

Lectures will not be recorded.

The Hong Kong University of Science and Technology  
Division of Social Science  
SOSC1990 Research Methods in Psychological Science  
Course Syllabus  
Fall Semester 2023

	Lecturer	Teaching Assistant
	Dr. Chen CHENG	Ms. Kayee Wong Ms. Ching In Vivian Ng
<b>Office:</b>	Room 2385	Room 2359
<b>Email:</b>	<a href="mailto:chencheng@ust.hk">chencheng@ust.hk</a>	<a href="mailto:sosc1990ta@ust.hk">sosc1990ta@ust.hk</a>
<b>Consultation:</b>	By appointment	By appointment

\*Emails will be responded to during weekdays 10am to 6pm HKT.

**Lecture Time:** Tuesday and Thursday 4:30pm – 5:50pm

**Venue:** Room 2407, Lift 17-18

### **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.

### **Intended Learning Outcomes (ILOs)**

Upon completion of this course, you 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
6. demonstrate the ability to present, discuss, and explain knowledge about psychological science with clarity in both oral and written forms

### **Suggested Textbook**

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

### **Assessment Scheme**

Assessment Tasks	Alignment of ILOs	Weighting
1. Individual Assignments	1,2,3,4,5,6	40%
2. Group Project	1,2,3,4,5,6	25%
3. Peer Review Paper	1,2,3,4,5,6	20%
4. In-Class Participation	1,2,3,4,5,6	10%
5. Research Experience	1,2,3,4,5,6	5%

### 1. Individual Assignments (40%)

You will have to complete three individual assignments. Guidelines of the assignments will be distributed on Canvas in due course.

Assignment	Topic
1	Research Ethics (10%)
2	Scaling and Measurements (15%)
3	Quantitative Research Methods (15%)

### 2. Group Project (25%)

You will be assigned into a team of 5-7 people to propose a research study. Your group has to 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 evaluations.

### 3. Peer Review Paper (20%)

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.

### 4. In-Class Participation (10% + 2% bonus points)

In-class participation is evaluated based on two ways:

- Attendance-taking. Throughout the semester, I will have ten "pop-up" attendances. The attendance will be conducted through in-class activities and group discussions. Each attendance counts for 1% of your final score, which accumulated to 10% in total.
- Additionally, you can earn up to 2 bonus points through answering questions, getting involved in on-stage demonstrations, each of these experiences will count as one point.

### 5. Research Experience (5%)

One of the best ways to understand knowledge is through application. Research Experience offers opportunities to "switch hats" from a researcher to a research participant to observe how a real research study is conducted. You will complete either of the two tasks:

- Research study: Complete a real research study as a participant and learn firsthand how it is conducted. Write a reflection report about your experience using templates provided.
- Research exercise: Read one journal article from the article list provided. Write a summary report using the template provided.

Your writings will be graded on a pass/fail basis (for failed cases, you will receive comments and have a chance to rewrite and resubmit with a one-point deduction).

### **Academic Integrity**

All of you are expected to observe the University's policies regarding academic integrity (<https://acadreg.ust.hk/generalreg.html#b>). Academic dishonesty such as plagiarism and cheating usually results in a reduced or failing grade in the course. Please consult the teaching team if you are not clear about the guidelines.

### **Course Communication Platform**

All lecture materials and announcements will be posted on CANVAS. Be sure to check CANVAS from time to time for any updated news. Interaction between the lecturer and the students is one of the key ingredients to an optimal learning experience. You can share any thoughts relevant to the course by email. These can be things you come across in your everyday life which are related to what you have learned in class.

### **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 participation 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. Details 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 10 am to 5 pm HKT.
- ***Feedback*** – Your opinions about the course are very valuable to improving the course. A course evaluation will be held at the end of the course. You are also very much welcome to talk to the teaching team.

## Teaching Schedule

Lecture	Date	Topic
1.	5 Sep	Introduction
2.	7 Sep	Research Methods
3.	12 Sep	Research Questions and Hypotheses Formulation
4.	14 Sep	Research Ethics
5.	19 Sep	
6.	21 Sep	Psychological Measurement
7.	26 Sep	
8.	28 Sep	Qualitative Research Methods Part 1
9.	3 Oct	<i>Workshop I: Conducting Literature Search</i>
10.	5 Oct	Understanding psychological research: What do Psychologists Study?
11.	10 Oct	Qualitative Research Methods Part 2
12.	12 Oct	Survey
13.	17 Oct	
14.	19 Oct	Experimental Designs 01
15.	24 Oct	
16.	26 Oct	Experimental Designs 02
17.	31 Oct	
18.	2 Nov	Group Project Consultations
19.	7 Nov	
20.	9 Nov	Descriptive statistics
21.	14 Nov	Inferential statistics
22.	16 Nov	<i>Workshop II: Inferential Statistics with SPSS/R</i>
23.	21 Nov	
24.	23 Nov	Group Project and Q & A Sessions
25.	28 Nov	
26.	30 Nov	

## Important dates

Date	Task due
19 September	Finalized Group List
27 September	Assignment 1
11 October	Group Project Proposal
23 October	Assignment 2
12 November	Research Experience
20 November	Group Project PPT
1 December	Assignment 3
3 December	Peer Evaluations
3 December	Peer Review Paper