THE UNIVERSITY OF HONG KONG FACULTY OF SOCIAL SCIECNES

Department of Psychology

COURSE OUTLINE (2024/2025, SEMESTER ONE)

1. Basic Course Information

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

^{***} Please note that the classroom venue varies on different dates. Please refer to the lecture schedule on page 4 for the venue for each class.

2. Course Instructor / Course Co-ordinator

Name Office		Phone	E-mail	Consultation Hour	
Henry Ng	6.16, JCT	39178205	nghks@hku.hk	Thursday 3:30-4:30pm	
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		
В	70 - 86		
С	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

- a. 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.
- b. 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).

- c. 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	Venue	Contents	Readings	Tutorials	Assessments
1	6 Sep	KKLG109	Overview of the research process	LSJ Ch. 1, 2	Research paper reading	
				Journal articles		
2	13 Sep	CPD 2.19	Research ethics	Journal articles	Plagiarism and the APA style	
		Describing data	SU Ch.1,2			
3	20 Sep	KKLG109	Sampling, distribution, and sampling distribution	SU Ch. 3,4	Introduction to Jamovi	
					LSJ Ch. 3, 4	
4	27 Sep	KKLG109	Basics of inferential statistics	SU Ch. 5, 7		
5 4 Oct KKLG109	KKLG109	Hypothesis testing with unknown population parameters	SU Ch. 6, 8	Exploring data with graphs		
				LSJ Ch. 5		
	11 Oct		[Holiday – no class]			
	18 Oct	t Reading Week (No Class)				
6 25 Oct T	25 Oct	ТВС	Power analysis	SU Ch. 7, 8, 9	One-sample test with known	A1 due
			LSJ Ch. 9	population mean LSJ Ch. 11		
7	1 Nov	KKLG109	Correlation and Simple Regression I	SU Ch. 12		
8	8 Nov	KKLG109	Correlation and Simple Regression II	SU Ch. 12	Running t-test with Jamovi I	
			One-way ANOVA I		LSJ Ch. 11	
9 15 Nov KKLG	KKLG109	One-way ANOVA II	SU Ch. 10	Running t-test with Jamovi II	Group project	
				Briefing on the Group project	Part A due	
				(Form groups before you come)		
10	22 Nov	CPD 2.19	Measurement reliability & Measurement validity	LSJ Ch. 2	Correlation and Simple regression	A2 due
				Journal articles	LSJ Ch. 12	
11	29 Nov	TBC	Research design: Internal validity & External validity	LSJ Ch. 2	One-way ANOVA	
				Journal articles	LSJ Ch. 13	
12	6 Dec	TBC	Final Test			Group project
						Part B due (Dec 10)