TE WHARE WĀNANGA O TE ŪPOKO O TE IKA A MĀUI
VICTORIA
UNIVERSITY OF WELLINGTON

School of Information Management

INFO 234 - BUSINESS PROCESS DESIGN

Trimester One, 2015

COURSE OUTLINE

Names and Contact Details

	Staff	Room	Email & Telephone	Office Hours
Course Coordinator and Lecturer	Pedro Antunes	RH526	pedro.antunes@vuw.ac.nz 04 463 5525	Send email to arrange an appointment.
Course Lecturer	Yi-Te Chiu	RH412	yi-te.chiu@vuw.ac.nz 04 463 5689	Send email to arrange an appointment.
SIM Undergraduate Support team	Simon Park Lucia Sohn	RH531 RH502	simstudents@vuw.ac.nz 04 463 6998	Mon-Fri 10am-4pm or by appointment

Trimester Dates

Teaching Period: Monday 2nd March – Friday 5th June
Study Period: Monday 8th June – Thursday 11th June
Examination Period: Friday 12th June – Wednesday 1st July (inclusive)

Withdrawal from Course

1. Your fees will be refunded if you withdraw from this course on or before Friday 13th March 2015.
2. The standard last date for withdrawal from this course is Friday 15th May.

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 online.

Class Times and Room Numbers

Lecture times	Lecture Room
Monday & Friday, 15:40 – 16:30	RHLT1

Course Delivery

Teaching and learning will take place in the context of regular classes with discussions moderated through Blackboard and other technologies. Computer based workshops will allow access to the software tools needed to complete the modelling and simulation projects.

Group Work

This course does not require 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

This course will explore the role and potential of IT to support business process management and design. Students learn a modern business process modelling technique, apply that to designing an improved business process, then test and evaluate their proposed design using simulation software.

Course Learning Objectives

CLO	On completion of this course students should be able to
1	Assess the role and potential of IT to support business process management
2	Use a contemporary formal process modelling technique
3	Design improved business processes
4	Use simulation software to evaluate and develop business processes

Course Content

See detailed information in Weekly Schedule.

Readings

Required reading:

- Dumas, M., La Rosa, M., Mendling, J., & Reijers, H. A. (2013). Fundamentals of Business Process Management. Heidelberg, Germany: Springer ($138.95 from VicBooks).

Other suggested readings:

- Business Process Model and Notation (BPMN). Version 2.0. OMG. 2011. (http://www.omg.org/spec/BPMN/2.0/)

Materials and Equipment

Students should use software available in 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 workshop exercises and assignments is provided on these machines.

The software adopted by this course is:

- Bizagi Modeler (http://www.bizagi.com/)

Bizagi Modeler is a freeware tool that runs exclusively on Microsoft Windows, although it can be used on Mac OS X through virtualisation. You will need to use Bizagi Modeler to develop your business processes. You may be able to work on your own computer but note that support is not provided. Brief details about installing the 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 must be able to independently solve any installation or execution problems. Furthermore, you must test your work on SIM's lab computers before submitting your assignments.

Assessment

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

Assessment overview

Item	Expected workload	Marks	CLO
Modelling project	20 hours	35	2
Simulation project	24 hours	35	1, 2
Exam	2 hours	30	1, 2, 3, 4

Exam. The exam is intended to evaluate theoretical knowledge related to Business Process Management (BPM) and the Business Process Modelling Notation (BPMN).

Modelling project. The main goal of the modelling project is to learn principles, techniques and best practices of BPM and to apply them in a realistic business case. The BPMN language and specific BPMN modelling tools will be used to model an existing business process described in a business case.

Simulation project. The main goal of the simulation project is to learn methods and techniques for qualitative and quantitative analyses of business processes. In particular, quantitative analysis will be focussed on simulating business processes through specific BPM simulation tools. Furthermore, the simulation project will also allow students to design a future business process using the BPMN language.

Projects and assignments. The modelling and simulation projects are interrelated, concern the same business case, and address the full BPM lifecycle:

- Process identification and construction of case/function matrix.
- Modelling the existing business process and associated activities (as-is model).
- Modelling communication and collaboration events and activities of the existing business process (collaboration model).
- Qualitative analysis and design of a future business process (to-is model).
- Quantitative analysis and simulation of the future business process.
- Revision of the future business process (to-is model) based on qualitative and quantitative analysis.

Assignments in detail

Assessment items	Marks	Assignments [1)]		Marks
Modelling project	35	1	Case/function matrix	5
		2	As-is model	20
		3	Collaboration model	10
Simulation project	35	4	To-be model	10
		5	Quantitative analysis	20
			Revised to-be model	5

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

Grading Assignments

This course involves resolving wicked problems. Wicked problems are difficult to address because they are incomplete, proposed solutions are not true-or-false, but good or bad, and require pluralistic design thinking. During analysis, students develop their own understanding of the problem, which will necessarily be diverse. When designing a solution, students decide on issues with no right answer, for which greater latitude of decision is assumed. For that reason the assessment of analysis and design usually involves the appreciation of a wide range of qualitative, subjective, and often conflicting criteria. The mark allocation scheme is described in the assignment handouts. Nevertheless, consider that the assignments will be primarily marked using subjective criteria.

Feedback

The combination of pluralistic design thinking with a large number of enrolments makes it impossible to provide a personalised, comprehensive criticism on the solutions proposed by students. Therefore, the assessment feedback will mainly consist of pre-formatted/generic feedback comments. However, following a practice that is common is design education, students are strongly advised to obtain feedback from the course lecturer and tutors on their performance before submitting the assignments.

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.

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.

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 per calendar day late up to 5 days after the due date. A calendar day begins at midnight.

At the course coordinator's discretion, work handed in after 5 days may be assessed and feedback provided, but no grade will be assigned.

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. Extensions will not be granted due to problems with submitting work.
- Be careful to submit your assignments according to the instructions given on Blackboard. Your work will not be marked if the submission instructions are not followed.
- Ensure compatibility 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, 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
Students who enrol in courses with examinations are obliged to attend an examination at the University at any time during the formal examination period. The final examination for this course will be scheduled at some time during the following period:

Friday 12th June – Wednesday 1st July (inclusive)

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.

Workshops

- You will attend weekly workshops where you gain practical knowledge on business process design 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 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 are also expected to learn for yourself how to use the modelling 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.

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 → Student records. Not receiving an email will not be a valid excuse for missing information.

Email should not be used to ask questions about the course. 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
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.

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INFO 234 • 2015 / T1 • Weekly Schedule				
Weeks		**Topics**	**Readings**	**Critical Actions**
1	L1	Introduction: Origins and history of BPM. The functional organisation. Rise and fall of BPR.	Chap.1	Workshops sign up: this week, by Friday, 18:00
	L2	Introduction: BPM lifecycle. Role of IT in BPM. BPM profession: Analyst, designer, project manager.	Chap.1	
	W	No workshop.		
2	L1	Process identification: Processes. Types of processes. Case types. Business functions. Case/function matrix. Process landscape.	Chap. 2	
	L2	Process identification: Process architecture. Abstract and detailed processes. Level 1 and level 2 processes. Selection criteria. Maturity assessment.	Chap. 2	
	W	Exercise: Case/function matrix.		
3	L1	Essential modelling: Processes. Activities. Sequence. Events.	Chap. 3	Submit project deliverable 1 (case/function matrix) by the end of this week (Sunday 23:59)
	L2	Essential modelling: Gateways. Token model. Types of gateways.	Chap. 3	
	W	Exercise: Simple process.		
4	L1	Essential modelling: Loops. Data artefacts.	Chap. 3	
	L2	Essential modelling: Pools and lanes. Messages. Black box and white box modelling. Collaborations.	Chap. 3	
	W	Exercise: Complex process.		
5	L1	Advanced modelling: Hierarchical decomposition. Inter-organisational decomposition. Process reuse. Embedded and global sub-processes.	Chap. 4	
	L2	Advanced modelling: Temporal events. Message events. Boundary events. Handling events.	Chap. 4	
	W	Exercise: Pools/lanes.		
6	L1	Advanced modelling: Handling exceptions. Process abortion. Activity compensation.		Submit project deliverable 2 (as-is model) by the end of this week (Sunday 23:59)
	L2	Advanced modelling: Collaboration diagrams. Quality assurance.	Chap. 4	
	W	Exercise: Events.		
7	L1	Qualitative analysis: Value added analysis. Waste elimination	Chap. 6	
	L2	Qualitative analysis: Root cause analysis. Cause-effect diagram. Impact assessment.	Chap. 6	
	W	Exercise: Collaborations.		
8	L1	Quantitative analysis: Process performance. Performance dimensions. Flow analysis. Cycle time analysis.	Chap. 7	Submit project deliverable 3 (collaboration model) by the end of this week (Sunday 23:59)
	L2	Quantitative analysis: Simulation. Simulation input parameters.	Chap. 7	
	W	Exercises: Exceptions, compensations.		
9	L1	Process redesign: What is redesign. How to redesign. Process heuristics.	Chap. 8	
	L2	Process redesign: Organisation heuristics. Technology heuristics.	Chap. 8	
	W	Project support.		
10	L1	Business process management systems: types, components, and benefits	Chap. 9	Submit project deliverable 4 (to-be model) by the end of this week (Sunday 23:59)
	L2	IT-enabled business processes changes	See course website	
	W	Exercise: Optimisation.		
11	L1	Management of business process change initiatives: issues, risks, and success factors	See course website	
	L2	Management of business process change initiatives: planning, strategy, and governance	See course website	
	W	Exercise: Simulation.		
12	L1	Management of business process change initiatives: implementation and use	See course website	Submit project deliverable 5 (quantitative analysis and revised to-be model) by the end of this week (Sunday 23:59)
	L2	Recap and the future of BPM	See course website	
	W	Project support.		