

City University of Hong Kong
Information on a Course
offered by Department of Information Systems
with effect from Semester A in 2012 / 2013

Part I

Course Title:	<u>IS Research Methods</u>
Course Code:	<u>IS8001</u>
Course Duration:	<u>One Semester (13 weeks)</u>
Credit Units:	<u>3</u>
Level:	<u>R8</u>
Medium of Instruction:	<u>English</u>
Prerequisites:	<u>Nil</u>
Precursors:	<u>Nil</u>
Equivalent Course:	<u>IS8001M IS Research Methods</u>
Exclusive Courses:	<u>Nil</u>

Part II

1. Course Aims

This course aims to equip IS research students with the necessary foundations and skills to perform IS research at a postgraduate level.

2. Course Intended Learning Outcomes (CILOs)

Upon successful completion of this course, students should be able to:

No.	CILOs	Weighting (if applicable)
1	Explain the nature of contemporary IS research	2
2	Build an understanding of the current IS research directions	2
3	Understand the IS research process	3
4	Evaluate, select, and apply appropriate methodologies to solve an IS research problem	3
5	Develop comprehensive research proposals following suitable research methodologies	3
6	Critically assess the quality of a research work	3

(3: Relatively most focused ILOs; 2: moderately focused ILOs; 1: less focused ILOs)

3. Teaching and Learning Activities (TLAs)

(Indicative of likely activities and tasks designed to facilitate students' achievement of the CILOs. Final details will be provided to students in their first week of attendance in this course)

Seminar: 2 hours per week
Tutorial: 1 hour per week

TLA1: Seminar

The following items form the content of the seminar:

1. Introduction of IS research and the role of theories
2. Overview of current areas of IS research
3. IS research process examination covering topics such as theory building, measurement, sampling, research design, survey research, experimental research, and qualitative research
4. Detailed examination and critique of some IS research work

TLA2: Tutorial

Participants are required to participate in question and answer sessions during or at the end of each lecture.

ILO No.	TLA 1: Seminar	TLA 2: Tutorial	Hours/week (if applicable)
CILO 1	2	2	
CILO 2	2	2	
CILO 3	2	2	
CILO 4	1	2	
CILO 5	1	2	
CILO 6	1	2	

(1: Indirectly Supporting ILO; 2: Directly Supporting ILO)

4. Assessment Tasks/Activities

(Indicative of likely activities and tasks designed to assess how well the students achieve the CILOs. Final details will be provided to students in their first week of attendance in this course)

Coursework : 100%

AT1. Discussion and Participation (15%): The class required students to actively participate in discussions to allow them to engage in deeper reflection and learning. Based on students' discussion and participation, the instructor assesses their understanding of the chosen research areas and their abilities to apply their skills.

AT2. Presentation (25%): Each student is required to give presentations as self reflections, which demonstrate the ability in solving problems in respective research area.

AT3: Final Term Paper (40%): Each student is required to submit a comprehensive project proposal that details how he/she applies appropriate methodologies to solve an IS research problem that he/she choose to investigate.

AT4: Assignments (20%): The course consists of several individual assignments, including paper critique, to assess students' understanding of the chosen research methods and their abilities to apply their skills.

ILO No	AT1 (15%)	AT2 (25%)	AT3 (40%)	AT4 (20%)
CILO 1	2	1	1	1
CILO 2	2	1	1	1
CILO 3	2	1	2	1
CILO 4	1	1	2	2
CILO 5	1	2	2	1
CILO 6	1	2	1	2

(1: Indirectly Supporting ILO; 2: Directly Supporting ILO)

5. Grading of Student Achievement:

Grading is assigned based on students' achievement of ILOs in accordance to the defined grading criteria. Grading pattern: Standard (A+, A, A- .. C-, D, F)

Part III

Keyword Syllabus

1. Introduction to IS Research: evolution and status of IS; nature and characteristics of IS research; research frameworks for IS; areas of current IS research; characteristics of good research.
2. The IS Research Process: identifying a research problem; theory building; measurement; research design; survey research; experimental research; case study research; qualitative

research; data analysis; system development; ethical issues; developing research proposals; publishing research results.

3. Selected research work in IS: management support systems; information systems development; management and organizational aspects of information systems.

Recommended Reading

Dubin, R., "Theory Building in Applied Areas," in Dunnette, Marvin D. (ed.), *Handbook of Industrial and Organizational Psychology*, (Chicago, Ill.: Rand McNally College Pub. Co.), pp. 17-39, 1976.

Galliers, R. D. and Land, F.F., "Choosing Appropriate Information Systems Research Methodologies," *Communication of the ACM*, 30, No. 11 (1987), pp. 900-902.

Gregor, S., "The Nature of Theory in Information Systems," *MIS Quarterly*, 30, No. 3 (2006), pp. 611-642

Churchill, G.A., "A Paradigm for Developing Better Measures of Marketing Constructs", *Journal of Marketing Research*, Vol. XVI, February 1979, pp. 64-73.

Gefen, D., & Straub, D., "A Practical Guide to Factorial Validity Using PLS-Graph: Tutorial and Annotated Example. *Communications of the AIS*, 2005, 16, 91-109.

Moore, G. C. and Benbasat, I., "Development of an Instrument to Measure the Perceptions of Adopting an Information Technology Innovation", *Information Systems Research*, September 1991, pp. 192-222.

Wixom, B.H., and Todd, P.A. "A theoretical integration of user satisfaction and technology acceptance," *Information Systems Research* (16:1), 2005, pp 85-102.

Hufnagel, E. M. and Conca, C., "User Response Data: The Potential for Errors and Biases" *Information Systems Research*, March 1994, pp. 48-73.

Dewan, S. Ren, F., "Risk and Return of Information Technology Initiatives: Evidence from Electronic Commerce Announcements," Vol. 18, No. 4, 2007, pp. 370-397.

Bouchard, T.J., "Field Research Methods: Interviewing, Questionnaires, Participant Observation, Systematic Observation, Unobtrusive Measures," in *Handbook of Industrial and Organizational Psychology*, Rand McNally College Publishing Company, Chicago, Illinois, 1976, pp. 363-413.

Benbasat, I., "Laboratory Experiments in Information Systems with a Focus on Individuals: A Critical Appraisal," in I. Benbasat (ed.) *The Information Systems Research Challenge: Experimental Research Methods*, Harvard Business School, 1990, pp. 33-47.

Santhanam, R., Sasidharan, S., and Webster, J. "Using Self-Regulatory Learning to Enhance E-Learning-Based Information Technology Training," *Information Systems Research*, Vol. 19, No. 1, March 2008, pp. 26-47.

Zmud, R.W., Olson, M.H., Hauser, R., "Field Experimentation in MIS Research," in I. Benbasat (ed.) *The Information Systems Research Challenge: Experimental Research Methods*, Harvard Business School, 1990, pp. 97-111.

Shadish, W. and T. Cook, "The Renaissance of Field Experimentation in Evaluating Interventions." *Annual Review of Psychology*, 2009, Vol. 60, No. 1. pp. 607-629.

Simon, S.J, Grover, V., Teng, J.T, and Whitcomb, K, "The Relationship of Information System Training Methods and Cognitive Ability to End-User satisfaction, Comprehension and Skill Transfer: A Longitudinal Field Study," *Information Systems Research*, Vol. 7, No. 4, December 1996, pp. 466-490.

Biros, D.P., George, J.F., Zmud, R.W., "Inducing Sensitivity to Deception in Order to Improve Decision Making Perform: A Field Study," *MIS Quarterly*; Vol. 26, No. 2, 2002; 26, pp. 119 - 144.

Chang H.H., Wong K.H. "Adoption of e-Procurement and Participation of e-Marketplace on Firm Performance: Trust as a Moderator" *Information & Management*, Aug 2010. Vol 47, No. 5/6; p. 262-270.

Groover, Varun, "A Tutorial on Survey Research: From Constructs to Theory" see <http://people.clemson.edu/~vgrover/survey/MIS-SUVY.html>

Pinsonneault, A. and Kraemer, K. L., "Survey Research Methodology in Management Information Systems: An Assessment" *Journal of Management Information Systems*, Vol. 10, No. 2, 1993, pp. 75-105.

Barclay, D., Higgins, C., and Thompson, R., "The Partial Least Squares (PLS) Approach to Causal Modeling: Personal Computer Adoption and Use as an Illustration." *Technology Studies*, Vol. 2, No.2, 1995, pp. 285-309.

Andrew Burton-Jones. "Minimizing Method Bias Through Programmatic Research," *MIS Quarterly*, Vol. 33, No. 3, 2009, pp. 445-471.

Gefen, D., Straub, D.W, and Boudreau, M.C., "Structural Equation Modeling and Regression: Guidelines for Research Practice" *Communications of AIS*, Volume 4, Article 7, October 2000.

Shin B., and Kim G., "Investigating the Reliability of Second-Order Formative Measurement in Information Systems Research," *European Journal of Information Systems*, 2011, 20, pp. 608–623.

Benbasat, I., Goldstein, D., and Mead, M., "The Case Research Strategy in Studies of Information Systems," *MIS Quarterly*, September 1987.

Klein, H. K. and Myers, M. D. "A Set of Principles for Conducting and Evaluating Interpretive Field Studies in Information Systems," *MIS Quarterly*, March 1999, pp. 67-94.

Myers, M. D. (Section Editor) "Qualitative Research in Information Systems",

[http://www2.auckland.ac.nz/msis/isworld/#Qualitative Research Methods](http://www2.auckland.ac.nz/msis/isworld/#Qualitative%20Research%20Methods)

Lee, A. S., "A Scientific Methodology for MIS Case Studies," *MIS Quarterly*, March 1989, pp. 33-50.

Benbasat, I. and Zmud, R. W., "The Identity Crisis within the IS Discipline: Defining and Communicating the Discipline's Core Properties," *MIS Quarterly*, Vol. 27, No. 2, 2003, pp.183 - 194.

Nevo, S., Nevo, D., and Ein-Dor, P., "Thirty Years of IS Research: Core Artifacts and Academic Identity," *Communications of the Association for Information Systems*: 2009, Vol. 25, Article 24.

Orlikowsky, W.J. and Suzanne, I., "Research Commentary: Desperately Seeking the "IT" in IT Research- A Call to Theorizing the IT Artifact" *Information Systems Research*, June 2001, pp. 121-134.

Benbasat, I. and Zmud, R. W. "Empirical Research in Information Systems: The Practice of Relevance," pp. 3-16, March, 1999.

Lee, A. "Rigor and Relevance in MIS Research: Beyond the Approach of Positivism Alone," pp. 29-33, March 1999.

Backhouse, J., Liebenau, J., and Land F., "On the Discipline of Information Systems" *Journal of Information Systems*, Vol. 1, pp. 19-27, 1991. (not in the CD)

Banville, C. and Landry, M., "Can the Field of MIS be Disciplined", *Communications of the ACM*, January 1989, pp.48-61.

Benbasat, I., and Weber, R., "Rethinking Diversity in Information System Research," *Information Systems Research*, December 1996, pp. 389-399.

Rosemann, M. and Vessey, I., "Toward Improving the Relevance of Information Systems Research to Practice: The Role of Applicability Checks," *MIS Quarterly*, Vol. 32, No. 1, 2008, pp. 1-22.