

School of Information Management

INFO 403 RESEARCH METHODS IN INFORMATION SYSTEMS

Trimester 1, 2016

COURSE OUTLINE

Prescription

A critical examination of methodologies used in theoretical and empirical research in information systems. Survey research, experimentation, case research, action research, grounded theory, ethnographic research, hermeneutic research, meta-research and other methodologies will be examined. Published research papers in which the various methodologies have been employed will be studied.

Course Learning Objectives

At the end of the course students should be able to:

1. demonstrate a critical awareness of the principal IS research methods and their conceptual underpinnings
2. identify, describe and determine the applicability of a selection of qualitative and quantitative research methods applicable in the field of information systems
3. design an appropriate research approach for a given situation
4. conduct analysis of both qualitative and quantitative data at a basic level
5. formulate a research proposal on a particular IS topic.
6. write up the results of their research in a form appropriate for scholarly consumption.

Course Content

This course provides an introduction to the research methods commonly used in information systems research. An initial exploration of the conceptual underpinnings of academic research will be followed by an examination of the more common methods used in empirical research in information systems (IS). Students are expected to participate fully in class discussions and exercises to expand their knowledge of such methods.

As this is an introductory course, none of the research methods will be dealt with in sufficient detail as to allow a student to become an expert practitioner of that method. To achieve such expertise, further study will be required. However, this course does provide students with the background necessary to undertake the INFO 430 research project. Students completing INFO 403 successfully should be equipped with the necessary understanding of research methods to allow them to execute their INFO 430 projects competently.

This schedule is subject to change but students will be informed as far in advance as possible of any changes.

Wk	Class Date	Lead	Topic	Deliverable
1	2 March	Brenda/ Janet	Introduction to the domain of research methods. Course admin. What is “research”?; what is “theory”?; the research process; the language of research; philosophy of research.	
2	9 March	Janet	Structuring of inquiry. Choosing a topic; Crafting a research question; creating a research project; research quality issues; rigor and relevance; conducting a literature review; research ethics.	
3	16 March	Janet	Qualitative research design. Approaches to qualitative research, data collection.	
4	23 March	Janet	Qualitative data analysis. Discovering patterns and relationships; trustworthiness in qualitative research thematic analysis; building theory; Software tools (e.g. NVivo, Leximancer)	Checkpoint – proposal outline
Easter Break				
5	6 April	Brenda	Quantitative research design. Survey research.	Assignment 1
6	13 April	Brenda	Quantitative data analysis (1). Data coding; descriptive statistics; graphical data displays; inferential statistics. Software tools (SPSS).	
7	20 April	Brenda	Quantitative data analysis (2). Bivariate analysis; ANOVA; regression.	
Mid Trimester Break				
8	4 May	Brenda	Quantitative data analysis (3). Multivariate analysis; factor analysis.	
9	11 May	Janet/ Brenda	Other research approaches. Experiments; design science; historical methods	Assignment 2
10	18 May	Janet	Critiquing research papers. Principles of writing up a research study; reading and critiquing articles; what constitutes a “good” research report.	
11	25 May	Janet	Research Ethics. Why and how to make a human ethics application	
12	1 June	Janet/ Brenda	Presentations of project proposal	Project proposal presentations
13	10 June		No class	Project proposal submission

Trimester Dates

From Monday 29th February to Friday 10 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	Name	Dr Janet Toland		
	Room	RH523		
	Tel	463-6861	Email	Janet.Toland@vuw.ac.nz
	Office hours	By appointment		
Course Lecturer	Name	Dr Brenda Chawner		
	Room	RH426		
	Tel	463-5780	Email	Brenda.Chawner@vuw.ac.nz
	Office hours	By appointment		

Class Times and Room Numbers

Wednesday 14.40 to 17.30 RWW 314

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

Readings

The required text for the course is Zina O’Leary: *The Essential Guide to Doing Your Research Project (2nd Edition)*. London: Sage. Copies are available in the bookstore on the ground floor of Rutherford House.

We will assign certain articles to accompany and augment the material in the text, for some classes. The 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. An indicative list of key readings for each week is shown below:

Week 1 topic: Introduction to the domain of research methods

O’Leary Chapter 1

O’Leary Chapter 2

Whetton, D. (1989). What constitutes a theoretical contribution? *Academy of Management Review*, 14(4), 490.

Davis, M (1971). That’s Interesting! Towards a phenomenology of sociology and a sociology of phenomenology. *Philosophy of the Social Sciences*, 1, 309. doi: 10.1177/004839317100100211

Week 2 topic: Structuring of inquiry

O’Leary Chapter 3

O’Leary Chapter 4

O’Leary Chapter 5

Van de Ven, A. H. (2007). Variance and Process Models, chapter 5 in *Engaged scholarship: A guide for organizational and social research*. Oxford, UK: Oxford University Press.143.

Week 3 topic: Qualitative research design

O’Leary Chapter 8

O’Leary Chapter 11

O’Leary Chapter 12

Pare, G. (2004). Investigating information systems with positivist case study research. *Communications of the Association for Information Systems*, 13, 233.

Walsham, G (1995). Interpretive case studies in IS research: nature and method, *European Journal of Information Systems* 4. 74.

Week 4 topic: Qualitative research analysis

O’Leary Chapter 14

Shenton, A. K. (2004). Introduction to the Special Issue on Web Surveys. *Sociological Methods & Research*, 37(3), 283. doi: 10.1177/0049124108328896

Gibbert, M. & Ruigrok, W. (2010). The what and how of case study rigor: Three strategies based on published work. *Organizational Research Methods*, 13(4), 710.

Week 5 topic: Quantitative research design: Surveys

O’Leary Chapter 8, p. 122-130

O’Leary Chapter 11, p. 201-206

O’Leary Chapter 10, p. 181-190

Witte, J. C. (2009). Introduction to the Special Issue on Web Surveys. *Sociological Methods & Research*, 37(3), 283. doi: 10.1177/0049124108328896

Week 6 topic: Quantitative data analysis 1 (Univariate analysis)

O’Leary Chapter 13, p. 274-298

Zikmund (2010) Chapter 21, Univariate Statistical Analysis (p. 508-529).

Week 7 topic: Quantitative data analysis 2 (Bivariate analysis)

Zikmund (2010) Chapter 22 Bivariate Statistical Analysis: Differences between Two Variables; Chapter 23, Bivariate Statistical Analysis: Measures of Association (p.530-575)

Mudambi, S., & Shuff, D. (2010). What Makes a Helpful Online Review? A Study of Customer Reviews on Amazon.com. *MIS Quarterly*, 34(1), 185-200. (example of regression)

Week 8 topic: Quantitative data analysis 3 (Factor analysis; introduction to path models)

Westland, J. C. (2015). An Introduction to Structural Equation Models *Structural Equation Models: Studies in Systems, Decision and Control* 22 (pp. 1-8). Berlin: Springer-Verlag. (available online)

Zhang, H., Lu, Y., Wang, B., & Wu, S. (2015). The impacts of technological environments and co-creation experiences on customer participation. *Information & Management*, 52(4), 468-482. doi:10.1016/j.im.2015.01.008

Limayem, M., & Cheung, C. M. K. (2011). Predicting the continued use of Internet-based learning technologies: the role of habit. *Behaviour & Information Technology*, 30(1), 91-99. doi:10.1080/0144929X.2010.490956

Week 9 topic: Other research approaches

O’Leary Chapter 9

Paré, G., Jaana, M., Sicotte, C. (2010). Exploring Health Information Technology Innovativeness and its Antecedents in Canadian Hospitals. *Methods of Information in Medicine*, 49(1), 28.

Week 10 topic: Critiquing research papers

O’Leary Chapter 6
O’Leary Chapter 15

Daft, R., (1995). Why I Recommended that your Manuscript be Rejected and What You Can Do about It in Publishing in the Organizational Sciences, Cummings, L. and Frost, P. (eds.), Sage Publications, 1995, 164.

Week 11 topic: Research ethics

O’Leary Chapter 4

Since it is often useful to read what other textbook authors have to say on certain topics, we have placed a few copies of a second book, by Keith Punch, in the 3 day reserve section of the Library (in Railway):

Punch, K.F. (2005). *Introduction to Social Research*. London: Sage.

We will not assign any material from this book, but simply recommend it to you as an alternative to the O’Leary book, should you wish to see obtain a different author’s perspective on any particular topic.

Mandatory course requirements

In addition to achieving an overall pass mark of at least 50%, students are expected to submit each assignment.

If you believe that exceptional circumstances may prevent you from meeting the mandatory course requirements, contact the Course Coordinator for advice as soon as possible.

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

Assessment

There will be five different assessments.

Assessment	Weight	Date
Checkpoint – Proposal outline	10%	23 March (2.40pm)
Assignment 1 – Qualitative Research Exercise	20%	8 April (4.00pm)
Assignment 2 – Quantitative Research Exercise	20%	11 May (2.40pm)
Session Preparation Assignments	10%	- continuous -
Project proposal		
• Submission	30%	10 June (4.00pm)
• Presentation	10%	1 June (10.00am)

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

Checkpoint exercise (10%) – Proposal outline – 23 March

(Addresses objectives 1, 2, 3, 5, and 6)

- To be distributed in class and placed on the Blackboard site

Assignment 1 (20%) – Qualitative Research Exercise – 8 April

(Addresses objectives 2, 3, 4)

- To be distributed in class and placed on the Blackboard site

Assignment 2 (20%) – Quantitative Research Exercise - 20 May

(Addresses objectives 2, 3, 4)

- To be distributed in class and placed on the Blackboard site

Session preparation assignments (10%)

(Addresses objectives 1, 2, 3, 4, 5)

Most weeks (except for weeks 1 and 12), each student is required to prepare a brief exercise related to key learnings for that week. This could be a written summary of academic articles, a short presentation or a practical activity. Generally any material to be handed in will not be more than 2 pages in length.

Project proposal (40%) – 10 June

(Addresses objectives 1, 2, 3, 5, 6)

The purpose of this assignment is to provide an opportunity for the student to develop a research project proposal – a detailed plan for conducting a specific, real research project – and to present the plan to your fellow students and selected SIM staff members. For honours students, the project proposal will form the basis for the student's INFO 430 project in the second trimester

In the final class (Wednesday 1st June), each student will deliver a short presentation of the proposed project, followed by a question and answer session.

Detail concerning the specific requirements for this assignment will be distributed and discussed in class, and also placed on the course Blackboard site.

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.

Group Work

There will be no formal group assignments. However, class discussion will sometimes take place in pairs or small groups.

Penalties

In fairness to other students, assignment work submitted after the deadline will incur a 10% penalty for each actual day (prior to the specified time) 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.

Important Notes:

- *No extension is possible based on a student's workload. You are expected to manage your workload to ensure there is sufficient time to complete assessments as required.*
- *You are expected to back up your work – From time to time files are lost, computers crash, etc., so it is critical that you get into the habit of backing up important files (on a USB stick for example).*
- *Do not leave submitting your work to the last minute – Technology problems do occur (especially on the day an assessment is due). Be smart and submit it in plenty of time. Extensions will not be granted due to problems with submitting work.*
- *Working together – All assessments in this course are individual assessments, unless they are explicitly identified as group assessments. You are encouraged to discuss aspects of your individual assessments with others. However, when it is time to develop your solution, the work must be ENTIRELY your own. In this way, we will have your perspective on the topic - not someone else's!*

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

Student feedback on last year's course was generally positive. However we are always looking to improve learning and teaching so any suggestions you may have are most welcome. There is no need to wait until the end of the course to give us your feedback, the sooner we get your ideas the sooner we can implement changes.

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

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

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.

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.
