-Fri 10am-4pm or by appointment

Names and Contact Details

Class Times and Room Numbers

Lecture times	Lecture Room
Tuesday 16:40 - 17:30	RHLT1
Friday 16:40 - 17:30	RHLT1

Course Delivery

Teaching and learning will take place in the context of regular classes with discussions moderated through Blackboard and other technologies. Workshops in computing laboratories will provide the required experience with application development frameworks and languages.

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 hours working on assignments

Readings

Required readings:

• User Experience Design. Pedro Antunes. (Working draft. Covers the first half of the trimester)

Recommended readings:

- 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. (Highly recommended, costs \$20)
- 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.

Materials and Equipment

Students should use the computer labs provided by SIM for this course. The software tools you need to complete workshops and assignments are provided in the computer labs. The times for the main SIM labs (level 100-300) are: MY labs, 7 days 8am-8pm; RWW labs, idem, except Fridays 8am-6pm, Sundays 1pm-5pm, and Saturdays closed. The RWW labs are dictated by Commerce Library hours.

The software tools adopted by this course are (see note 1):

- Evolus Pencil (used to develop preliminary design / wireframing)
- Justinmind Prototyper (used to develop final design; see note 2)

NOTE 1: 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> be able to independently solve any installation or execution problems. Furthermore, assignments <u>must</u> be compatible with the software tools installed in SIM's labs.

NOTE 2: Justinmind Prototyper is installed in SIM's labs and is freely available on the web at http://www.justinmind.com for Windows and OS X operating systems. Note however the following important restrictions on using Justinmind Prototyper. For 30 days after first installation on a personal computer, Justinmind Prototyper runs the Pro version with advanced features, but after that period it reverts to the Free version, which has several limitations regarding the supported interactive features (basically, only one interactive feature can be used). SIM has a number of "special" registration keys providing access to Pro features for the period strictly necessary to complete the assignment on time, which can be applied at any time after install through the help menu "register key" option. These registration keys will be valid in the labs. SIM will be able to supply "special" registration keys for use in personal computers.

Assessment

The Assessment Handbook will apply to all VUW courses: see http://www.victoria.ac.nz/documents/policy/staff-policy/assessment-handbook.pdf.

Item ¹⁾		Expected workload	Marks	CLO	
Preliminary Personas		4 hours	10%	1	
design	Wireframes	8 hours	10%	2, 3	
Final design Prototype		20 hours	40%	2, 4	
	Evaluation	4 hours	10%	5	
Tests	·		15%+15%	1, 2	

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

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

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. A generic mark allocation scheme is described in the assignment handouts. Nevertheless, consider that <u>the quality of design will be primarily assessed using subjective criteria</u>.

Feedback

Design activities are predominantly conducted in an iterative way. During the iterations, feedback will be provided with **formative purposes**, upon request by the students. Summative feedback will mainly consist of pre-formatted/generic feedback comments.

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.

Extensions

Familiarise yourself with the assessment handbook regarding extensions. Extensions can only be granted in accordance to the conditions expressed in section 3.2.1 and further discussed in section 8 of the assessment handbook.

Personal extensions are granted only in special circumstances and supporting evidence such as a medical certificate may be requested by the course coordinator or SIM undergraduate support team.

Non-extendable assessments. For some work, such as: lab projects, case discussion preparation, and tutorial preparation there is no possibility of late submission as the opportunity for the work to be completed has already passed. The evaluation assessment item is a non-extendable assignment.

Penalties

Your assignments must be submitted before the deadlines specified in the Weekly Schedule. The penalty for late submission of work without a prior extension arrangement is a reduction of 10% of the available marks each calendar day, starting from the due date and time, up to 5 days after the due date. At the course coordinator's discretion, work handed in after 5 days may be assessed and feedback provided, but no grade will be assigned.

The abovementioned rules do not apply to the evaluation assignment, because the adopted evaluation method involves the peers and can only be done during the timeframe specified in the Weekly Schedule. In this specific case, the penalty for late submission of work without a prior extension arrangement is that no grade will be assigned.

Submissions <u>must</u> follow the specific instructions provided on Blackboard regarding: 1) repository where to upload electronic documents; 2) format of electronic documents; and 3) compatibility with software installed in SIM's labs. Failure to comply with these instructions will result in the inability to mark an assignment. At the course coordinator's discretion, corrections may be requested/supplied after the deadlines, but they will result in a penalty of reduction of 10% of the available marks.

Use of Turnitin

Student work provided for assessment in this course may be checked for academic integrity by the electronic search engine <u>http://www.turnitin.com</u>. 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. Extensions will not be granted due to problems with submitting work.
- 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, 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.

Mandatory Course Requirements

In addition to obtaining an overall course mark of 50 or better, students must

1) Attend at least six workshops and get a sign-off.

Any student who is concerned that they have been, or might be, unable to meet any of the mandatory course requirements because of exceptional personal circumstances, should contact the Course Coordinator as soon as possible.

Workshops

- You will attend weekly workshops where you gain practical knowledge necessary to work on 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 <u>before the scheduled workshop</u> <u>time</u>. 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 are also expected to learn for yourself how to use the software tools adopted by this course.
- You must sign up for workshops by via https://signups.victoria.ac.nz/. 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.

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

Students enjoyed the examples given in lectures. Though it was noted that slides could be more informative. An electronic book has been developed that covers most of the topics discussed in lectures in depth and with more examples. The book is offered to students in ibooks and pdf formats.

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 http://www.victoria.ac.nz/vbs/studenthelp/general-course-information

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.

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

Lec	tur	es (weeks/sessions)		
1	1	Introduction: Motivation, Topics of Interest, Main Design Activities (UXD 1)		
1	2	Users: Work Practices, Eliciting Data, Deciding on Users, Personas (UXD 2)		
2	1	Documenting the Design: Conceptual Frameworks, Storyboards, Wireframes (UXD 3)		
2	2	Interaction: Interaction Model, Gulfs of Evaluation and Execution, Mental Models (UXD 4)		
3	1	Gestalt: Figure-Ground, Good Figure, Proximity (UXD 5)		
3	2	Gestalt: Similarity, Closure, Good Continuation, Symmetry (UXD 5)		
4	1	Affordances (UXD 6)		
4	2	Heuristics: Recognition Rather Than Recall, Feedback, Visibility of System Status, Progressive Disclosure (UXD 7)		
5	1	Heuristics: Confirmation, User Control, Consistency, Flexibility-Usability Trade-Off (UXD 7)		
5	2	Heuristics: Efficiency-Thoroughness Trade-Off, Performance Load, Minimalism, Golden Ratio (UXD 7)		
6	1	Predicted Behaviour: Fitts' Law, Hick's law, Menu Performance, Chunking, KLM (UXD 8)		
6	2	(Test 1)		
7	1	Design Process: Process Model, Types of Artefacts, Real-World Constraints (UX 9)		
7	2	Prototyping (UX 11)		
8	1	Evaluation: Formative, Summative, Qualitative, Quantitative (UX 17)		
8	2	Rigorous Evaluation: Think Aloud Protocols, Questionnaires, KLM Evaluation, Cognitive Walkthrough (UX 12)		
9	1	Rapid Evaluation: Wizard of Oz, Usability Inspection, Heuristic Evaluation (UX 13)		
9	2	Rapid Evaluation: Design Walkthroughs, Scenario Based Evaluation, Guerrilla Usability Testing (UX 13)		
10	1	Design Paradigms (UX 7)		
10	2	Design Thinking (UX 7)		
11	1	Design Theory and Theory of Design		
11	2	Design of Business		
12	1	Ethics: Accessibility, Code of Conduct, Standards (UX 24)		
12	2	(Test 2)		

Bibliography: UXD - User Experience Design UX - The UX Book

Wo	Workshops (weeks)			
1	(none)	7	Heuristics	
2	Personas	8	Prototyping	
3	Wireframes	9	Evaluation	
4	Gestalt	10	Peer evaluation	
5	Affordances	11	Implementation support	
6	Heuristics	12	Implementation support	

Important deadlines (weeks)		Details (more specific instructions available on Blackboard)	
1			
2			
3	Submit personas	By Sunday, 31 Jul (23:59)	
4			
5	Submit wireframes	By Sunday, 14 Aug (23:59)	
6	Test 1	Friday 19 Aug (Lecture time, unless a room is not available)	
7			
8			
9	Share prototype with peers and issue evaluation questionnaire	By Sunday, 25 Sep (23:59)	
10	Peer evaluation	During workshops	
11	Submit evaluation report	By Sunday, 9 Oct (23:59)	
12	Test 2	Friday 14 Oct (Lecture time, unless a room is not available)	
	Submit prototype	By Sunday, 16 Oct (23:59)	