# SOSC1050: Introduction to Social Science Research

Division of Social Science Hong Kong University of Science and Technology Fall 2023

## **Instructor Information**

Primary Instructor
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## Overview

This course presents a broad introduction to standard practice in social analysis by introducing a series of concepts that will serve as the basis for greater understanding in later courses. The course also showcases how such techniques are applied in modern social analysis. Throughout the lecture material, important classic and modern examples of published research will be used to illustrate applications of the topics. Where appropriate, differences in norms and practices between the major social science disciplines will be highlighted and discussed. Strengths and limitations of quantitative approaches to social analysis will be highlighted throughout the course. Students will demonstrate their facility with the concepts introduced in the course through class participation and original writing assignments.

# Meeting Time and Place

Wednesdays and Fridays, 16:30 - 17:50 Room 4582, Main Academic Building

## Office Hours

Tuesdays and Thursdays, 10:00–11:00 Or by appointment

# **Intended Learning Outcomes**

At the end of the course, students should be able to:

- 1. Understand the types of research questions and social phenomena that are able to be addressed using standard social science research techniques.
- 2. Identify the differences in norms and practices between the major social science disciplines with respect to the application of standard research techniques.
- 3. Identify exemplary studies that have advanced our current understanding of important social phenomena.
- 4. Apply their understanding of best practices in social analysis to new problems and questions.

## Grading

## 15% Development of a Research Question (Due [early October, date TBD])

On a topic of his or her choosing, each student will, in about 500 words, develop a social science research question that could potentially be addressed using empirical social science research techniques. The specific questions themselves will usually be only one, and up to a handful of, sentences. The remainder of the 500 words should be used to convince the reader that the chosen topic is an interesting and important one to study. More details will be provided in class. [ILOs 1, 2, and 4]

## 20% Annotated Bibliography (Due [early November, date TBD])

On a topic of his or her choosing, each student will construct an annotated bibliography consisting of about 150-200 words on each of 7 different sources from the scholarly literature. The 150-200 words should briefly summarize the main findings of each citation and offer appropriate positive and negative critical commentary. The description should not be mere summary. More details will be provided in class. [ILOs 1, 2, and 3]

## 35% Research Design Papers (Due [mid-December, date TBD])

In consultation with the instructor, students will develop an original research design on a topic of their choosing. Students should suggest a feasible research project that could be carried out in the future, using the course materials as guidance. Students are not expected to actually carry out the suggested empirical analysis. In a writeup of about 4000 words to be turned in after the last day of class, students will develop a literature review, suggest a theoretical framework, draw testable hypotheses, and suggest how they would use empirical social science research techniques to address the phenomenon. More details will be provided in class. [ILOs 1, 2, 3, and 4]

## 10% Critical Questions for Research Spotlights (Various Due Dates)

Beginning in Week 7, Thursday classes will largely consist of discussion of an exemplary study or general topic in a social science subfield. Students will have one relatively advanced reading that they are expected to complete prior to class. In weeks 7 to 13, all students are expected to sign up for one week in which they will construct discussion questions that are intended to help guide discussion. On Wednesday of the week that students sign up for, they will submit five discussion questions to the instructor by 12:00 (noon). More details will be provided in class. [ILOs 1 and 3]

## 10% Attendance

Attendance is required. After the drop/add period, students can miss two class sessions for any reason without penalty. Any additional absences will only be excused with a valid excuse backed up by documentation.

## 10% Class Participation

After each class, the instructor will assess student contributions. [ILOs 1, 2, 3, and 4]

## Readings

Required readings should be completed prior to the date they are listed on the schedule. All readings will be provided through Canvas. There is no text that is perfect for this course, and therefore there is no text that students are required to purchase.

## Schedule

Schedule is subject to change with advanced notice from the instructor. If any changes are made to the schedule or readings, said changes will be announced in class and an updated version of the syllabus posted to Canvas.

#### Week 0

- Thursday, September 1
  - Introduction and Course Overview

#### Week 1

- Tuesday, September 6
  - Overview of Empirical Social Science
  - \* Readings:
    - King, Gary, Robert O. Keohane, and Sidney Verba. 1994. Designing Social Inquiry: Scientific Inference in Qualitative Research. Princeton: Princeton University Press. [pp. 7-19]
- Thursday, September 8
  - Activity: The First Steps of the Research Process

- Tuesday, September 13
  - Theory Development in the Social Sciences
  - \* Readings:
    - o King, Gary, Robert O. Keohane, and Sidney Verba. 1994. Designing Social Inquiry: Scientific Inference in Qualitative Research. Princeton: Princeton University Press. [pp. 19-23]
    - Lave, Charles A., and James G. March. 1975. Introduction to Models in the Social Sciences. New York: University Press of America. [pp. 10-20, 29-34, 40-42]
- Thursday, September 15
  - Activity: Speculation and Theory Building

- Tuesday, September 20
  - Measurement: Conceptualization and Operationalization
  - \* Readings:
    - Bhattacherjee, Anol. Research Methods for the Social Sciences. Open textbook. [Ch. 6, Available at: https://courses.lumenlearning.com/suny-hccc-research-methods/chapter/chapter-6-measurement-of-constructs/]
- Thursday, September 22
  - Activity: From Theory to Concept

#### Week 4

- Tuesday, September 27
  - Measurement: Reliability and Validity
  - \* Readings:
    - Bhattacherjee, Anol. Research Methods for the Social Sciences. Open textbook. [Ch. 7, Available at: https://courses.lumenlearning.com/suny-hccc-research-methods/chapter/chapter-7-scale-reliability-and-validity/]
- Thursday, September 29
  - Activity: Measurement

- Tuesday, October 4
  - Data Collection
  - \* Readings:
    - King, Gary, Robert O. Keohane, and Sidney Verba. 1994. Designing Social Inquiry: Scientific Inference in Qualitative Research. Princeton: Princeton University Press. [pp. 23-28]
    - o Bhattacherjee, Anol. Research Methods for the Social Sciences. Open textbook. [Ch. 8, through section on "Non-Probability Sampling", Available at: https://courses.lumenlearning.com/suny-hccc-research-methods/chapter/chapter-8-sampling/]
- Thursday, October 6
  - Activity: Interpreting quantitative data analyses

- Tuesday, October 11
  - Internal and External Validity of Research Designs
  - \* Readings:
    - Shadish, William R., Thomas D. Cook, and Donald T. Campbell. 2002. Experimental and Quasi-Experimental Designs for Generalized Causal Inference. New York: Houghton, Mifflin, and Co. [pp. 53-63, 83-93]
- Thursday, October 13
  - Research Spotlight: Social Conformity
  - \* Readings
    - $\circ$  Asch, S.E. 1955. "Opinions and Social Conformity." Scientific American 193(5): 31–35.

#### Week 7

- Tuesday, October 18
  - Statistical Modeling
  - \* Readings:
    - Jones, Kelvyn. 2012. "Introduction to Statistical Modelling." In Bridget Somekh and Cathy Lewin, eds., Theory and Methods in Social Research. New York: Sage. [pp. 241-247.]
- Thursday, October 20
  - Research Spotlight: Delayed Gratification and Life Outcomes
  - \* Readings
    - Mischel, Walter, Yuichi Shoda, and Monica L. Rodriguez. 1989. "Delay of Gratification in Children." Science 244(4907): 933–938.

- Tuesday, October 25
  - Central Tendency and Variability
  - \* Readings
    - Crump, Matthew J.C., Paul C. Price, Rajiv Jhangiani, I-Chant A. Chiang, and Dana C. Leighton. 2018. Research Methods for Psychology. Open Source Ebook. [Sections 13.1.1-13.1.9, Available at: https://www.crumplab.com/ResearchMethods/descriptive-statistics.html]
- Thursday, October 27
  - Research Spotlight: Social Networks
  - \* Readings
    - o Milgram, Stanley. 1967. "The Small World Problem." Psychology Today 2: 61–67.

- Tuesday, November 1
  - Hypothesis Testing
  - \* Readings:
    - Crump, Matthew J.C., Paul C. Price, Rajiv Jhangiani, I-Chant A. Chiang, and Dana C. Leighton. 2018. Research Methods for Psychology. Open Source Ebook. [Sections 14.1.1-14.1.6, Available at: https://www.crumplab.com/ResearchMethods/inferential-statistics.html]
    - o Navarro, Danielle. 2020. Learning Statistics with R: A Tutorial for Psychology Students and Other Beginners. LibreText Ebook. [Sections 17.2 and 17.5]
- Thursday, November 3
  - Research Spotlight: Survey Experiments
  - \* Readings
    - Nelson, Thomas E., and Donald R. Kinder. 1996. "Issue Frames and Group-Centrism in American Public Opinion." *Journal of Politics* 58(4): 1055–1078.

#### Week 10

- Tuesday, November 8
  - Correlation and Causation
  - \* Readings:
    - Singh, Seema. 2018. "Why Correlation Does Not Imply Causation." [Available at https://towardsdatascience.com/why-correlation-does-not-imply-causation-5b99790df07e]
    - o Australian Bureau of Statistics. N.d. "Statistical Language Correlation and Causation." [Available at: https://www.abs.gov.au/websitedbs/D3310114.nsf/home/statistical+language+-+correlation+and+causation]
- Thursday, November 10
  - Research Spotlight: Natural Experiments
  - \* Readings
    - Card, David. 1990. "The Impact of the Mariel Boatlift on the Miami Labor Market." Industrial and Labor Relations Review 43(2): 245–257.

- Tuesday, November 15
  - Data Presentation
  - \* Readings:
    - None
- Thursday, November 17

- Research Spotlight: Field Experiments
- \* Readings
  - Paluck, Elizabeth Levy, and Donald P. Green. 2009. "Deference, Dissent, and Dispute Resolution: An Experimental Intervention Using Mass Media to Change Norms and Behavior in Rwanda." American Political Science Review 103(4): 622–644.

- Tuesday, November 22
  - Introduction to New Frontiers in Social Science Research
  - \* Readings:
    - o None
- Thursday, November 24
  - Research Spotlight: The Replication Crisis
  - \* Readings
    - Open Science Collaboration. 2015. "Estimating the Reproducibility of Psychological Science." *Science* 349(6251): aac4716.

- Tuesday, November 29
  - End of Semester Wrap Up