

THE UNIVERSITY OF HONG KONG
FACULTY OF SOCIAL SCIENCES
Department of Psychology

COURSE OUTLINE (2023/2024, SEMESTER ONE)

1. Basic Course Information

Course Code	PSYC7301
Course Title	Introduction to Research Methods in Psychology
Course Credits	6
Lecture Time & Venue	Friday 3:30 – 5:20 CPD 3.41
Tutorial Time & Venue	Friday 5:30 – 6:20 CPD 3.41

2. Course Instructor / Course Co-ordinator

Name	Office	Phone	E-mail	Consultation Hour
Henry Ng	6.16, JCT	39178205	nghks@hku.hk	By appointment
Wendy Lau	6.13, JCT	39178226	wlau049@hku.hk	By appointment

3. Course Description

The field of psychology has taken a scientific approach since the beginning of the 20th century (or even earlier). No matter you aspire to become a researcher or a practitioner (e.g., a clinical psychologist), learning the scientific method is a key to your success. This course will go you through a complete research process, including research design, ethics, data collection, data analysis, and writing a research report. You will learn how psychology research is conducted, which is essential to your dissertation and other courses.

4. Course Learning Outcomes

On completing the course, students are expected to be able to do the following:

- a. Understand core issues in designing a study, including ethics, validity, and reliability.
- b. Understand the logic of statistical inferences.
- c. Investigate simple research questions (t-test; simple regression) using statistical analyses with Jamovi on their own.
- d. Appreciate the importance of replication in psychological science and be able to carry out a preregistered study as a group.
- e. Report statistical analyses in writing.

5. Assessment Methods and Weighting

Assessment methods	Weighting (%)
Individual assignments	20% (10% each)
Final test	40%
Group project	40%

6. Jamovi and SPSS

Jamovi and SPSS are software packages commonly used in business and academic research. Jamovi will be the main software used to do data analyses in this course. **You must complete all assessments using Jamovi.** Supplementary instructions on using SPSS may be provided throughout the course. Please install a copy of Jamovi in your personal computer:

<https://www.jamovi.org/download.html> (please install the solid version)

If you have any technical issues on installing the software, please contact our I.T. officer of the Psychology Department.

7. Textbooks

SU

Caldwell, S. (2013). *Statistics unplugged*. Belmont, CA: Wadsworth/Thompson Learning. (Available at the A&P bookstore: <https://apbookshop.com/hku>)

LSJ

Navarro, D. J., & Foxcroft, D.R (2019). *Learning statistics with jamovi: a tutorial for psychology students and other beginners* (Version 0.70). DOI: 10.24384/hgc3-7p15. (Available online:

<https://blog.jamovi.org/2018/10/25/learning-statistics-with-jamovi.html>)

8. Marking scale

Grading will be based on the following table:

Grade Range	Performance (after rounding)
A	87 - 100
B	70 - 86
C	53 - 69
D	40 - 52
F	<= 39

9. Feedback Policy

To be honest, this would not be an easy course for some students (well, this applies to every course) and we noticed that in our previous cohorts. We aimed to give the best content to you WITHOUT making you panic. Some students with a math or science background may find the course progress being too slow, which is absolutely fine. Feel free to talk to us if you are a fast learner and want to learn advanced content. If you have difficulties picking up math and statistics, again, talk to us. We do not eat people (though that's the first impression I often leave on new students).

10. Class conduct

- All assignments and exams will be checked for plagiarism against a database of articles, books, webpages, and essays submitted by students at HKU and other universities. No scores will be given for an assignment that contains plagiarized materials. Further penalties will also be applied. These penalties include a zero mark for the course. Plagiarism will also be reported to the Department/Faculty Office/University Disciplinary Committee for consideration of possible disciplinary action.
- Although you are encouraged to share your views and course-relevant resources with your classmates, NEVER show them any of your own written work (drafts or completed assignments). Things other people wrote (whether published or unpublished) may be used in your assignments only with proper acknowledgement and referencing. Neither may you use materials submitted for another course without proper acknowledgement (This is called self-plagiarism).
- All acts of dishonesty in any work constitute academic misconduct. This includes, but is not limited to

cheating, plagiarism, copying other students' work, and abetting to any of the above. Any academic misconduct will subject students to a FAILING grade in this course. You should consult with this webpage for avoiding plagiarism: <http://www.hku.hk/plagiarism>

- d. If you are not the author, making copies of course materials (e.g., PowerPoint files) available online in places other than HKU Moodle may constitute an act of copyright infringement. Please use the materials responsibly. For details, please check https://hku.to/Copyright_Classroom_L2 or https://hku.to/Copyright_Classroom.

Department of Psychology has formulated departmental policies/guidelines on student misconduct. Visit the website at http://www.psychology.hku.hk/?page_id=1814 for more information.

The first tutorial will cover more on this issue.

Class No.	Date	Contents	Readings	Tutorials	Assessments
1	8 Sep	Overview of the research process	LSJ Ch. 1, 2 Journal articles	Research paper reading	
2	15 Sep	Research ethics Describing data	Journal articles SU Ch.1,2	Plagiarism and the APA style	
3	22 Sep	Sampling, distribution, and sampling distribution	SU Ch. 3,4	Introduction to Jamovi LSJ Ch. 3, 4	
4	29 Sep	Basics of inferential statistics	SU Ch. 5, 7	Exploring data with graphs LSJ Ch. 5	
5	6 Oct	Hypothesis testing with unknown population parameters	SU Ch. 6, 8	One-sample test with known population mean LSJ Ch. 11	
6	13 Oct	Power analysis	SU Ch. 7, 8, 9 LSJ Ch. 9	Running t-test with Jamovi I LSJ Ch. 11	
	20 Oct	Reading Week (No Class)			
7	27 Oct	Correlation and Simple Regression I	SU Ch. 12	Running t-test with Jamovi II Briefing on the Group project (Form groups before you come)	A1 due
8	3 Nov	Correlation and Simple Regression II One-way ANOVA I	SU Ch. 12	Correlation and Simple regression LSJ Ch. 12	
9	10 Nov	One-way ANOVA II	SU Ch. 10	One-way ANOVA LSJ Ch. 13	Group project Part A due
10	17 Nov	Measurement reliability & Measurement validity	LSJ Ch. 2 Journal articles	Revision	A2 due
11	24 Nov	Research design: Internal validity & External validity	LSJ Ch. 2 Journal articles	Revision	
12	1 Dec	Final Test			Group project Part B due (Dec 8 th)