

The Hong Kong University of Science and Technology  
Division of Social Science  
SOSC1990 Research Methods in Psychological Science  
Course Syllabus  
Fall Semester 2020

Lecturer	Teaching Assistant
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**Lecture Time:** Tuesday and Thursday, HKT 16:30 – 17:50  
**Zoom ID:** 992 8927 3530

### 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)

After taking this course, you should be able 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. understand the professional ethics in the 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

### Assessment Scheme

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Individual Assignments	45%
Group Project	30%
Peer Review Paper	25%

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1. Individual assignments (45%) ILOs #1 #2 #3 #4 #5 #6

You will have to complete 4 individual assignments. Guidelines of the assignments will be distributed on Canvas in due course.

	Topic	Due Date
Assignment 1	Literature search and generating research hypothesis	Sep 25
Assignment 2	Research ethics	Oct 14
Assignment 3	Survey	Oct 28
Assignment 4	Statistics	Batch 1 – Dec 2 Batch 2 – Dec 4

2. Group project (30%) ILOs #1 #2 #3 #4 #5 #6

You will work in 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).

3. Peer review paper (25%) ILOs #1 #2 #3 #4 #5 #6

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

**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 eth 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.

**Your Feedback**

Your opinions about the course are very valuable to improve 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.	Sep 8	Introduction: What is science?
2.	Sep 10	
3.	Sep 15	Where to start? The beginning of the research journey
4.	Sep 17	Workshop: How to conduct literature search?
5.	Sep 22	Psychological Measurement
6.	Sep 24	
7.	Sep 29	Research ethics: Is the study ethical?
-	<i>Oct 1</i>	<i>Holiday – National Day</i>
8.	Oct 6	Research ethics: Is the study ethical?
9.	Oct 8	Qualitative methods
10.	Oct 13	
11.	Oct 15	Survey
12.	Oct 20	
13.	Oct 22	Experimental design
14.	Oct 27	
15.	Oct 29	
16.	Nov 3	Group project consultation
17.	Nov 5	
18.	Nov 10	Factorial design
19.	Nov 12	Basic statistics: Statistical inference and statistical relationships
20.	Nov 17	
21.	Nov 19	
22.	Nov 24	Workshop: Statistics with R
23.	Nov 26	
24.	Dec 1	Group project Q&A session
25.	Dec 3	

## Important Dates

Date	Task
Sep 23	Submission of group list
Sep 25	Assignment 1 due
Oct 14	Assignment 2 due
Oct 28	Assignment 3 due
Oct 30	Group project proposal due
Nov 25	Group project due
Dec 1 or 3	Group project Q&A session
Dec 2	Assignment 4 – Batch 1 due
Dec 4	Assignment 4 – Batch 2 due
Dec 5	Peer evaluation due
Dec 11	Peer review paper due