

## **GEOG2137 Introduction to Research Design (6 credits)**

**Course Teacher: Dr Alex Y H Lo**

### **Objectives**

To introduce students to different research methods and techniques, and help students develop skills in field data collection, data analysis and presentation of findings.

### **Course Synopsis**

This is a foundation course on applied research in the social sciences in general and human geography in particular. It is designed to introduce the key elements of a sound research design and offer training in basic research techniques. This course begins with an introduction to research methodology, followed by exercises to design and implement research experiments relevant to human geography. Both qualitative and quantitative methodologies will be covered. Field activities, such as questionnaire survey, are an essential part of this course. This course also covers the selection and use of various methods and tools for processing, analyzing and presenting data collected.

### **Lecture Topics**

- What is research?
- Concepts and methodologies
- Problem identification and hypothesis testing
- Research instruments and measurements
- Data Collection
- Analysis techniques
- Data analysis
- Data interpretation
- Organization and presentation of data
- Ethics in human research

### **Assessment**

100% coursework (consists of written exercises, practicals, and group project).

### **Learning Outcomes**

Knowledge:

- Understand the key elements of a sound research design
- Understand the strengths and weaknesses of various research methods and tools
- Interpret, organize and present data in a systematic way

Skills:

- Design experiments and sampling schemes
- Collect, analyse and interpret data
- Use data analysis techniques

### **Recommended Reading List**

1. Bouma, G. & Carland, S. (2016) *The Research Process*, 6th edition. South Melbourne, Victoria: Oxford University Press.
2. Cleophas, T. J. & Zwinderman, A. H. (2016) *SPSS for starters and 2nd levelers*. Cham: Springer.
3. Gomes, B & Jones, J. P. (2010) *Research Methods in Geography: A Critical Introduction*. Chichester, UK : Willey-Blackwell.
4. Groves, R. M. et al. (2009) *Survey Methodology*, 2nd edition. Hoboken, Wiley: New Jersey.