

**THE UNIVERSITY OF HONG KONG
FACULTY OF BUSINESS AND ECONOMICS**

PhD Course Syllabus

Course Code/Title: [IIMT6004] Research Methods for Information System

Course Description: This is a broad overview course about doing empirical Information Systems research. We will examine and evaluate a variety of methods, including lab and field experiments, surveys, etc. In addition, we will cover critical issues used to evaluate the appropriateness of methods, including reliability, validity, levels of analysis, statistical power and significance testing. By the end of the course students should have enough knowledge about different methods to identify those most useful for their own research, and to effectively evaluate their own and other's research methodology. Yet, good research cannot be defined simply in terms of a checklist of rules nor can we take infinite time and resources to satisfy each rule, so we will also examine many exemplars of good (and bad!) research to identify the tradeoffs that can and must be made in real life research.

Course Objectives:

1. To give students an overview of Information Systems research
2. To familiarize students with the primary research methods in the field of Information Systems
3. To help students understand how to apply basic statistical methods for data analysis
4. To help students gain some hands-on experience in data collection and analysis
5. To help students critically evaluate IS research methods

Pre-requisite: Nil

Assessment: 100% coursework

Remarks: All PhD courses are non-credit-bearing and will be assessed on a letter grade basis.

Course Learning Outcomes (CLOs) On completion of this course, students should be able to:	Aligned PLOs*				
	1	2	3	4	5
1. Understand and appreciate major research methods for IS research	✓	✓			
2. Be able to apply appropriate data collection methods for research projects in different contexts	✓	✓			
3. Be able to apply appropriate data analysis methods for empirical data	✓	✓	✓		
4. Understand how to report empirical data collection and analysis results			✓	✓	
5. Be able to critically evaluate major research methods			✓	✓	✓

***Programme Learning Outcomes (PLOs) for Research Postgraduate Programme:**

1. Demonstrate critical understanding, at an advanced level, of up-to-date knowledge and research methodology of a particular field
2. Implement effective academic and personal strategies for carrying out research projects independently and ethically
3. Contribute original knowledge in response to issues in their specialist area
4. Communicate research findings at a diverse range of levels and through a variety of media
5. Evaluate one's own research in relation to important and latest issues in the field

COURSE DETAILS *(subject to change at instructor's discretion)*

Year/Semester: 2026-27, First Semester

Time/Venue: Thursday 14:00 - 16:50

Sep 3, 10, 17, 24;

Oct 8, 22, 29;

Nov 5, 12, 26

Instructor: **Prof. Jiang, Zhenhui Jack**

Email: jiangz@hku.hk

Office: KK804 (by appointment)

I. Teaching and Learning Activities

In-class and Out-of-class Activities (e.g. lectures, class discussion, papers reading, proposal writing)	Expected hour	% of student study effort
1. Lecture	24	20
2. Paper Presentation and Discussion	12	10
3. Project Development	42	35
4. Preparatory Work	42	35
Total	120	100%

II. Assessment

Assessment Components (e.g. assignments, proposal, presentation, examination)	Weight	CLOs to be assessed				
		1	2	3	4	5
1. Homework	20%	✓	✓	✓		
2. Presentation	40%	✓	✓		✓	✓
3. In-class Discussion	40%	✓	✓	✓	✓	
Total	100%					

Students will be assessed based on the following performance standards:

Course Grade	Performance Standard
A+, A, A-	Outstanding performance; demonstrates comprehensive understanding, critical thinking, and originality.
B+, B, B-	Good performance; shows solid understanding and application of key concepts, with some minor errors or omissions.
C+, C, C-	Satisfactory performance; basic understanding is evident, but with notable gaps or inconsistencies.
D+, D	Marginal performance; minimal understanding, with significant errors or misunderstandings.

F	Failing performance; little or no understanding of key concepts.
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III. Course Content and Tentative Schedule

Session	Lecture Topics	Special Notes
1	Doing Research: Theory, Constructs, and Hypotheses	
2	Measures, Validity & Reliability	Assignment 1 due.
3	A/B Testing	Assignment 2 (Optional) due.
4	Internal Validity and Experiments	
5	Factorial Experimental Design (I): Between-Subjects	Receive a paper for critique
6	Factorial Experimental Design (II): Within-Subjects, and Mixed Designs; and External Validity	Assignment 3 due. Assignment 4 due.
7	Survey and Field Research (I)	
8	Survey and Field Research (II)	
9	Other Data Collection Methods: Process Tracing, Content Analysis, and Eye Tracking	Assignment 5 due.
10	Review and Proposal Presentation	Proposal due.

IV. Required/Recommended Readings

[Please provide details here]

Including text and papers on various topics.

V. Course Policy

The University Regulations on academic dishonesty will be strictly enforced! Academic dishonesty is behaviour in which a deliberately fraudulent misrepresentation is employed in an attempt to gain undeserved intellectual credit, either for oneself or for another. It includes, but is not necessarily limited to, the following types of cases:

- Plagiarism - The representation of someone else's ideas as if they are their own. Where the arguments, data, designs, etc., of someone else are being used in a paper, report, oral presentation, or similar academic project, this fact must be made explicitly clear by citing the appropriate references. The references must fully indicate the extent to which any parts of the project are not one's own work. Paraphrasing of someone else's ideas is still using someone else's ideas, and must be acknowledged. Please check the University Statement on plagiarism on the web: <http://www.hku.hk/plagiarism/>
- Unauthorized Collaboration on Out-of-Class Projects - The representation of work as solely one's own when in fact it is the result of a joint effort.
- Cheating on In-Class Exams - The covert gathering of information from other students, the use of unauthorized notes, unauthorized aids, etc.

- d. Unauthorized Advance Access to an Exam - The representation of materials prepared at leisure, as a result of unauthorized advance access (however obtained), as if it were prepared under the rigors of the exam setting. This misrepresentation is dishonest in itself even if there are not compounding factors, such as unauthorized uses of books or notes.

You are expected to do your own work whenever you are supposed to. Incident(s) of academic dishonesty will NOT be tolerated. Cheating or plagiarism of any kind would result in an automatic FAIL grade for the course plus strict enforcement of all Faculty and/or University regulations regarding such behaviour.