

THE EDUCATION UNIVERSITY OF HONG KONG

Course Outline

Part I

Programme Title	:	Bachelor of Social Sciences (Honours) in Sociology and Community Studies and Bachelor of Education (Honours) (Geography); all undergraduate programmes
Programme QF Level	:	5
Course Title	:	Quantitative Research Methods
Course Code	:	SSC4311
Department	:	Social Sciences and Policy Studies
Credit Points	:	3
Contact Hours	:	39
Pre-requisite(s)	:	Nil
Medium of Instruction	:	English
Course Level	:	4

Part II

The University's Graduate Attributes and seven Generic Intended Learning Outcomes (GILOs) represent the attributes of ideal EdUHK graduates and their expected qualities respectively. Learning outcomes work coherently at the University (GILOs), programme (Programme Intended Learning Outcomes) and course (Course Intended Learning Outcomes) levels to achieve the goal of nurturing students with important graduate attributes.

In gist, the Graduate Attributes for Sub-degree, Undergraduate, Taught Postgraduate, Professional Doctorate and Research Postgraduate students consist of the following three domains (i.e. in short "PEER & I"):

- Professional Excellence;
- Ethical Responsibility; &
- Innovation.

The descriptors under these three domains are different for the three groups of students in order to reflect the respective level of Graduate Attributes.

The seven GILOs are:

1. Problem Solving Skills
2. Critical Thinking Skills
3. Creative Thinking Skills
- 4a. Oral Communication Skills
- 4b. Written Communication Skills
5. Social Interaction Skills
6. Ethical Decision Making
7. Global Perspectives

1. Course Synopsis

This course provides an introduction to the use of quantitative methods in the context of sociology, as well as in relation to general research design. The main goal of this course is to offer a basic and nontechnical application of quantitative research. Special attention is also given to the use of statistics in understanding social transformations of communities at different levels, including local, regional, and global. This course will emphasize both conceptual and practical knowledge, including data collection approaches, questionnaire designs, sampling methods, issues of measurement, data cleaning and validation, descriptive and inferential statistics, univariate and bivariate analysis, data visualization techniques, and report writing. Students will learn how to analyze individual, community, and national-level data with specialized computer programs for statistical analysis. The course will also offer a brief introduction of more advanced statistical topics including multiple regression analysis and various modeling techniques. Advanced mathematical knowledge is not required.

2. Course Intended Learning Outcomes (CILOs)

Upon completion of this course, students will be able to:

- CILO₁ Understand the application of quantitative methods in sociological research design;
- CILO₂ Demonstrate the ability to understand and critically evaluate quantitative results prepared by others;
- CILO₃ Demonstrate the ability to collect and analyze individual, community, and national-level data and interpret the results;
- CILO₄ Demonstrate the ability to analyze quantitative data with the aid of statistical software.

3. Content, CILOs and Teaching & Learning Activities

Course Content	CILOs	Suggested Teaching & Learning Activities
Exploring issues of various data collection approaches, nature and shortcomings of quantitative research, sampling strategies, questionnaire designs, measurement and data presentation	CILOs _{1,2,3}	<ul style="list-style-type: none">• Interactive lecture• Small-group discussion• Analyze survey reports and newspaper articles
Understanding some basic statistical knowledge, from descriptive statistics, probability, hypothesis testing, confidence intervals, to bivariate associations, simple regression analysis and other modeling techniques	CILOs _{1,2,3,4}	
Exploring practical issues in conducting	CILOs _{1,2,3,4}	

quantitative research, from gaining access to respondents, cost estimation, resource allocation, to data cleaning and validation, and effective report writing		
Getting familiar with computer software for data input and statistical analysis	<i>CILOs_{3,4}</i>	<ul style="list-style-type: none"> • Tutorial class

4. Assessment

Assessment Tasks	Weighting (%)	CILO
(a) In-class exercises Students are expected to participate in class discussion and finish class exercises. Assessment for this component will be based on participation in class, quality of input, as well as the completion of class exercises.	20%	<i>CILOs_{1, 2,3,4}</i> <i>Ensure that students have understood the practical application of quantitative research.</i>
(b) Quiz Students will take part in an in-class mid-term or final quiz.	30%	<i>CILOs_{1, 2,3,4}</i> <i>Ensure that students have mastered the conceptual aspects of quantitative research.</i>
(c) Final project (Individual Presentation + Report) Students will conduct a data analysis study. They will select a research question, design their own methodology, collect and analyze data, and write a report.	50%	<i>CILOs_{1, 2, 3, 4}</i> <i>Demonstrate the ability to conduct a small-scale quantitative study, analyze data, and prepare a survey report</i>

5. Use of Generative AI in Course Assessments

Please select one option only that applies to this course:

- ☐ **Not Permitted:** In this course, the use of generative AI tools is not allowed for any assessment tasks.
- ☒ **Permitted:** In this course, generative AI tools may be used in some or all assessment tasks. Instructors will provide specific instructions, including any restrictions or additional requirements (e.g., proper acknowledgment, reflective reports), during the first lesson and in relevant assessment briefs.

6. Required Text(s)

- Babbie, E. (2012). *The Practice of Social Research*. Belmont, CA: Wadsworth.
- Babbie, E., Halley, F. S., Wagner III, W. E., & Zaino, J. (2012). *Adventures in social research: data analysis using IBM SPSS statistics*. CA: Sage Publications.

7. Recommended Readings

- Alan Agresti and Barbara Finlay, *Statistical Methods for the Social Sciences* (Fourth Edition). (Prentice Hall, 2009)
- Healey, J. F. (2009). *Statistics: A Tool for Social Research*. Belmont, CA: Wadsworth.
- Mlodinow, L. (2009). *The Drunkard's Walk: How Randomness Rules Our Lives*. New York: Vintage.
- Salsburg, D. (2002). *The Lady Tasting Tea: How Statistics Revolutionized Science in the Twentieth Century*. New York: Henry Holt.

8. Related Web Resources

- Sage Method Space
<http://www.methodspace.com/>
- Web Center for Social Science Research Methods
<http://www.socialresearchmethods.net/>

9. Related Journals

Journal of Quantitative Criminology
Social Science Quarterly
Social Science Research
Sociological Methodology
Sociological Methods and Research

10. Academic Honesty

The University upholds the principles of honesty in all areas of academic work. We expect our students to carry out all academic activities honestly and in good faith. Please refer to the *Policy on Academic Honesty, Responsibility and Integrity* (<https://www.eduhk.hk/re/uploads/docs/000000000016336798924548BbN5>). Students should familiarize themselves with the Policy.

11. Other

Nil

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