

The Hong Kong University of Science and Technology
Division of Social Science
SOSC1990 Research Methods in Psychological Science
Fall Semester, 2022

Lecturer	Teaching Assistant
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Lecture Time: Tue, Thu 3:00pm – 4:20pm

Venue: CYTG010, Lift 25 – 26

Course Description

This course introduces students to the basic research principles in psychological science. It evaluates various research designs and statistical analyses, and discusses relevant ethical issues encountered in studying human behaviors.

Prerequisite

SOSC1960 Discovering Mind and Behavior or SOSC1980 Psychology and Everyday Life

Intended Learning Outcomes (ILOs)

Upon completion of this course, students are expected to:

1. recognize the basic research principles in psychological science;
2. evaluate various research designs and statistical analyses commonly used in research on psychological science;
3. demonstrate the ability to apply the professional ethics in conducting research and practice of psychological science;
4. demonstrate skills of scientific reasoning, effective research methods, and problem solving;
5. demonstrate the ability to critically read, summarize, interpret, and evaluate information regarding behavioral phenomena and social issues; AND
6. demonstrate the ability to present, discuss, and explain knowledge about psychological science with clarity in both oral and written forms.

Recommended Textbook

Shaughnessy, J. J., Zechmeister, E. B., & Zechmeister, J. S. (2015). *Research methods in psychology* (10th ed.). New York: McGraw-Hill.

Jhangiani, R. S., Chiang, I-Chant. A., Cuttler, C., & Leighton, D. C. (2019). *Research methods in psychology* (4th ed.). Kwantlen Polytechnic University, Surrey, B. C.
<https://open.umn.edu/opentextbooks/textbooks/75>

Assessment Scheme

Assessment Scheme	Weighting	ILOs
Individual Assignments	40%	#1, #2, #3, #4, #5, #6
Group Project	35%	#1, #2, #3, #4, #5, #6
Peer Review Paper	25%	#1, #2, #3, #4, #5, #6

1. Individual Assignments (40%)

- You will have to complete 3 individual assignments. Guidelines of the assignments will be distributed on CANVAS in due course.

Assignment	Topic
1	Research Ethics
2	Scale and Measurement
3	Quantitative Research Methods

2. Group Project (35%)

- You will be randomly assigned into a team of 5-6 people to propose a research study. Your group will formulate a research hypothesis(es) and to propose a research design to test your hypothesis(es). You will evaluate the contributions of fellow members towards the completion of the project using iPeer. Each person's individual grade will be adjusted based on the peer evaluation.

3. Peer Review Paper (25%)

- You will work individually to review your peers' research study. Your task is to critically evaluate pitfalls and weaknesses of your peers' research study and make suggestions to improve the research design and methodology.

Academic Integrity

You should observe the University's policies regarding academic integrity (<https://registry.hkust.edu.hk/resource-library/regulations-student-conduct-and-academic-integrity>). Academic dishonesty such as plagiarism and cheating would result in a reduction of scores or even a failing grade in the course. We will investigate every suspected case of plagiarism and report the confirmed case to Division of Social Science for further review or action. Make sure you understand academic honesty.

Course Communication Platform

All lecture materials and announcements will be posted on CANVAS. Be sure to check CANVAS frequently for any updated news.

Some Other Notes

- Interaction in class** – I believe interactions (both verbal and non-verbal) between the lecturer and the students (and among students) are one of the key ingredients to an optimal learning experience. Your active participations in class discussion or activities will not only enhance your learning, but also motivate the teaching team to do better! Stay behind the class and share with me your thoughts about the course contents.
- Lecture slides** – Lecture slides will be posted to CANVAS before each class, but the contents will be a bit different from the displayed slides as I hope to encourage you to

take your own notes. Note-taking facilitates your reflection and assimilation of the lecture contents.

- **Penalties** – Score deduction applies to any assignments over the word limit. Detailed can be found in the assignment guidelines.
- **Late submission** – For any group assignment, the group leader will do the submission. Submissions received less than 5 hours after the deadline will not be penalized. No submissions will be accepted after 5pm HKT on the due date.
- **Communication** – Please expect that your emails will be responded to during weekdays 10am to 6pm HKT.
- **Your feedback** – Your opinions about the course are very valuable to help me improve the course. Feel free to drop by to talk to me. A course evaluation will also be held at the end of the course.

Teaching Schedule

Week	Date	Topic	Submission / Key Tasks
1	Sept 1	(1) Introduction	
1	Sept 6	(2) Types of Research Methods	
	Sept 8	(3) Research Questions and Hypotheses Formulation	
2	Sept 13	(4) Research Ethics	
	Sept 15	(5-6) Psychological Measurement	
3	Sept 20		<i>*Group Formation</i>
	Sept 22	(7-8) Survey and Sampling	Assignment 1
4	Sept 27		
	Sept 29	Workshop: Conducting Literature Search	
5	Oct 4	<i>Chung Yeung Festival</i>	
	Oct 6	(9-10) Qualitative Research Methods	
6	Oct 11		
	Oct 13	(11-14) Experimental Designs	Assignment 2
7	Oct 18		
	Oct 20		Group Project Proposal
8	Oct 25		
	Oct 27	(15) Descriptive Statistics	
9	Nov 1	Group Project Consultation	
	Nov 3		
10	Nov 8	(16-17) Inferential Statistics	
	Nov 10		
11	Nov 15	(18-21) Inferential Statistics with Jamovi/SPSS	
	Nov 17		
12	Nov 22		Group Project PPT
	Nov 24	Group Presentation and Q&A Sessions	
13	Nov 29		
	Dec 1		Assignment 3 Peer Evaluation
	Dec 6		Peer Review Paper