Form 2B

City University of Hong Kong

Information on a Course
offered by Department of Applied Social Sciences
with effect from Semester A in 2012/2013

Part I

Course Title:	Research Design & Analysis in Psychology
Course Code:	SS5780
Course Duration:	Two semesters
No. of Credit Units:	6
Level:	P5
Medium of Instruction:	English
Medium of Assessment:	English
Prerequisites:	SS2023 Basic Psychology or its equivalent
Precursors:	Nil
Equivalent Courses:	Nil
Exclusive Courses:	Nil

Part II

Course Aims:

This course aims to provide essential training in research designs and quantitative methods commonly employed in psychology. Upon completion of the course students should be able to plan a psychological research study, to conduct the study in operation, to analyse the observation, and to report and communicate in a professional manner.

Course Intended Learning Outcomes (CILOs)
Upon successful completion of this course, students should be able to:

No.	CILOs	Weighting
1.	explain major theories and principles of research methodology in psychology;	20%

2.	use appropriate research designs and statistical methods in the investigations of human behaviour;	20%
3.	execute quantitative analysis on behavioural data by hand and to manage and analyse them with the help of computer;	25%
4.	organize, synthesize, and differentiate the research literature for the planning of an investigation in an area of psychology; and	20%
5.	report, criticize, and communicate the research findings in a professional manner.	15%

Teaching and learning Activities (TLAs)

(Indicative of likely activities and tasks designed to facilitate students' achievement of the CILOs. Final details will be provided to students in their first week of attendance in this course)

CILO No.	TLA1	TLA2	TLA3	Hours / week (if applicable)
CILO 1	✓			
CILO 2	✓	✓		
CILO 3	✓	✓		
CILO 4			✓	
CILO 5	✓		✓	

Describe the TLAs:

TLA1: Lectures

Focus on explaining pertinent concepts and practices in research methodology and statistical analysis.

TLA2: Practical Labs

Practical hands-on training in data manipulation and data analysis using computer software.

TLA3: Workshops

Group project preparation and consultation.

Assessment Tasks/Activities

(Indicative of likely activities and tasks designed to assess how well the students achieve the CILOs. Final details will be provided to students in their first week of attendance in this course)

CILO No.	Type of Assessment Tasks/Activities	Weighting	Remarks
CILO 3	AT1: Short Assignment	20%	
CILO 1-3	AT2: Quiz	40%	
CILO 2, 4, 5	AT3: Project	30%	
CILO 3	AT4: Practical participation	10%	

Further description of ATs:

AT1: Short Assignment (20%)
Individual exercise on data manipulation and statistical reporting using SPSS, appended with computation by hand and editing of tables/graphs.

AT2: Quiz (40%)
In-class individual test comprised of multiple choice questions and statistical problem solving.

AT3: Project (30%)
At the end of Semester A, students will submit a group research proposal of about 3000 words in APA format. Emphasis is on the integration of research literature and the formulation of hypotheses and design. At the end of Semester B, students will submit a research report of about 2000 words based on the proposal completed in Semester A. Emphasis of the report is on methodology, results, and discussion.

AT4: Practical participation (10%)
Active involvement in practical labs and group project.

Grading of Student Achievement:

Refer to Grading of Courses in the Academic Regulations for Taught Postgraduate Degrees.

Letter Grade	Grading criteria in relation to CILOs
A+ A A-	Strong evidence of competencies in managing and analysing behavioural data arising from various designs, applying appropriate designs and strategies in the process of observation, communicating and reporting research findings in a professional manner.
B+ B B-	Evidence of competencies in managing and analysing behavioural data arising from various designs, applying appropriate designs and strategies in the process of observation; ability to communicate and report research findings in APA format.
C+ C C-	Able to manage and analyse behavioural data arising from various designs, apply appropriate designs and strategies; report research findings in a systematic way.
D	Sufficient knowledge in handling behavioural data arising from relevant designs to enable the student to progress without repeating the course.
F	Little evidence of ability or knowledge in research methodology in psychology, which necessitates repeating the course before proceeding to independent research.

Part III

1. Keyword Syllabus:

Research designs, descriptive and inferential statistics, normal distribution, analysing differences between means, analysing correlation, non-parametric tests of categorical data, power and effect size, analysis of variance, one-way and factorial models, fixed and random effects, randomized block design and within-subject design, polynomials and planned contrast tests, post-hoc tests, introduction to multivariate analyses including general linear model, multiple regression, partial correlations, exploratory factor analyses, report writing, research ethics.

2. Recommended Readings:

Text(s)

Coolican, H. (2009). *Research methods and statistics in psychology*. London: Hodder & Stoughton.

Gravetter, F., & Wallnau, L. (2013). *Statistics for the behavioral sciences*. Canada: Wadsworth.

Gravetter, F., & Forzano, L. B. (2009). *Research methods for the behavioral science*. Canada: Wadsworth.

Smith, R. A., & Davis, S. F. (2010). *The psychologist as detective.* New Jersey: Pearson.

Norusis, M. J. (2005). *SPSS 13.0 Guide to data analysis*. NJ: Prentice Hall.

3. Online Resources:

http://www.ats.ucla.edu/stat/spss/default.htm

http://www.socialresearchmethods.net/

http://davidmlane.com/hyperstat/index.html

http://www.wadsworth.com/psychology_d/templates/student_resources/workshops/workshops.html

http://www.statsoft.com/textbook/stathome.html

http://www.apastyle.org/apa-style-help.aspx