



# School of Information Management

# MMIM 582 ENTERPRISE SYSTEMS AND SUPPLY CHAIN MANAGEMENT

# Trimester Two 2010

# **COURSE OUTLINE**

# Names and Contact Details

Course Coordinator	Jean-Grégoire Bernard
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# **Trimester Dates**

**Teaching Period:** Monday 12<sup>th</sup> July – Wednesday 15<sup>th</sup> October 2010 **Study Period:** Monday 18<sup>th</sup> October – Thursday 21<sup>st</sup> October 2010 **Examination Period:** Friday 22nd October – Saturday 13th November 2010 (inclusive)

# **Class Times and Room Numbers**

Wednesdays 17:40 – 19:30 in RWW 128

# **Course Content**

This course focuses on the theory and practice of implementing and utilising enterprise-wide application systems in organizations. Few organizations attempt to build information systems on their own and many rely upon the marketplace to fulfil their information systems needs nowadays. Such a shift to the marketplace require novel skills on the behalf of IS professionals to evaluate and to manage vendors. Furthermore, the adoption of enterprise systems is usually done in the context of a larger organizational improvement and change initiative. Their adoption involves explicit redesign of organizational processes and other organizational structures (i.e. job

design, compensation, reporting relationships). When enterprise systems are designed to digitize inter-organizational and supply chain business processes, the complexity of adoption is magnified. It is not surprising to observe costs overruns, schedule delays, and unfulfilled expectations following enterprise systems implementation projects. The adoption of enterprise systems is thus a venture fraught not only with significant potential rewards but also considerable risks. This course will provide you the skills and knowledge required to face the challenges related to the adoption and implementation of enterprise systems.

# **Course Learning Objectives**

By the end of the course, students should be able to (week # in parenthesis):

- 1. Describe and understand the function of enterprise systems in organizations (1).
- 2. Describe the peculiar technological features of enterprise systems (2).
- 3. Describe and understand the key differences between the conventional information systems development life cycle and the enterprise systems life cycle (3, 4, 5).
- 4. Evaluate and analyse the rationale for enterprise systems as a component of organizational change initiatives (6).
- 5. Evaluate and analyse the technical and organizational challenges of implementing and maintaining enterprise systems (7, 8, 9).
- 6. Understand and appreciate the features of the activities required to use enterprise systems at their full potential to digitize and to improve supply chain processes (10, 11).
- 7. Identify key current trends that shape the enterprise systems marketplace (12).

The course objectives include the Faculty learning objectives which are the development of critical and creative thinking, leadership, effective oral and written academic communication, and a global and multicultural perspective. Selected Faculty learning objectives will be assessed along with the following specific outcomes based on the statutory statement of course learning objectives above.

# **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 if necessary. There is no textbook for this course. Case studies to be discussed in class will be assigned and communicated in class during the trimester. I expect you to read the required readings before each class and to have done the informal exercises if any were assigned for the class. All course readings will be made available via the 'Blackboard' system. Supplementary readings will also be provided on 'Blackboard' for your own curiosity.

Class	Topic	Required readings and preparation	
Week 1 14/7	Introduction – Understanding the integrated enterprise	<ul> <li>Harmon, T., Burris, P., Reiss-Davis, Z. (2008). A new ERP for the 21<sup>st</sup> century. Forrester Research Report. http://www.microsoft.com/presspass/itanalyst/docs /10-03-08NewERP21.PDF</li> </ul>	

Week 2 21/7	Enterprise systems: The technology – Architecture of enterprise systems applications	<ul> <li>Chapter 4 'Configuring SAP R/3' (p.75-112) of Bancroft, N., Seip, H., Sprengel, A. (1997). Implementing SAP R/3: How To Introduce A Large System Into A Large Organization. Upper Saddle River, NJ: Prentice-Hall. ISBN: 013889213X.</li> <li>Meinhardt, S., Popp, K. (2006). Configuring Business Application Systems. p.705-721 of <i>Handbook on Architectures of Information</i> <i>Systems</i>. Berlin, Germany: Springer Berlin Heidelberg. ISBN 978-3-540-26661-7.</li> </ul>
28/7	No class	
Week 3 4/8	Enterprise systems as products (part 1) – The development life cycle of an enterprise system	<ul> <li>Hestermann, C., Anderson, R.P., Pang, C. (2009). Magic Quadrant for Midmarket and Tier 2- Oriented ERP for Product-Centric Companies. Gartner RAS Core Research Note 600163386. http://www.gartner.com/technology/media- products/reprints/microsoft/vol4/article12/article12.html</li> <li>Xu, L., Brinkkemper, S. (2007). Concepts of product software. <i>European Journal of Information Systems, 16</i>, 531-541.</li> </ul>
Week 4 11/8	Enterprise systems as products (part 2) – The packaged software business – The role of consultants	<ul> <li>Cusumano, M. (2003). Finding your balance in the products and services debate. <i>Communications of the ACM</i>, <i>46</i>(3), 15-17.</li> <li>Cusumano, M. (2003). Beware the lure of the horizontal. <i>Communications of the ACM</i>, <i>46</i>(7), 15-17.</li> <li>Swanson, E. B. (2010). Consultancies and capabilities in innovating with IT. <i>Journal of Strategic Information</i> Systems, 19(1), 17-27.</li> </ul>

Week 5 18/8	Class presentations	Individual assignment #1 due before beginning of class. Class presentations of individual assignment #1.
Week 6 8/9	<ul> <li>Project chartering <ul> <li>Evaluating the rationale for an enterprise systems</li> <li>Software selection</li> <li>Budgeting and scheduling</li> </ul> </li> </ul>	<ul> <li>Ross, J.W. (2006). Enterprise Architecture: Driving Business Benefits from IT. CISR Working Paper No. 359 and MIT Sloan Working Paper No. 4616-06.</li> <li>TGI. (2009). Return on Investment Analysis. Technology Group International White Paper. http://www.tgiltd.com/images/library/ return_on_investment_analysis.pdf (Free registration required).</li> <li>TGI. (2009). Preparing a Request for Proposal (RFP). Technology Group International White Paper. http://www.tgiltd.com/images/library/ preparing_a_request_for_proposal.pdf (Free registration required).</li> <li>TGI. (2009). Software Selection Criteria Listing. Technology Group International White Paper. http://www.tgiltd.com/images/library/ preparing_a_request_for_proposal.pdf (Free registration required).</li> </ul>
Week 7 15/9	Organizational implementation – Change management – Training – Communication	<ul> <li>Markus, M. L. (2004). Technochange management: Using IT to drive organizational change. <i>Journal of Information Technology</i>, <i>19</i>(1), 4-20.</li> <li>Chapter 7 'Stage 4B: Solution: Social Design' (p.157-192) of Manganelli, R.L., Klein, M.M. (1996). <i>The reengineering handbook: A step-by- step guide to business transformation</i>. AMACOM. ISBN: 0814479235.</li> </ul>

Week 8 22/9	<ul> <li>Technical implementation</li> <li>Software tailoring and configuration</li> <li>Testing and data conversion</li> <li>Rollout</li> <li>Upgrading enterprise systems</li> </ul>	_	<ul> <li>Brehm, L., Heinzl, A., &amp; Markus, M. L. (2001). <i>Tailoring ERP systems: A spectrum of choices and their implications</i>. Paper presented at the Hawaii International Conference on Systems Sciences.</li> <li>Beatty, R.C., Williams, C.D. (2006). ERP II: Best practices for successfully implementing an ERP upgrade. <i>Communications of the ACM, 49</i>(3), 105-109.</li> <li>Kanaracus, C. (2010). Oracle ERP users urged to upgrade. ComputerWorld. http://www.computerworld.com.au/article/349922/</li> </ul>
Week 9 29/9	Managing the implementation project – Risk management	_	<ul> <li>Markus, M.L., Axline, S., Petrie, D., Tanis, C. (2000). Learning from adopters' experiences with ERP: Problems encountered and success achieved. <i>Journal of Information Technology</i>, <i>15</i>, 245-265.</li> <li>Keil, M., Li, L., Mathiassen, L., Zheng, G. (2008). The influence of checklists and roles on software practitioner risk perception and decision-making. <i>Journal of Systems and Software</i>, <i>81</i>, 908-919.</li> </ul>
Week 10 6/10	Managing the supply chain with enterprise systems	_	O'Leary, D.E. Supporting Decisions in Real-Time Enterprises: Autonomic Supply Chain Systems. (2008). Chapter 38 (p.20-37) of <i>Handbook on</i> <i>Decision Support Systems 2</i> . Berlin, Germany: Springer Berlin Heidelberg. ISBN: 978-3-540- 48716-6. Melnyk, S.A., Davis, E.W., Spekman, R.E., Sandor, J. (2010). Outcome-Driven Supply Chains. <i>MIT Sloan Management Review</i> , <i>51</i> (2), 33-38.
Week 11 13/10	Developing an analytical capability from an enterprise system – Reporting – Data warehousing – Business intelligence	_	<ul> <li>Meredith, R., O'Donnell, P., Arnott, D. Databases and Data Warehouses for Decision Support. (2008). Chapter 11 (p.207-230) of <i>Handbook on</i> <i>Decision Support Systems 1</i>. Berling, Germany: Springer Berlin Heidelberg. ISBN: 978-3-540- 48713-5.</li> <li>Davenport, T.H. (2006). Competing on analytics. <i>Harvard Business Review</i>, 84(1), 98-107.</li> <li>Individual assignment #2 due before beginning of class.</li> </ul>

Week 12 20/10 *To be confirmed	The future of enterprise systems - Open source enterprise systems - Cloud Computing		Johansson, B., Sudzina, F. (2008). ERP systems and open source: An initial review and some implications for SMEs. <i>Journal of Enterprise</i> <i>Information Management</i> , 21(6), 649-658.
		_	Kanaracus, C. (2010). Open-Source ERP 'most active' SourceForge project. ComputerWorld. http://www.computerworld.com.au/article/351721/
		_	Iyer, B., Henderson, J.C. (2010). Preparing for the future: Understanding the seven capabilities of cloud computing. <i>MISQ Executive</i> , 9(2), 117-131.

# **Course Delivery**

A series of seminars where the weekly readings will act as the basis of discussions and collective analysis of managerial dilemmas will act as the foundation for the course. You will be actively involved in informal case studies, class exercises, and informal group presentations. These class exercises and presentations will not contribute to course grades (except from the one stated in the assessment requirements section below). These activities will foster deeper involvement and understanding of the themes and concepts addressed in the lectures.

# **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 discussions. You are expected to spend 2 hours in class and about 6 hours preparing for class on average. Additional time will be required for completion of the course assignments.

# **Group Work**

All group work will occur in class and will not contribute to course grades.

# **Materials and Equipment**

You will make extensive use of the University Library print and electronic resources to elaborate your vendor report (assignment #1) and request for proposal (assignment #2). As a starting point, among the relevant resources we find:

- Proquest
- LexisNexis
- Factiva
- Business Source Complete
- RDS Business Suite
- Index New Zealand
- NewztextPlus
- On the internet: CIO Magazine, ComputerWorld, InformationWeek, Baseline, and enterprise systems vendors' websites are good starters, but there are many others.

Assessment Requirements		Due date
Individual assignment #1: Vendor report	30%	August 18, at the beginning of class.
Class presentation of vendor report	10%	August 18.
Individual assignment #2: RFP & project plan	30%	October 13, at the beginning of class.
Individual assignment #3: Case study analysis	<u>_30%</u>	November 12 at 15:00.
Total	100%	

# Individual assignment #1: Vendor report

This assignment requires you to describe, synthesize, and present an analyst report on a specific enterprise systems vendor. The report should contain a detailed description of the history, the product strategy, the strengths and the weaknesses of the enterprise systems vendor. Each student will work on a different vendor; the vendors will be allocated on a random basis on the second day of class (July 21). The written report should be of no more than 3000 words, but no less than 2500 words (excluding figures and tables). Further instructions on how to elaborate the vendor report as well as a detailed marking grid will also be communicated on July 21. A hard copy of the vendor report is due on August 18 at the beginning of class.

#### Class presentation of vendor report (individual)

This assignment requires you to present to the class your individual assignment #1 (Vendor report). You will need to distil and synthesize the essential information contained in your report in a 10 minutes presentation. Further instructions on how to prepare your presentation as well as a detailed marking grid will also be communicated in class on August 11<sup>th</sup>.

#### Individual assignment #2: Request for proposal and project plan

This assignment requires you to elaborate a request for proposal and a project plan for an enterprise systems project of a real-world organization. For this assignment, you assume the role of a project manager for the organization and you will identify a business process improvement initiative for that organization, define the rationale for reengineering the business process, and specify the key requirements that vendors should fulfil. You will also elaborate an initial project plan for the implementation of the enterprise system. The organization for which you will elaborate the request for proposal and the project plan can be your employer (or former employer), but it can also be an organization for which large amount of public information is available. If uncertain about your choice of organization, you should inquire with the lecturer. The written report of this assignment should be of no more than 3000 words, but no less than 2500 words (excluding figures and tables). Further instructions on how to elaborate the vendor report as well as a detailed marking grid will also be communicated in class on September 8<sup>th</sup>. A hard copy of the case analysis is due on October 13 at the beginning of class.

#### Individual assignment #3: Case study analysis

For this case study, you assume the role of an expert consultant on enterprise systems. The analysis should identify the key issues and challenges faced by managers of an organization facing significant challenges in implementing an enterprise systems solution. You should present a substantial argument explaining what they did in the past and why, and what they ought to do now and why. The written report of the case analysis should be of no more than 3000 words, but no less than 2500 words (excluding figures and tables). Specific questions will guide your analysis of the cases. Further instructions on how to elaborate the case study analysis as well as a detailed marking grid will also be communicated in class on October 13. A hard copy of the case analysis is due on November 12 at 5:00pm at the reception desk of the School of Information Management.

# **Mandatory Course Requirements**

An attendance register will be kept, however there will be no penalty for non-attendance. To pass the course, you must gain a minimum of 40% on each item of assessment and a weighted average of 50% across all assessments.

Letter Grade	Number grade	Approx Dist'n *	Simple Description	More Complete Description**
A+	Over 84	4%	Outstanding	Far exceeds requirements, flawless, creative
А	80-84	10%	Excellent	Polished, original, demonstrating mastery
A-	75-79	14%	Very Good	Some originality, exceeds all requirements
B+	70-74	22%	Good	Exceeds requirements in some respects
В	65-69	26%	Satisfactory	Fulfils requirements in general
B-	60-64	18%	Acceptable	Only minor flaws. Unoriginal
C+	55-59	4%	Pass	Mistakes, recapitulation of course material
С	50-54	2%	Minimum pass	Serious mistakes or deficiencies
D	40-49	1%	Unacceptable	Little understanding, poor performance
E	00-39	1%	Fail	Below the minimum required

# **Grading Standards**

\* This is the hypothetical percentage of students that would attain the various levels of performance, over several repetitions of the course, under similar conditions. It is recognised that the distribution in a particular course, particularly with small enrolment, may differ markedly from the long-term distribution. To obtain a fair distribution of marks relative to assignment difficulty, scaling of marks may be employed on some or all assessments.

\*\* The lecturer will develop a more complete or specific description of the meaning of the various levels of performance based upon the specific nature of the assessment in a course. For example, performance may be determined by the qualities of a written report, a classroom presentation, or an examination. The words used to describe these kinds of assessments will obviously vary.

# 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.

# Penalties

Assignments submitted after the due date and time will not be accepted and students will not receive any marks. Unusual or unforeseeable circumstances (e.g. serious illness, family bereavement) may lead to a waiver of this penalty but need to be discussed with the Course Coordinator as soon as possible. If a word limit is imposed, the examiner will only mark the assignment up to the word limit.

# **Class Representative**

A class representative will be elected in the first class, and that person's name and contact details will be 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**

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

# **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 subject to checking by Turnitin. Turnitin will retain a copy of submitted materials 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.

#### Withdrawal from Courses:

Your fees will be refunded if you withdraw from this course on or before 23 July 2010

The last date for withdrawal from this course (*assuming it has 12 weeks of lectures, otherwise modify accordingly*) is the three-quarter point of the teaching period, i.e. **Friday 24 September.** After that date, permission to withdraw requires the permission of the Associate Dean (Students) as set out in section 8 of the Personal Courses of Study Statute http://policy.vuw.ac.nz/Amphora!~~policy.vuw.ac.nz~POLICY~00000001743.pdf

To apply for permission, fill in the Late Withdrawal form available from either of our Student Customer Service Desks.

# For the following important information follow the links provided:

#### 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

# AVC (Academic) Website: information including: Conduct, Academic Grievances, Students with Impairments, Student Support

http://www.victoria.ac.nz/home/about\_victoria/avcacademic/Publications.aspx

# **Faculty of Commerce and Administration Offices**

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

# Manaaki Pihipihinga Programme

http://www.victoria.ac.nz/st\_services/mentoring/