

**TIMETABLE ARRANGEMENT:** Annual; 2nd Semester

**CREDITS:** 6

**COURSE TEACHER(S):** Dr. Duoduo XU

**ASSESSMENT:**

**COURSEWORK 100 %**

- Lecture attendance and participation
- Questionnaire design
- SPSS exercise
- Group project (in-class presentation + final report)

**OBJECTIVES:**

This course introduces students to leading theoretical and methodological approaches to quantitative urban research. In so doing, students will acquire an appreciation for the crucial role that quantitative methods play in the analysis of cities and urban development.

**COURSE SYNOPSIS:**

This course introduces students to a range of quantitative research methods used in the study and analysis of cities and urban regions. Drawing on empirical and theoretical approaches from the fields of geography, sociology, as well as related disciplines in social sciences, the course provides students with a rigorous grounding in the key methodologies, intellectual goals, representational strategies, and ethical considerations that guide quantitative urban research. A combination of readings, lectures and in-class discussions will enable students to compare scholarly approaches to urban development with the more operational perspectives of those who are responsible for the planning, design, and governance of cities.

By developing individual and group research projects, students will learn to apply quantitative data collection methods—such as experimentation, survey research, scientific sampling, questionnaire design, archival research—in order to investigate some of the most pressing socioeconomic and spatial challenges that confront cities today: including but not limited to urbanization, migration, housing, land capitalization, residential segregation, income inequality, fertility decline and population aging. Ultimately, these research projects aim to equip students with basic quantitative analytical skills that will be of considerable value to them in their future academic and professional careers.

**LECTURE TOPICS:**

- Course Overview
- Introduction to Quantitative Urban Research Methods
- Evaluation Research
- Survey Research
- Sampling
- Measurement
- Questionnaire Design
- Quantitative Data Analysis I : Univariate and Bivariate Analysis: Distributions and Descriptive Statistics
- Quantitative Data Analysis II : Statistical Inference and Hypothesis Testing
- Quantitative Data Analysis III: Multivariate Analysis: Regression
- Using SPSS for Data Analysis
- Group Project Presentations I
- Group Project Presentations II

**RECOMMENDED READING LIST:**

- Babbie, Earl R. (2016). The Practice of Social Research (14th ed.). Boston, MA: Cengage Learning.
- Ewing, R., & Park, K. (Eds.). (2020). Basic Quantitative Research Methods for Urban Planners. Routledge.
- Wagner III, William. E. (2019). Using IBM® SPSS® Statistics for Research Methods and Social Science Statistics (7th ed.). LA: Sage Publications.

# Additional reading materials will be introduced by course teacher in class.

Course Learning Outcomes (CLOs) After completing this course, students would be able to:		Alignment with Programme Learning Outcomes (PLOs)*						Course Assessment Methods
		1	2	3	4	5	6	
1	Critically evaluate the assumptions, strengths and weaknesses of different forms of quantitative methods in urban research	✓			✓			Questionnaire design & group project
2	Formulate valid and clear research questions related to city development and select appropriate research methods to answer them		✓			✓		Questionnaire design & group project
3	Develop skills to collect primary data or process secondary data using quantitative research methods; as well as analyze, interpret, and synthesize the resulting research findings			✓			✓	Questionnaire design, SPSS exercise & group project
4	Develop skills to present those findings in a clear and convincing manner, both orally and in writing		✓				✓	SPSS exercise & group project

### **\*Geography Major Programme Learning Outcomes (PLOs)**

In order to meet the demands and challenges in this dynamic and ever-changing world, the Department has designed a series of well-structured and contemporary courses to cater to the different interests of students. Its courses are designed to align with the University's educational aims which hope to nurture future generations not only with a critical and intellectual mindset, but also with a passion to contribute to society in general.

After completing the programme, Geography Major students should be able to:

**PLO1** critically analyse the geographical aspects of the relationship between people and the natural environment;

**PLO2** demonstrate and develop an understanding of how these relationships have changed with space and over time;

**PLO3** identify, collect and utilize primary and secondary data to investigate and analyse the issues and problems facing people, places and society;

**PLO4** integrate, evaluate and communicate information from a variety of geographical and other sources;

**PLO5** participate in promoting social, economic and environmental sustainability at the local, regional and global scales; and

**PLO6** effectively apply a range of transferable skills in academic, professional and social settings.