



School of Information Management

INFO401 FOUNDATIONS OF INFORMATION SYSTEMS RESEARCH

Trimester 1, 2016

COURSE OUTLINE

Prescription

An overview of the main streams of research which contribute to the field of information systems. This course will provide students with the perspective needed to appreciate current and future trends in information systems research.

Course Learning Objectives

This course provides an overview of some of the main streams of research that have contributed to the development of information systems as an academic discipline. The course will provide students with the perspective needed to appreciate current and future trends in information systems research. This course also builds skills that will assist students in developing the capability to carry out independent research in the fields of information systems and electronic commerce.

By the end of this course students will be able to:

1. Understand some of the core “body of knowledge” in the information systems field (LG3).
2. Describe, integrate, and apply to research situations the findings of selected articles in designated thematic areas of Information Systems as listed in the course timetable (LG1).
3. Perform a thorough search for relevant Information Systems research in print media, CD-ROM, online databases, and Internet resources (LG2).
4. Evaluate academic articles including both research papers and surveys of others' research (LG2).
5. Write a concise, logical, and integrated review of academic literature, using appropriate style, language, citation, and referencing (LG1, LG4).
6. Present research-based knowledge and ideas clearly and persuasively (LG4, LG5).

Course Content

Indicative Schedule, Trimester 1, 2016

| Week | Date | Topic/Assessment |
|---|--------------------|--|
| 1 | 1 March (Tate) | The IS Discipline and its Relationships <ul style="list-style-type: none"> • <i>Course overview</i> • <i>In-class exercise: the IS discipline</i> • <i>In class exercise: Writing summaries and critiques of academic articles</i> |
| 2 | 8 March (Tate) | Metaphors for IS – conceptualizing real-world phenomena <ul style="list-style-type: none"> • <i>Presentations and article critiques</i> • <i>In-class exercise: Research question workshop</i> |
| 3 | 15 March (Tate) | The Literature Review <ul style="list-style-type: none"> • <i>Presentations and article critiques</i> • <i>In class exercise: making a metaphor for information systems</i> |
| 4 | 22 March (Tate) | User Acceptance <ul style="list-style-type: none"> • <i>Presentations and article critiques</i> • <i>Discussion and exercises</i> • <i>In class exercise: make a poster</i> |
| Easter break 24 – 30 March | | |
| 5 | 5 April (Tate) | Task Technology Fit <ul style="list-style-type: none"> • <i>Presentations and article critiques</i> • <i>Discussion and exercises</i> • <i>In class exercise: Case</i> |
| 6 | 12 April (Tate) | IT Project Management <ul style="list-style-type: none"> • <i>Presentations and article critiques</i> • <i>Discussion and exercises</i> • <i>In class exercise: Case</i> <p>Due Friday 15 April: Literature Review Outline, Poster and Annotated Bibliography.</p> |
| 7 | 19 April (Tate) | IS Success, Impact and Value <ul style="list-style-type: none"> • <i>Presentations and article critiques</i> • <i>Discussion and exercises</i> |
| Mid-term break 25 April to 1 May | | |
| 8 | 3 May (Goh) | Habit in IS <ul style="list-style-type: none"> • <i>Presentations and article critiques</i> • <i>Discussion and exercises</i> |
| 9 | 10 May (Goh) | Design in IS <ul style="list-style-type: none"> • <i>Presentations and article critiques</i> • <i>Discussion and exercises</i> |
| 10 | 17 May (Goh) | Mobile in IS <ul style="list-style-type: none"> • <i>Presentations and article critiques</i> • <i>Discussion and exercises</i> |
| 11 | 24 May (Goh) | Business Intelligence and Analytics in IS <ul style="list-style-type: none"> • <i>Presentations and article critiques</i> • <i>Discussion and exercises</i> |
| 12 | 31 May (Goh) | Wrap up – IS research informing practice. The value and relevance of IS research <ul style="list-style-type: none"> • <i>In-class exercise</i> • <i>Break-up function</i> <p>Due Tuesday 7 June: Literature Review</p> |
| | | <ul style="list-style-type: none"> • Final test (Tuesday June 14) |

Trimester Dates

From Monday 29 February to Sunday 19 June.

Withdrawal from Course

1. Your fees will be refunded if you withdraw from this course on or before Friday 11th March 2016.
2. The standard last date for withdrawal from this course is Friday 13th May 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](#).

Names and Contact Details

Course coordinator and lecturer Dr Mary Tate (**till 22 April**)
Location: RH 504
Email: mary.tate@vuw.ac.nz
Ph: 463 5265
Office hours: by appointment

Course coordinator and lecturer Dr Tiong-Thye Goh (**after 22 April**)
Location: RH 403
Email: tiong.goh@vuw.ac.nz
Ph: 463 6860
Office hours: by appointment

Class Times and Room Numbers

Tuesdays 11:30 to 14:20
Railway Building 314 (RWW314)

Course Delivery

This is a face-to-face seminar-style course. Students are expected to attend all classes. We will do academic article reviews and carry out discussions presented and led by students. Each week a sample question will be provided. Questions in the final test will be similar to these weekly questions. You are expected, as a minimum, to be thoroughly familiar with ALL the essential course readings, and to come to class ready to discuss topics related to these readings, regardless of whether they have been presented in class.

Readings

There is no textbook. The schedule of readings will be posted on Blackboard. Students are responsible for sourcing and downloading readings from the VUW library as required.

Week 1: The IS Discipline and its Relationships

- 1) Benbasat, I., & Zmud, R.W. (2003). The identity crisis within the IS discipline: Defining and communicating the disciplines core properties. *MIS Quarterly*, 27(2), 183-194
- 2) Tate, M., & Hope, B. (2004). *The Importance of Service Branding in Multi-Channel E-commerce Success: Towards a research framework*. Paper presented at the Australasian Conference in Information Systems (ACIS), Hobart, Australia.
- 3) Grover, V., Ayyagari, R., Gokhale, R., Lim, J., & Coffey, J. (2006). A citation analysis of the evolution and state of information systems within a constellation of reference disciplines. *Journal of the Association for Information Systems*, 7(5), 270-325.

- 4) R Robey, D., & Markus, M.L. (1998). Beyond rigor and relevance: Producing consumable research about information systems. *Information Resources Management Journal*, 11(1), 7-15.

Week 2: Metaphors for IS

- 5) Gorry, G.A., & Scott-Morton, M.S. (1971). A framework for management information systems (SMR Classic Reprint). *Sloan Management Review*, 30(3), 49-62.
- 6) Walsham, G. (1991). Organizational metaphors and information systems research. *European Journal of Information Systems*, 1(2), 83-94.
- 7) Kendall, J., & Kendall, K. (1993). Metaphors and Methodologies: Living Beyond the Systems Machine. *MIS Quarterly*, 7(2), 149-171.

Week 3: The Literature Review

- 8) Sylvester, A., Tate, M., & Johnstone, D. (2011). Beyond synthesis: Re-presenting heterogeneous research literature. *Behaviour and Information Technology*,
- 9) Pare, G., Trudel, M.-C., Jaana, M., & Kitsiou, S. (2015). Synthesizing information systems knowledge: A typology of literature reviews. *Information and Management*, 52, 183–199.
- 10) Boell, S., & Cecez-Kecmanovic, D. (2014). On being ‘systematic’ in literature reviews in IS. *Journal of Information Technology*(10.1057/jit.2014.26), 1-13.

Week 4: User Acceptance

- 11) Boonstra, A. (2003). Interpretive Perspectives on Acceptance of an Electronic Prescription System. *Journal of Information Technology Cases and Applications*, 5(2), 27-50.
- 12) Venkatesh, V., & Davis, F.D. (2000). A Theoretical Extension of the Technology Acceptance Model; Four Longitudinal Field Studies. *Management Science* 46(2), 186-20
- 13) Venkatesh, V., Morris, M.G., Davis, G.B., & Davis, F.D. (2003). User acceptance of information technology: Toward a unified view. *MIS Quarterly*, 27(3), 425-478

Week 5: Task Technology Fit

- 14) Bibbo, D., et al. (2012). Employing Wiki for knowledge management as a collaborative information repository: an NBC universal case. *Journal of Information Technology Teaching Cases* 2012(2): 17-28.
- 15) Goodhue, D.L., & Thompson, R.L. (1995). Task technology fit and individual performance *MIS Quarterly*, 21(2), 213-236.
- 16) Dishaw, M., & Strong, D. (1999). Extending the technology acceptance model with task-technology fit constructs. *Information and Management*, 36, 9-21.
- 17) Klopping, I., & McKinney, E. (2004). Extending the Technology Acceptance Model and the Task-Technology Fit Model to Consumer e-Commerce. *Information Technology, Learning and Performance Journal* 22(1), Pg 35

Week 6: Project Management

- 18) Winter, M., Smith, C., Morris, P., & Cicmil, S. (2006). Directions for future research in project management: The main findings of a UK government-funded research network. *International Journal of Project Management*, 24, 638-649.
- 19) Cicmil, S., Williams, T., Thomas, J., & Hodgson, D. (2006). Rethinking Project Management: Researching the actuality of projects. *International Journal of Project Management*, 24, 675–686.
- 20) Fortune, J., & White, D. (2006). Framing of project critical success factors by a systems model. *International Journal of Project Management*, 24, 53–65.

Week 7: IS Success, Impact and Value

- 21) DeLone, W.H. & McLean, E.R. (2003). The DeLone and McLean model of information systems success: A ten-year update. *Journal of Management Information Systems*, 19(4), 9-30.
- This paper is an extension of the highly cited 1992 paper:
DeLone, W.H. & McLean, E.R. (1992). Information systems success: The quest for the dependent variable. *Information Systems Research*, 3(1), 60-95. [not included]

- 22) Gable, G., Sedara, D., & Chan, T. (2008). Reconceptualising Information Systems Success: The IS-Impact Measurement Model. *Journal of the Association for Information Systems*, 9(7), 377-408.
- 23) Tate, M., Sedera, D., McLean, E. R., & Burton-Jones, A. (2013). Information Systems Success Research: the "Twenty Year Update?" Panel Report from PACIS, 2011. *Communications of the Association for Information Systems*, 34(article 63), 1235-1246.

Week 8: Habit in IS

- 24) Limayem, M., & Hirt, S. G. (2003). Force of habit and information systems usage: Theory and initial validation. *Journal of the Association for Information Systems*, 4(1), 3.
- 25) Limayem, M., et al. (2007). How Habit Limits the Predictive Power of Intention: The Case of Information Systems Continuance. *MIS Quarterly* 31(4), 705-737
- 26) Sander Hermsen, Jeana Frost, Reint Jan Renes, Peter Kerkhof, (2016) Using feedback through digital technology to disrupt and change habitual behavior: A critical review of current literature, *Computers in Human Behavior*, Volume 57, April 2016, Pages 61-74, ISSN 0747-5632, <http://dx.doi.org/10.1016/j.chb.2015.12.023>.

Week 9: Design in IS

- 27) Meth, H.; Mueller, B.; and Maedche, A. (2015). Designing a Requirement Mining System. *Journal of the Association for Information Systems*, 16(9), 2.
- 28) Zhou, H. (2015). Love in the modern world :Designing the social presence for long-distance couples <http://hdl.handle.net/2142/78529>
- 29) Oinas-Kukkonen, H., & Harjumaa, M. (2009). Persuasive systems design: Key issues, process model, and system features. *Communications of the Association for Information Systems*, 24(1), 28.

Week 10: Mobile in IS

- 30) Dery, K., Kolb, D., & MacCormick, J. (2014). Working with connective flow: how smartphone use is evolving in practice. *European Journal of Information Systems*, 23(5), 558-570.
- 31) Urban, G. L., & Sultan, F. (2015). The Case for 'Benevolent' Mobile Apps. *MIT Sloan Management Review*, 56(2), 31.
- 32) Paschou, M., Sakkopoulos, E., & Tsakalidis, A. (2013). easyHealthApps: e-Health apps dynamic generation for smartphones & tablets. *Journal of medical systems*, 37(3), 1-12.

Week 11: BI&A in IS

- 33) Chen, H., Chiang, R. H., & Storey, V. C. (2012). Business Intelligence and Analytics: From Big Data to Big Impact. *MIS quarterly*, 36(4), 1165-1188.
- 34) Salehan, M., & Kim, D. J. (2016). Predicting the performance of online consumer reviews: A sentiment mining approach to big data analytics. *Decision Support Systems*, 81, 30-40.
- 35) Delen, D. (2010). A comparative analysis of machine learning techniques for student retention management. *Decision Support Systems*, 49(4), 498-506.

Expected Workload

3 hours per week attending classes

2-3 hours per week preparing for classes

5-6 hours a week (on average throughout the trimester including breaks) developing assessment items

Total 150 hours

Assessment

The Assessment Handbook will apply to all VUW courses: see

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

Course assessment will be based on:

Article reviews, seminar leadership and discussion

Literature review outline/poster

Annotated bibliography

Due Date

20% 5:00 pm the previous day on Blackboard and by email to the course co-ordinator (ongoing, weekly)

10% Friday 15 April 5:00 pm

10% Friday 15 April 5:00 pm

Literature review 30% Tuesday 7 June 5:00 pm
End of term take-home test 30% Tuesday 14 June

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

Penalties

In fairness to other students, assignment work submitted after the deadline will incur a 10% penalty for each actual day (prior to 9.30 am) late. In the event of bereavement or prolonged illness affecting your ability to meet the deadline, discuss your situation with the Course Co-ordinator. You must verify your claim, e.g., produce a medical certificate. In doing so, you consent to your supporting documentation being checked by the Course Co-ordinator. Extensions will only be granted under these conditions.

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.

Student feedback

This course has been consistently highly rated by students. In response to feedback, we have introduced some less theoretical and more applied topics (for example, project management), and discussion exercises based on recent cases where possible and appropriate.

Student feedback on University courses may be found at www.cad.vuw.ac.nz/feedback/feedback_display.php.

Communication of Additional Information

Additional information will be announced in class, or communicated via Blackboard or email. Any or all of these methods may be used.

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.
