TE WHARE WĀNANGA O TE ŪPOKO O TE IKA A MĀUI

VICTORIA
UNIVERSITY OF WELLINGTON

SCHOOL OF INFORMATION MANAGEMENT

MMIM 580
SUSTAINABILITY AND INFORMATION SYSTEMS

Trimester 1, 2015

COURSE OUTLINE

Names and Contact Details

Course Coordinator	Name	Dr Janet Toland
	Room	RH523
	Tel	463-6861 Email Janet.toland@vuw.ac.nz
	Office hours	By appointment
Course Lecturer	Name	Dr Jocelyn Cranefield
	Room	RH430
	Tel	463-6887 Email Jocelyn.cranefield@vuw.ac.nz
	Office hours	By appointment
Course Administrator	Name	Ms Usha Varatharaju
	Room	RH521
	Tel	463 5309 Email usha.varatharaju@vuw.ac.nz
	Office hours	9am to 4pm

Trimester Dates
From Monday 2nd March to Friday 5th June

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 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
Monday 17.40 to 19.30 in RWW126 (Railway West Wing, Level 1)

Course Delivery
Classes will be delivered in interactive seminar mode. Students will be expected to do preparatory work and participate in class discussions on the various topics.

Group Work

Assignment 3 is a group presentation worth 10% of the overall mark. It is expected that group members would need to meet face-to-face for around three hours and virtually for around five hours in order to prepare for the presentation.

Expected Workload

On average students will be expected to spend at least 10 hours per week on their course work preparation, including the mid-term break period.

Prescription

An examination of the role of information systems in delivering triple bottom line benefits (social, environmental and financial success; or people, planet and profitability). Topics include environmentally sustainable business processes and practices, and organisational, regulatory, behavioural and technological issues in the context of organisations, communities, government and society.

Course Learning Objectives

Students who pass this course should be able to:
1. Identify and discuss issues relating to triple bottom line sustainability in organisations, communities, government and society;
2. Analyse and evaluate the use of information systems and technology in relationship to organisational strategy and the environment;
3. Outline and discuss ways in which information systems can impact on and help to deliver sustainability.

Course Content

Wk	Class Date	Lead	Topic	Deliverable
1	2 March	Jocelyn/ Janet	**Module 1: Introduction to Sustainability & Information Systems.** The case for sustainability. Why information systems and sustainability? The triple bottom line.	
2	9 March	Jocelyn	**Module 1: Introduction to Sustainability & Information Systems.** The research agenda, models and frameworks for sustainability.	
3	16 March	Jocelyn	**Module 2: Sustainable Organisations.** Green IT strategies in organisations, capability maturity frameworks - case studies.	
4	23 March	Janet	**Module 2: Sustainable Organisations.** Corporate social responsibility, metrics and building a business case.	Mini-Literature Review
5	30 March	Janet	**Module 2: Sustainable Organisations.** Managing sustainability in organisations and implementing associated changes.	
Mid Trimester Break				

Wk	Class Date	Lead	Topic	Deliverable
6	20 April	Jocelyn	**Module 3: Sustainable industries & networks**. Collaborative consumption and the sharing economy; whole of government	Case Study Analysis
7	27 April (ANZAC observed)	Virtual session Jocelyn/ Janet	**Module 3: Sustainable industries & networks**. The sustainable virtual supply chain.	
8	4 May	Jocelyn	**Module 3: Sustainable industries & networks**. Innovation in sustainability; start-ups and entrepreneurship	Group presentations Weeks 8-11
9	11 May	Janet	**Module 4: Information Systems & Societal Sustainability**. Sustainable communities and cities.	Group presentations Weeks 8-11
10	18 May	Janet	**Module 4: Information Systems & Societal Sustainability.** Smart grids, smart homes, smart cars – the role of information systems	Group presentations Weeks 8-11
11	25 May	Janet	**Module 4: Information Systems & Societal Sustainability.** Frugal information systems, working with limited resources.	Group presentations Weeks 8-11
12	1 June (Queen's Birthday)		**Individual research**	Research Essay Submission

Readings

We will assign articles for each class. The full list of prescribed readings for each class will be available on the Blackboard site. Students are expected to acquire their own copies of these readings from the site, unless otherwise informed, and to acquaint themselves with the content before each corresponding class. Indicative readings for each module are shown below.

Note: students are required to purchase two case studies for a total cost of approximately $20.

Module 1	Brooks, S., Wang, X. & Sarker, S. , Unpacking Green IS: A Review of the Existing Literature and Directions for the Future in vom Brocke, J, Seidel, S. & Recker, J. (2012). Green Business Process Management Towards the Sustainable Enterprise, Springer-Verlag
	Murugesan, S. (2008). Harnessing Green IT Principles and Practices, IEEE Computer Society, 24-33
	Dedrick, J. (2010). Green IS: Concepts and Issues for Information Systems Research. Communications of AIS, 27, 172-184.
	Jenkin, T., Webster, J., & McShane, L. (2011). An Agenda for 'Green' Information Technology and Systems Research, Information and Organization, 21(1), 17-40.
	Day, G.S. & Schoemaker, P.J.H.. (2011). Innovating in Uncertain Markets: 10 Lessons for Green Technologies, MITSloan Management Review, 52 (4)
	OECD, How was life? Global Well-being since 1820
Module 2	Curry, E., Guyon, B., Sheridan, C., & Donnellan, B. (2012). "Developing an Sustainable IT Capability: Lessons From Intel's Journey. *MIS Quarterly Executive*, *11*(2), 61-74.
	Stewart, L. 2014. ICT Sustainability: New Zealand Benchmark 2014, Fujitsu
	Watson, R.T., Boudreau, M.C., Chen, A., & Huber, M. H. (2008). Green IS: Building Sustainable Business Practices. In R.T. Watson (Ed.), Information Systems: A Global Text (1-17) Athens, GA: Global Text Project.
	Seidel, S., Recker, J., & vom Brocke, J. (2010). Enablers and Barriers to the

	Organizational Adoption of Sustainable Business Practices. Proceedings of AMCIS 2010 Ngoh, S., Vatanasakdakul, S. & Smith, S. (2014). Sustainable Symmetry: a Comparison of Institutional Green Statements. Proceedings of PACIS 2014 Connecting with a Low-Carbon Future: www.telstra.com.au/abouttelstra/download/document/telstra-lcf-report.pdf Oppong-Tawiah, D., Webster, J., Staples, S., Cameron, A. F., & Ortiz de Guinea, A. (2014). Encouraging Sustainable Energy Use in the Office with Persuasive Mobile Information Systems. Proceedings of ICIS 2014
Module 3	Dao, V., Langella, I., & Carbo, J. (2011). From green to sustainability: Information Technology and an integrated sustainability framework. *The Journal of Strategic Information Systems*, *20*(1), 63-79. Koopman, C., Mitchell, M. D., & Thierer, A. D. (2014). The Sharing Economy and Consumer Protection Regulation: The Case for Policy Change. *Available at SSRN 2535345*. http://heartland.org/sites/default/files/koopman-sharing-economy.pdf Matzler, K., Veider, V., & Kathan, W. (2014). Adapting to the Sharing Economy. *MIT Sloan Management Review, Winter 2015.* Meek, W. R., Pacheco, D. F., & York, J. G. (2010). The impact of social norms on entrepreneurial action: Evidence from the environmental entrepreneurship context. *Journal of Business Venturing*, *25*(5), 493-509. Zahra, S. A., Newey, L. R., & Li, Y. (2014). On the frontiers: The implications of social entrepreneurship for international entrepreneurship. *Entrepreneurship Theory and Practice*, *38*(1), 137-158.
Module 4	Watson, R.T., Boudreau, M.C. & Chen, A.J.W. 2010). Information Systems and Environmental Sustainability Development: Energy Informatics and New Directions for the IS Community, MIS Quarterly, 34 (1), 23-38 Brandt, T., Feuerriegel, S., & Neumann, D. (2013). Shaping a Sustainable Society: How Information Systems Utilize Hidden Synergies between Green Technologies. Proceedings of ICIS 2013 Watson, R.T., Kunene, K.N. & Islam, M.S. (2013). Frugal Information Systems. Information Technology for Development, 27 (2), 87-93 Sakuri, M. & Kokuryo, J. (2014) Design of a Resilient Information System for Disaster Response. Proceedings of ICIS 2014 Valogianni, K., Ketter, W., Collins, J. & Zhdanov, D. (2014).Enabling Sustainable Smart Homes: an Intelligent Agent Approach. Proceedings of ICIS 2014 Fridgen, G., Mette, P. & Thimmel, M. (2014). The Value of Information Exchange in Electric Vehicle Charging. Proceedings of ICIS 2014 Global e-Sustainability Initiative – Smarter 2020: http://gesi.org/SMARTer2020

Assessment

Assessment	Weight	Due Date
Assignment 1: Mini-literature review	20%	10 pm Wednesday 25th March
Assignment 2: Case study analysis	30%	10 pm Wednesday 22nd April
Assignment 3: Group presentations	10%	By arrangement during weeks 8-11
Assignment 4: Research essay	40%	10 pm Wednesday 3rd June

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

Assignment 1: Mini Literature Review (20%) - 1,000 words– 25ᵗʰ March
(Addresses objective 1)
- To be distributed in class and placed on the Blackboard site

Students will prepare a literature review on one of three given topics: eco-collaboration, eco-efficiency or eco-effectiveness. At least 12 articles should be used and at least 8 articles should be from reputable academic journals.

Assignment 2: Case Study Analysis (30%) – 2,000 words - 22ⁿᵈ April
(Addresses objectives 1 & 2))
- To be distributed in class and placed on the Blackboard site

Students will analyse a case study that highlights issues of sustainability in an organisational setting.

Assignment 3: Group Presentations (10%) – 20 minutes - Weeks 8 to 11
(Addresses objectives 1, 2 & 3)
- To be distributed in class and placed on the Blackboard site

Students will work in groups of 3 or 4 to prepare a research based action plan outlining the issues involved in implementing a sustainable change within an organisation. The presentation will be 20 minutes followed by a discussion.

Assignment 4: Research Essay (40%) – 3,000 words – 3ʳᵈ June
(Addresses objectives 1, 2 & 3)
- To be distributed in class and placed on the Blackboard site

Students will prepare a research essay on one of three topics given out in assignment one. The research essay will include a revised version of the mini-literature review submitted for assignment one.

Penalties
In fairness to other students, work submitted after the deadline will be subject to a penalty of 10% of the marks earned per day of lateness. Assignments more than one week late will not be accepted and a "zero" mark will be applied. In the event of unusual, unforeseen circumstances, e.g., serious illness, family bereavement, students should discuss waiver of the penalty with the Course Coordinator.

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.

Mandatory Course Requirements
Students are expected to attend all lectures, read assigned material and contribute to class discussions.

To meet mandatory requirements, students are expected to submit each assignment and to obtain an overall course mark of at least 50%.

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

Communication of Additional Information

Additional information or information on changes will be announced in class, posted on Blackboard and/or e-mailed to students, depending on the situation. It is imperative that students monitor Blackboard regularly as well as their student e-mail accounts.

Student feedback

As this is a new course being taught for the first time, there is no previous student feedback. Our goal is to provide the best learning experience possible, so if you have any suggestions for improvement please let us know, there is no need to wait until the end of the course to provide your 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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MMIM 580 Case Analysis Rubric   **Name:** _____   **ID:** _____

	Very good/exemplary (7-10)	Meets expectations (5-6)	Below expectations (0-4)	
Issue identification and framing: *Identifies the nature of key problems, issues & situations*	Clearly identifies and explains nature of key issues	Explains and summarises most key issues in the case. Some material not explained, inaccurately explained or not dealt with	Key elements/issues missing from problem identification and/or are inaccurately explained. (or problems identified lack relevance to themes)	**/10**
Analysis & communication of argument *Conducts thorough analysis by selecting, applying, combining and interpreting evidence from case to build convincing arguments*	Selects, interprets and combines relevant evidence accurately, convincingly and systematically Analysis is rich, appropriate, well justified and follows logically from arguments Communication is clear and well structured	Selects, interprets and combines relevant evidence. Moderate degree of analysis to support arguments Communication is generally clear Structure leaves room for improvement Some evidence omitted, not well explained, or partially synthesised	Limited or incomplete analysis, or significant omissions/inaccuracies in selection and combination of evidence to support arguments Communication lacks clarity and/or structure is unclear	**/10**
Application of relevant sustainability-related concepts & literature *Supports arguments with course themes and topics, using sustainability terms, theory, framework or models appropriately*	Uses relevant terms/ theory appropriately to support and explain issues Sources that support arguments are accurately cited/referenced	Use of terms/theory is largely appropriate to explain issues Sources that support arguments are mostly accurately cited/referenced	Use of terms/theory is not appropriate to explain issues, or is absent or incorrectly used Sources that support arguments are poorly cited/referenced	**/10**
TOTAL				**/ 30**
Comments:				

MMIM 580 Assignment 3 – Group Presentation Rubric

Group Topic	
Student Names:	

	Exemplary	*Good*	*Acceptable*	*Unacceptable*
Content [6 marks]				
Organization and Professionalism [1 mark]	Presentation is organized and the interest level of the audience is maintained.	Thoughts articulated clearly, though does not engage audience.	Thoughts don't flow, not clear, does not engage audience.	Mumbles, audience has difficulty hearing, confusing.
Selection of Evidence [1 mark]	Makes thorough and accurate selection of relevant evidence.	Generally good selection of evidence, though with a few gaps.	Largely accurate and adequate selection of evidence for task at hand.	Significant omissions and/or inaccuracies in evidence
Interpretation of Evidence [2 marks]	Interprets evidence accurately, convincingly and systematically.	Generally convincing interpretation though not always systematic.	Largely accurate, appropriate and justifiable interpretation of evidence.	Interpretation of evidence is incomplete, inaccurate, distorted or misused.
Completeness [1 mark]	Thoroughly explains all points and responds to questions with easiness and in a convincing manner.	Majority of points covered in depth, some points glossed over. Answers most questions in a convincing manner.	Majority of points glossed over and has difficulty responding to questions.	One or more points left out and cannot provide satisfying answers to questions.
Creativity [1 marks]	Very original presentation of material; captures the audience's attention.	Some originality apparent; good variety.	Little or no variation; material presented with little originality or interpretation.	Repetitive with little or no variety, insufficient use of visual aids.
Delivery [4 marks]				
Eye Contact [1 marks]	Holds attention of entire audience with the use of direct eye contact, seldom looking at notes.	Consistent use of direct eye contact with audience, but still returns to notes.	Displayed minimal eye contact with audience, while reading mostly from the notes.	No eye contact with audience, as entire report is read from notes.
Enthusiasm [1 marks]	Demonstrates a strong positive feeling about topic during entire presentation.	Occasionally shows positive feelings about topic.	Shows some negativity toward topic presented.	Shows absolutely no interest in topic presented.
Visual Aid [1 marks]	Visual aid enhances presentation; all thoughts articulated; keeps interest.	Thoughts articulated clearly, but not engaging.	Adds nothing to the presentation.	Poor, distracts audience and is hard to read.
Time Frame [1 marks]	Presentation falls within required time frame (~1 minutes).	Presentation falls within required time frame (~3 minutes).	Presentation falls within required time frame (~5 minutes).	Presentation is much more or much less than the required time frame.
Scorer's Holistic Judgement	Excellent oral communication for students at this level.	Good oral communication skills for students at this level.	Satisfactory oral communication for students at this level.	Unsatisfactory oral communication for students at this level.

MMIM 580   **Rubric for Literature Review and Research Report**

Name:_____ **Topic**_____ **ID** _____

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	Exemplary	Satisfactory	Unsatisfactory	
	11-15	6-10	0-5	
Effectiveness of topic framing **Understands and states the problem, issue, situation with reference to course concepts and themes (frameworks, research, theory)**	Succinctly & accurately explains and summarises all key elements of the topic/theme using many appropriate terms, frameworks/theories &/or concepts from course. High focused.	Explains and summarises most key elements of the topic/theme using some appropriate terms, theories &/or concepts from course. Moderate focus	Many key elements missing and/or inaccurately explained. Limited use of appropriate terms, theories & concepts from course in explaining topic/theme. Lacks clear focus.	/20
Reflection and analysis **Analyses/reflects on nature and potential significance of the new technology/trend in an insightful, critical way, with reference to organisations, individuals, systems, culture processes etc (as relevant to topic)**	Comments in a structured, analytical and insightful way on relevant issues, limitations, opportunities etc; and/or strong reflective application of frameworks and/or theory to situation/issue	Makes a substantive analytical and reflective contribution addressing 3+ relevant issues, subthemes, theories, models, limitations, opportunities etc. Some reflective application of frameworks/theory to situation/issue	Limited or no attempt at analysis, Reflection with respect to fewer than 3 relevant issues; or only superficial analytical & reflective comments apparent.	/20
Quality and clarity of argument	Argument effectively and efficiently conveyed; highly focused on the question; easily understood. Logical flow. Draws thorough, appropriate conclusions demonstrating an ability to identify priority, significance and impact	Argument reasonably clear; occasionally misses the point but answers the question Understandable. Draws appropriate, justifiable conclusions addressing relevant key issues and outcomes	Argument confused/unclear. Irrelevant information; Poor transition between ideas. Unclear conclusion Conclusions do not follow from evidence and analysis, are far-fetched or trivial in scope.	/20
Structure and style: **Document, paragraph and sentence structure, flow and layout, appropriate to audience.**	Variety of sentence construction; logical flow; style and structure appropriate for task, audience and genre. Uses engaging delivery that enhances understanding.	Not overly repetitive; some variety in sentence construction; generally flows well; some awareness of audience and genre.	Overly repetitive or simplistic sentence structure; consistently disjointed, lack of flow; style/structure inappropriate for audience. Significantly over or under advised length.	/10

	Exemplary	Satisfactory	Unsatisfactory	
	8-10	5-7	0-4	
Technical writing skills: Spelling, capitalisation, punctuation, grammar, general proofreading. **& Vocabulary:** Originality, breadth, appropriateness, variety.	Very few spelling errors, correct punctuation, grammatically correct, complete sentences. Highly appropriate, well chosen, precise and varied vocabulary. Consistently uses correct word choice and discipline-specific terminology.	Occasional lapses in spelling, punctuation, grammar, but not enough to seriously distract the reader. Generally appropriate vocabulary; not overly repetitive. Generally uses correct word choice and discipline-specific terminology.	Numerous spelling errors, non-existent or incorrect punctuation, and/or severe errors in grammar that interfere with understanding Excessively limited or inappropriate or repetitive vocabulary. Misuses discipline-specific terminology.	/10
Academic Integrity: Appropriate use of references AND CITATIONS.	Appropriate use of others' work, acknowledged via in-text citations. Uses APA (or accepted alternative) referencing system consistently and correctly.	Other sources acknowledged. Generally uses APA (or accepted alternative) referencing system.	Unattributed work from other sources. 1 Does not attempt to use APA (or accepted alternative2) referencing system.	/10
Holistic judgement:	Exemplary written communication.	Satisfactory written communication.	Unsatisfactory written communication.	/10
TOTAL	**Grade & comments**:			/100

The mark for this assessment will be scaled to 20% for the literature review and 40% for the research essay

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[1] Note that Plagiarism will cause the entire document to be "Unsatisfactory" regardless of quality of remaining parts.
[2] APA is FCA standard. Occasionally lecturers may allow other referencing systems, providing guidance as needed.