

School of Information Management

## **MBUA511 PROCESS DESIGN**

Trimester 2, 2016

### **COURSE OUTLINE**

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#### **Names and Contact Details**

Course Coordinators	Benoit A. Aubert	Andreas Drechsler
Room	Room RH517, Pipitea Campus	Room RH502, Pipitea Campus
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Office Hours	meetings by appointment	meetings by appointment

#### **Trimester Dates**

From Monday 19 September to Friday 4 November.

#### **Class Times and Room Numbers**

Monday 9.30am-2.30pm and Wednesday 9.30am-2.30pm plus Thursday 27th October 9.30am-2.30pm in WIG 501 (ICT Graduate School).

#### **Withdrawal from Course**

1. Your fees will be refunded if you withdraw from this course on or before Friday 30<sup>th</sup> September.
2. The standard last date for withdrawal from this course is Friday 21<sup>st</sup> October 2016. 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](#).

#### **Prescription**

This course explores 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 and improved business process, then test and evaluate their proposed design using simulation software.

#### **Course Learning Objectives**

By the end of the MBUA511 course, a student 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

This course looks at business process evaluation and redesign through the use of simulation. It follows MBUA510. While Analysis focuses on the as-is situation in an organisation, Design tries to imagine what could be implemented in the same organisation, taking advantage of the possibilities offered by information technology.

## Course Schedule and Readings

Please note that slight variations might be made to this schedule as the trimester progress. Changes will be communicated in class and through Blackboard if necessary.

Lecture	Topic	Indicative Readings
1	<b>Introduction to business processes modelling and transformation</b>	<p>Hammer, M. (2015). What is Business Process Management? In J. Vom Brocke &amp; M. Rosemann (Eds.), Handbook on business process management (2nd ed.). New York, NY: Springer.</p> <p>Melão, N., &amp; Pidd, M. (2000). A conceptual framework for understanding business processes and business process modelling. <i>Information systems journal</i>, 10(2), 105-129.</p>
2	<p><b>Process Identification and BPMN (1)</b></p> <p>(1) Process identification: Identify processes that are worthwhile to manage and produce a process architecture (Note: Instead of problem-oriented view covered in SA/BA, process-oriented view focuses on key processes that should be managed and improved. These processes may not contain serious “problems” but are so important and deserve reevaluation and rework).</p> <p>(2): BPMN Basic concepts Process, Activities, Sequence, Events, Gateways, Pools - Lanes, Information/ data artefacts, Token model, Flow rules</p>	<p>White, S. A. (2004). Introduction to BPMN. <i>IBM Cooperation</i>, 2(0), 11 pages.</p> <p>Resources: Chapter 2 – Process Identification in Dumas, M., La Rosa, M., Mendling, J., &amp; Reijers, H. A. (2013). Fundamentals of business process management. Heidelberg, Germany: Springer</p> <p>Chapter 3 – Essential process modelling in Dumas, M., La Rosa, M., Mendling, J., &amp; Reijers, H. A. (2013). Fundamentals of business process management. Heidelberg, Germany: Springer</p> <p>Workshop: modelling tool (BIZAGI)</p>
3	<p><b>Process decomposition and BPMN (2)</b></p> <p>(1)Modelling complex business processes: hierarchical decomposition and inter-organizational decomposition</p> <p>(2) BPMN: advanced concepts Process reuse Events handling</p>	<p>Chapter 4 – Advanced process modelling in Dumas, M., La Rosa, M., Mendling, J., &amp; Reijers, H. A. (2013). Fundamentals of business process management. Heidelberg, Germany: Springer</p> <p>Section 5.4 – Process Model Quality Assurance in Dumas, M., La Rosa, M., Mendling, J., &amp; Reijers, H. A. (2013). Fundamentals of business process management. Heidelberg, Germany: Springer</p> <p>Workshop: advanced modelling</p>

	<p>Exceptions handling Collaboration diagrams</p> <p>(3)Quality of business process model</p>	
4	<p><b>Simulation principles</b> Simulation can assist organizations in examining the performance metrics of a system either in both current and future state. Students need to be aware of key performance indicators, such as cycle time, arrival rate, mean inter-arrival time, waiting time, process costs, resource utilization, etc (flow analysis and queueing theory may be briefly touched upon). More broadly, students should consider different process performance dimensions (e.g., time, cost, quality, and flexibility) and understand the limitations of simulation.</p>	<p>Hammer, M., Haney, C. J., Wester, A., Gaffney, P., &amp; Ciccone, R. (2007). The 7 deadly sins of performance measurement and how to avoid them. <i>MIT Sloan Management Review</i>, 48, 19–28.</p> <p>Section 7.1 – Performance Measures in Dumas, M., La Rosa, M., Mendling, J., &amp; Reijers, H. A. (2013). <i>Fundamentals of business process management</i>. Heidelberg, Germany: Springer</p> <p>Chapter 5 - Measuring Process Performance in Harmon, P. (2014). <i>Business process change: a business process management guide for managers and process professionals</i> (3rd ed.). Morgan Kaufmann Publishers Inc.</p> <p>Chapter 2 - The Impact of Value-Driven BPM in Franz, P., &amp; Kirchmer, M. (2012). <i>Value-driven Business Process Management: The Value-switch for Lasting Competitive Advantage</i>. New York, NY: McGraw Hill Professional.</p> <p>Wil, M. P., &amp; Aalst, van der. (2015). <i>Business Process Simulation Survival Guide</i>. In J. Vom Brocke &amp; M. Rosemann (Eds.), <i>Handbook on business process management</i> (2nd ed.). New York, NY: Springer.</p> <p>Workshop: simulation</p>
5	<p><b>Business process management – technical design 1</b></p> <p>Linking what was covered in the Analysis course with business process improvements. Assessment of value added and associated business changes</p>	<p>Smart, P. A., Maddern, H., &amp; Maull, R. S. (2009). Understanding business process management: implications for theory and practice. <i>British Journal of Management</i>, 20(4), 491-507.</p> <p>Workshop: Using root cause analysis and Value-added analysis to improve processes. Assessing improvement</p>
6	<p><b>Business process management – technical design 2</b> Process level improvements</p>	<p>Chapter 8 – Process Redesign in Dumas, M., La Rosa, M., Mendling, J., &amp; Reijers, H. A. (2013). <i>Fundamentals of business process management</i>. Heidelberg, Germany: Springer</p> <p>Sidorova, A., Torres, R., &amp; Al Beayeyz, A. (2015). <i>The Role of Information Technology in Business Process Management</i>. In J. Vom Brocke &amp; M. Rosemann (Eds.), <i>Handbook on business process management</i> (2nd ed.). New York, NY: Springer.</p> <p>Workshop: technology heuristics</p>

7	<p><b>Business process management – technical design 3</b> Improving processes by modifying the organisational elements</p>	<p>Process Management for Knowledge Work by Thomas H. Davenport in Vom Brocke &amp; Rosemann's (2015) edited book (vol. 1)</p> <p>Managing Creativity-intensive Processes: Learning from Film and Visual Effects Production by Stefan Seidel, Katherine Shortland, David Court, and Didier Elzinga in Vom Brocke &amp; Rosemann's (2015) edited book (vol. 2)</p> <p>FT special report (October 22nd, 2014), The Connected Business, The Financial Times. Retrieved from <a href="http://www.ft.com/intl/reports/the-connected-business">http://www.ft.com/intl/reports/the-connected-business</a></p> <p>Workshop: Organisation heuristics</p>
8	<p><b>Organisational design</b> Mapping the as-is and the to-be situations. Assessing feasible change</p>	<p>Manganelli, R. L., &amp; Klein, M. M. (1994). The Reengineering Handbook. Chapter 4b</p> <p>Sikdar, A., &amp; Payyazhi, J. (2014). A process model of managing organizational change during business process redesign. <i>Business Process Management Journal</i>, 20(6), 971–998. <a href="http://doi.org/10.1108/BPMJ-02-2013-0020">http://doi.org/10.1108/BPMJ-02-2013-0020</a></p> <p>Workshop: applying organisational design and drafting transition plans</p>
9	<p><b>Risk Analysis</b></p>	<p>Zur Muehlen, M., &amp; Ho, D. T. Y. (2005, September). Risk management in the BPM lifecycle. In <i>Business process management workshops</i> (pp. 454-466). Springer Berlin Heidelberg.</p> <p>Rosemann, M. (2006). Potential pitfalls of process modeling: part A. <i>Business Process Management Journal</i>, 12(2), 249–254.</p> <p>Managing Regulatory Compliance in Business Processes by Shazia Sadiq and Guido Governatori in Vom Brocke &amp; Rosemann's (2015) edited book (vol. 2)</p> <p>No Excuses: A Business Process Approach to Managing Operational Risk by Dennis I. Dickstein and Robert H. Flast <a href="http://iiba.books24x7.com/toc.aspx?bookid=29831">http://iiba.books24x7.com/toc.aspx?bookid=29831</a></p> <p>New Zealand Government, <i>Report of the Ministerial Inquiry into the Novopay Project</i>, June 2013.</p> <p>Workshop: Novopay case (risk focus)</p>
10	<p><b>Anchoring business process redesign in the company: governance</b></p>	<p>Business Process Governance by M. Lynne Markus and Dax D. Jacobson in Vom Brocke &amp; Rosemann's (2015) edited book (vol. 2)</p> <p>Business Process Management Governance by Andrew Spanyi in Vom Brocke &amp; Rosemann's (2015) edited book (vol. 2)</p>

		<p>Chapter 3, Section 3.3: Plan business analysis governance in IIBA (2015). A guide to the business analysis body of knowledge v.3. Toronto, Canada: International Institute of Business Analysis.</p> <p>Workshop: Novopay case (governance focus)</p>
11	<b>Anchoring business process redesign in the company: business cases</b>	<p>Chapter 10.7: Business Cases in IIBA (2015). A guide to the business analysis body of knowledge v.3. Toronto, Canada: International Institute of Business Analysis.</p> <p>Chapter 9: Making a Business and Financial Case in Paul, D. (2014). Business Analysis, Third Edition. <a href="http://iiba.books24x7.com/toc.aspx?bookid=75457">http://iiba.books24x7.com/toc.aspx?bookid=75457</a></p> <p>Gambles, I. (2009). Making the Business Case: Proposals that Succeed for Projects That Work. Gower Publishing Limited. <a href="http://iiba.books24x7.com/toc.aspx?bookid=37469">http://iiba.books24x7.com/toc.aspx?bookid=37469</a></p> <p>Workshop: Novopay case, Business case development</p>
12	<b>Success factors, summary and the future of business process design and analysis</b>	<p>vom Brocke, J., Schmiedel, T., Recker, J., Trkman, P., Mertens, W., &amp; Viaene, S. (2014). Ten principles of good business process management. Business Process Management Journal, 20(4), 530–548.</p> <p>Trkman, P. (2010). The critical success factors of business process management. International Journal of Information Management, 30(2), 125–134.</p> <p>Process Intelligence (Dumas et al., 2013)</p> <p>BPM and service management in Vom Brocke &amp; Rosemann’s (2015) edited book (vol. 1)</p> <p>BPM and in-memory data in Vom Brocke &amp; Rosemann’s (2015) edited book (vol. 1)</p> <p>Business Process Analytics in Vom Brocke &amp; Rosemann’s (2015) edited book (vol. 2)</p> <p>Workshop: poster session about the emerging trend topics</p>

Indicative readings are listed above. Further readings will be sourced from the IIBA online library <http://www.iiba.org/Learning-Development/Online-Library.aspx>

### **Course Delivery**

The course is offered over six weeks, two days a week. Typically, a day will start with a presentation and a discussion of theoretical elements, followed by a workshop in which students will apply the concepts seen that morning to a simple situation. The afternoon session will follow a similar format. Students are expected to use afternoon workshop to apply the concepts seen in class to their project. This course will develop your ability for team work.

### **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. You are expected to attend all course sessions, read assigned materials, and contribute to workshop activities. You are expected to spend 48 hours in class and about 60 hours preparing for class on average (additional time of about 42 hours spread over the trimester will be required for completion of the course assignments).

### **Assessment**

The Assessment Handbook will apply to all VUW courses: see

<http://www.victoria.ac.nz/documents/policy/staff-policy/assessment-handbook.pdf>.

		Weight	Due Date	Corresponding learning objectives
1	Modelling project	60%	10 October 2016	1, 2, 3
2	Simulation project	40%	4 November 2016	1, 2, 4

If you cannot complete an assignment or sit a test or examination, refer to

[www.victoria.ac.nz/home/study/exams-and-assessments/aegrotat](http://www.victoria.ac.nz/home/study/exams-and-assessments/aegrotat)

### **Penalties**

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.

### **Extensions**

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

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.

### **Group Work**

Group work will be conducted during the workshops. In addition, students should be expected to spend an additional 18 hours for group work during the trimester.

### **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.

### **Materials and Equipment**

Students will be required to use Bizagi Modeler (<http://www.bizagi.com>) for the simulation of business processes.

### **Student feedback**

Not applicable as this is the first time the course is offered.

**Communication of Additional Information**

Additional information or changes will be conveyed by means of in-class announcements, Blackboard, and e-mail. Please ensure that you check these communication channels regularly.

**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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