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

COURSE OUTLINE (2024/2025, SEMESTER ONE)

1. **Basic Course Information**

Course Code	PSYC7315
Course Title	Psychological testing and measurement
Course Credits	6
Lecture Time & Venue	Thursdays 3:30pm - 6:20pm; CPD-LG.35
Tutorial Time & Venue	Please refer to the Moodle page of this course for details about the optional tutorials

2. **Course Instructor / Course Co-ordinator**

Name	Office	Phone	E-mail	Consultation Hour
Dr Jonathan Yeung (Instructor)	6.16, JCT	39178205	jncy@hku.hk	Fridays, 3:30 pm - 4:30 pm (Please make appointment by email in advance)
Dr Lance Wong (Course coordinator and tutor)	6.17, JCT	39178227	lancewlw@hku.hk	Tuesdays, 12:30 pm – 1:30 pm (Please make appointment by email in advance)

3. **Course Description**

This course uses an application-oriented approach to introduce students to the core concepts of psychometrics, a rigorous, scientific discipline of psychological testing and measurement. Students will be provided with hands-on experiences to apply statistical methods for constructing and developing psychological measurement scales empirically as well as introductory exposure to instruments used by practitioner psychologists to assess intelligence, personality, and occupationally relevant attributes.

4. **Course Learning Outcomes**

On completing the course, students will be better able to:
- understand the basic concepts and principles of psychometrics and their application in some commonly used psychological tests;
- apply basic psychometric methods (as covered in this course) for developing and evaluating psychological testing instruments;
- apply relevant statistical procedures to carry out the psychometric methods covered in this course; and
- interpret and evaluate empirical findings on the psychometric quality of psychological tests.

5. Assessment Methods and Weighting

Assessment methods	Weighting in final course grade (%)
Homework and their planned due dates[*]: • Assignment 1: 14 October 2024 • Assignment 2: 11 November 2024 • Lab report (final assignment): 12 December 2024	Assignment 1: 15% Assignment 2: 15% Lab report: 20%
Quiz 1[**]; venue: CPD-LG.60	20%
Quiz 2[**] (cumulative in scope); venue: CPD-3.16	30%
Total	**100%**

[*] The planned due dates are tentative. Please refer to the instructions of each assignment for its finalized due date.
[**] Any changes (if any) in time and/or mode/venue (e.g., online vs. invigilated) of the quizzes arising from unforeseeable circumstances (e.g., typhoons) will be announced via Moodle as in advance as possible.

6. Course Schedule

Date	Topic	Assigned reading
05-Sep	Overview and introduction	Kaplan & Saccuzzo - Chapter 1
12-Sep	Scaling and scaling methods	Kaplan & Saccuzzo - Chapter 2; Allen & Yen - Chapter 2 and Chapter 8
19-Sep	Scaling and scaling methods	
26-Sep	Correlation and bivariate regression	Kaplan & Saccuzzo - Chapter 3; Allen & Yen - Chapter 2
3-Oct	Reliability and validity	Kaplan & Saccuzzo - Chapter 4 and Chapter 5; Allen & Yen - Chapter 4 and Chapter 5
10-Oct	Reliability and validity	
17-Oct	No class (Reading week)	
24-Oct	**Quiz 1** (3:30pm - 5:15 pm)	
31-Oct	Reliability and validity; Factor analysis	Fabrigar & Wegener – Chapter 1 and Chapter 2
7-Nov	Factor analysis	
14-Nov	Factor analysis; Test construction and development	Kaplan & Saccuzzo - Chapter 6 Allen & Yen - Chapter 6
21-Nov	Test construction and development	
28-Nov	No class (This session's time is allocated for Quiz 2 on 5 Dec)	
5-Dec	**Quiz 2** (3:30pm - 5:15 pm)	

7. Textbooks

Main textbook

1. Kaplan, R. M., & Saccuzzo, D. P. (2018). *Psychological Testing: Principles, Applications, and Issues* (9th edition). Cengage Learning.

References

2. Allen, M. J., & Yen, W. M. (2001). *Introduction to measurement theory*. Waveland Press.

3. Fabrigar, L. R., & Wegener, D. T. (2012). *Exploratory factor analysis*. Oxford University Press.

4. Navarro, D. (2018). *Learning statistics with R: A tutorial for psychology students and other beginners*. (This book is downloadable via the HKU library. The book is primarily intended as a general reference on the command syntax of R for this course.)

8. Feedback Policy

Students are welcomed to approach Jonathan or Lance for any learning challenges encountered in this course. If you have any questions, concerns, or suggestions related to this course, please schedule a time to discuss with Jonathan or Lance in person. (However, please try to avoid making queries related to a quiz or an assignment 24 hours before the quiz or the assignment's deadline.)

Graded assignments with feedback on answers will be returned to students within two to three weeks after the assignments' due dates. The results of the mid-semester quiz will also be released to students within two to three weeks after the quiz. However, the results of (a) the final assignment, if its due date is too close to the end of the semester, and (b) the final quiz will not be separately released to students – the results will be incorporated in the overall grades. The answer papers of quizzes will not be returned to students. Students can obtain feedback for a quiz by scheduling individual meetings with Lance within two weeks after the quiz results have been released.

9. Important Notes

Academic Honesty:
Academic dishonesty will not be tolerated. Any student who engages in any form of academic dishonesty (e.g., cheating on exams, plagiarism, self-plagiarism, interfering with grading, falsification and fabrication of data in any academic exercise, etc.) will receive a grade of F on the component(s) of assessment concerned or in this course and will be reported to the Department/Faculty Office/University Disciplinary Committee for further disciplinary action. There will be no exceptions. If you are not sure what constitutes the academic offense of plagiarism, check out the webpage at https://tl.hku.hk/plagiarism/. Department of Psychology has formulated departmental polices/guidelines on student misconduct. Visit the website at https://psychology.hku.hk/useful-information-to-current-students/ for more information.

Plagiarism:
A softcopy is required for all written assignments. The softcopy will be checked for plagiarism against a database of articles, books, webpages, and essays submitted by students at HKU and other universities. No credit will be given for an assignment that contains plagiarized materials. Further penalties will also be applied. These penalties may include a zero mark for participation in course tutorials and 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.

Other course policies:
Students are expected to attend all class sessions punctually and participate actively in each session, to keep up with the scheduled learning progress. Before each session, students should read the assigned papers and/or textbook chapters. Students must complete their homework assignments independently and submit all assignments on schedule. Students must work independently on all quizzes. Students must complete each quiz entirely on their own and must not communicate with any classmates during the quiz. All quiz materials must be returned, except for online quizzes. Leaving the venue with quiz materials or making copies of the materials are considered academic dishonesty.

Each assignment is due at **11:55 pm on the day of the deadline** specified in the assignment's instructions unless otherwise specified. The total mark of a belatedly submitted assignment (if accepted) will be reduced by 5% per calendar day lapsed. **Any assignments submitted more than six calendar days after the deadline will not be accepted** (i.e., if a student does not submit the assignment before the 7th day after the deadline, the assignment will receive zero mark). Exceptional situations (e.g., certified medical conditions) leading to late submission of assignments will be handled with discretion. In any case, no assignment will be accepted once the corresponding answer key has been released.

Each assignment submission should have the student's name and UID on the front page as a minimum. The filename(s) of the submitted file(s) must commence with "[UID]Assignment[assignment number]", e.g., "3012345678Assignment2.docx".

Arrangements for a make-up quiz will be considered only for (a) absence from a quiz due to certified medical conditions or leave of absence formally approved by the University and (b) if the corresponding medical certification or formal leave-of-absence approval document is provided. Any request for a make-up quiz should be made by email to Jonathan or Lance no later than two days after the day of the original quiz. In case a make-up quiz is arranged, it will normally be held within one week after the original quiz, and the student concerned may be required to attend the make-up quiz in person (even if the original quiz is online). The format and/or difficulty level of a make-up quiz may substantially differ from that of the original quiz. If it is not feasible to organize a make-up quiz as intended, the teaching team will decide on an alternative solution in place of the missed quiz. If a student does not attend a make-up quiz organized for him/her, no further arrangements will be made for the student to take the quiz. There will be no make-up quiz arranged for any make-up quiz.

The University provides students with access to GenAI tools. However, their application is (a) not necessary for learning the contents of this course and (b) not expected to be advantageous for completing the course's assignments. The GenAI tools, at least at this stage of development, should not be taken as reliable sources of knowledge for this course, for which the answers of GenAI tools to questions are too often (a) loaded with inaccuracies, (b) incomplete, and/or (c) misleadingly represented. Students who nonetheless choose to use any GenAI tools for completing their homework assignments should note that the same academic integrity standards are applicable for applying the tools as for other references. **The application of GenAI, if any, in submitted work should be properly acknowledged. Submitting any GenAI output, in part or in whole, for homework assignments without explicit referencing (to indicate that the contents concerned are generated by the GenAI sources) will constitute plagiarism.**

Grading for this course will be based on the table below:

Marks	Grade	Marks	Grade	Marks	Grade	Marks	Grade
≥ 90	A+	77-79	B+	67-69	C+	56-59	D+
85-89	A	73-76	B	63-66	C	45-55	D
80-84	A-	70-72	B-	60-62	C-	< 45	F