TE WHARE WĀNANGA O TE ŪPOKO O TE IKA A MĀUI

VICTORIA
UNIVERSITY OF WELLINGTON

School of Information Management

INFO222 MODERN SYSTEMS ANALYSIS

Trimester Two 2009

COURSE OUTLINE

Names and Contact Details
Lecturer & Course Coordinator
Lan Anh Tran
Easterfield Building EA 233
Tel. 04 463 6887
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Office hours: Wednesday between 11:00 and 13:00

Lecturer
Rob Hawthorne
rob.hawthorne@prophesy.co.nz
Office hours: To be announced.

Tutor - TBA

Trimester Dates
- **Teaching Period:** Monday 13 July to Friday 16 October 2009
- **End of Year Study Period:** Monday 19 October to Monday 26 October 2009
- **Examination Period:** Tuesday, 27 October to Saturday 14 November 2009

Note: Students who enrol in courses with examinations should be able to attend an examination at the University at any time during the formal examination period.

Withdrawal dates: Information available via
http://www.victoria.ac.nz/home/admisenrol/payments/withdrawlsrefunds.aspx

Class Times and Room Numbers
Lectures
Thursday 13:10 - 15:00, MY632

Computer lab workshops:
Workshops are held in weeks 3-11 in MY201. There are two slots of the workshop every week**:**

Monday: 9:00 – 11:00
Wednesday: 9:00 – 11:00

Workshop Allocation Procedure

Sign-up sheets for each available time slot will be available on Blackboard. You must sign up for the tutorials yourself in the first week, between <u>13 and 24 July</u>. Please contact the tutor if you have not signed up by that time. Detailed instructions for signing up are in the Discussion Board on Blackboard. You need to 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 group, it will be your responsibility to know when your tutorials and workshops are scheduled and where they are located.

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 Tutor reserves the right to put you in the workshop of her choice.
* Each workshop can take up to 35 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 do this <u>in the first week</u>, otherwise you may be assigned to a less desirable time slot.*
* If you have any serious problems with your assigned time slot, see the Lecturer.

Course Content

This course introduces students to the Unified Modeling Language (UML) for software engineering. It covers the concepts of object-oriented and component-based software design and development, and the major diagrams types of the UML model. Additionally, it includes knowledge and concepts associated with quality and quality assurance, verification, validation and testing, software project management, and teamwork.

Both lectures and workshops of the course will provide students with knowledge and skills in creating diagrams based on UML for designing a system/software within organizations. Furthermore, the course will increase students' understanding of the analysis and specification of business and user needs, and system requirements for organizations.

Timetable

	Lecture	Reading	Workshop
Week 1	Introduction to Software Engineering	1	No workshop
Week 2	Business Modeling and Use Case Models	7-8	No workshop
Week 3	Object-oriented Principles	2	Tutorial on System Specifications
Week 4	Class Models	5-6	Use Case Diagrams
Week 5	Activity and State Diagrams	11-12	Class Diagrams
Week 6	- Mid-term Review - Mid-term Test (1 hour)		Activity Diagrams
Week 7	Sequence and Communication Diagrams	9-10	State Diagrams
Week 8	Component and Deployment Diagrams	13	Sequence Diagrams
Week 9	Concepts of Reuse and Product Quality	18-19	Communication Diagrams
Week 10	Project Management and Quality Assurance	20	Deployment Diagrams
Week 11	Software Methodology: - Agile Methods - Extreme Programming - RUP	3-4	No workshop
Week 12	- Course Review, Summary, Conclusion - Final test (1 hour)		No workshop

Course Learning Objectives
On completion of this course, students will be able to:

understand the concepts of software engineering and object-oriented development.
use UML and its associated diagrams for basic software design.
model the process of system analysis and design.
analyse and specify business and user needs, and system requirements.
understand the concept of system quality and implement quality assurance when designing software.
implement the concept of software project management.
contrast the iterative, component-based development model (such as Agile methods and RUP, etc.) and a traditional waterfall approach.
design major types of UML diagrams such as use case, class, activity, state, and deployment diagrams, using Visual Paradigm software

Course Delivery
Lectures will be delivered every week in the lecture room MY632.

Workshops/tutorials will be carried out during weeks 2-10 in the lab MY201.

Expected Workload

Students are expected to spend 2 hours per week in class, 2 hours per week in tutorials/workshop exercises, and 3 to 4 hours per week on studying and reading.

Group Work

There is no group work.

Readings

- Stevens, P. and Pooley, R. (2006) *Using UML - Software Engineering with Objects and Components*. 2nd edition. Reading, Mass.: Addison-Wesley. Available at the VUW Book Store. Price: $110.5
- Additional readings will be announced on Blackboard during the course.

Materials and Equipment

- Students are required to bring their own headphones in order to listen to the video case for every workshop.
- Students are required to have the textbook during the course.
- Both mid-term and final tests are CLOSED BOOK tests. No aids other than hard-copy foreign language dictionaries are allowed. The use of unauthorized aids, including electronic aids of any kind, or any form of cheating, will lead to immediate failure of the test.

Assessment Requirements

	%	Due Date
Mid-term Test	40	20 August (1 hour)
Final Test	40	15 October (1 hour)
Tutorials/workshops	20	As indicated in workshop schedule
TOTAL	100	

Mid-term Test: This will be a 1-hour test held in the normal lecture theatre during the normal lecture time in week 6.

Final test: This will be a 1-hour test held in the normal lecture theatre during the normal lecture time in week 12.

Unless otherwise stated, all materials covered in the lectures, recommended readings, and workshops during the 12-week course will be assessable during the mid-term and final tests. Further details will be advised closer to the date.

Tutorial/Workshop: You will be given an assignment to complete each week during the tutorials/computer workshops. Your mark will be your attendance and participation of the 8 tutorials/workshops. You must show your tutor/lecturer the completed assignment during the workshop in the lab.

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 exam.

Penalties

Workshop participation must be signed-off by the tutor for your class. Late sign-offs will not be accepted (exceptions are made for documented medical and other emergencies).

Mandatory Course Requirements

To pass this course, students must have:

participated at least 6 workshops during the course
attained at least 50% of the mid-term test
attained at least 50% of the final test

Communication of Additional Information

Course information will be maintained on the VUW BlackBoard System. All students are required to access this at least twice per week. Email communication from students must be via their SCS email accounts. Email from other email accounts will be ignored.

Use of Turnitin (if applicable)

Student work provided for assessment in this course may be checked for academic intergrity 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. Turnitin will retain a copy of submitted materials on behalf of the University for dection of future plagiarism, but access to the full text of submissions will not be made available to any other party.

Academic Integrity and Plagiarism

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

General University Policies and Statutes

http://www.victoria.ac.nz/home/about/policy/academic.aspx

Faculty of Commerce and Administration Offices

http://www.victoria.ac.nz/fca/studenthelp/Contactus.aspx

Manaaki Pihipihinga Programme

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