SOSC 5110 Social Science Research Design and Methods
Fall 2021

Course Information

Instructor: Dr. Jin Wang　　　Office: Room 2355　　　Email: sojinwang@ust.hk

Class time: Wednesday 12-2:50 PM.　　　Class venue: G001, CYT Bldg

Office hours: Wednesday 4:30-5:30 PM

TA: Miss Yabin Yin　　Email: yyinak@connect.ust.hk　Office Hours: by appointment

Course website: http://canvas.ust.hk/

Please do not hesitate to contact me and TA should you have any questions with respect to the course, lectures, or readings. We are available during office hours and for appointment to answer questions.

Course Description

This course offers a broad overview of principles of social science research design and methods. It is intended to provide an understanding of the major approaches in social science to research design, the collection and analysis of quantitative and qualitative data, and the specification and testing of theories. The course covers the logic of scientific inquiry and various research techniques such as experimentation, scientific sampling, survey research, field methods, archival data, and empirical analysis that are commonly used by researchers in economics, political science, sociology, public policy, psychology, and education.

Intended Learning Outcomes

The course is intended to help postgraduate students translate their general interests into a well-defined research question, specify a hypothesis, design a study to test it, and interpret the results to assess whether they support the hypothesis. The course aims to help students conduct meaningful and creative research work by themselves, by learning to recognize research designs in the day to day world. In addition, this course is intended to help students assess the quality of empirical work from others. The main final project in this course is a research proposal in which students will propose a design to study a question of interest.

For the topics covered, students will read and discuss a selection of articles taken from the major generalist journals in the discipline. By analyzing and understanding the operationalization of research methods in these articles, students will familiarize with issues of research design and get

a sense of what each method does (and does not do), of the vision of the social world it conveys, and of the type of questions it can be applied to.

- Identify theories, hypotheses, and methods used in social science research.

- Apply different methods to research questions.

- Analyze data to measure concepts, make comparisons, and draw inferences.

- Define causation and the multiple ways of reaching causal inferences.

- Communicate social science research method and design orally and in writing.

Textbooks and References

The material will be drawn from the following reference books and from journal articles.

- Babbie, Earl. *The Practice of Social Research* (14th Edition). Cengage Learning. 2016.

- Angrist, Joshua D. and Jörn-Steffen Pischke. *Mastering 'Metrics: The Path from Cause to Effect*. Princeton University Press. 2014.

- Required reading list (canvas): a selection of journal articles, please check the canvas website for the latest updates.

- https://www.shss.ust.hk/staff/camcam/resources-related-to-research-design-and-methods/

Assessments

The assessments of the course will be composed of the following parts.

- Class discussion and participation – 10%
- Assignments – 20%
- Research proposal interim report –10%
- Paper Presentation – 15%
- Research proposal presentation – 15%
- Research proposal write up and final submission – 30%

NOTE: for all of the assessments **late submissions will NOT be accepted**.

Class discussion and participation For the topics covered, students will read a selection of articles taken from the major generalist journals in the discipline. By analyzing and understanding the operationalization of research methods in these articles, students will familiarize with issues of research design and get a sense of what each method does (and does not do), of the vision of the social world it conveys, and of the type of questions it can be applied to. For each lecture, sufficient time will be reserved for student discussions of the topic covered. Please read the key readings assigned in advance (to be completed prior to class sessions) and come well-prepared to discuss the insights you have gained from them.

Assignments Students will complete three assignments throughout the semester. The main purpose of these assignments is to enhance the understanding of research design and methods.

Paper presentation From week 6, some lecture time will be reserved for presentations. The topics of the presentations will be chosen by the students from recently published papers in leading social science journals, which should highlight novel research method and design in relevant disciplines. Students need to submit the presentation slides through their email to TA the day before the presentation.

Research proposal The basis of good research is a solid research design. Furthermore, methods are often more fun and easy to learn when they are in the context of advancing one's research. For your final project, you will write a research proposal. The proposal should reflect what you have learned in class about social science research design. The proposal should be for research that could be carried out assuming available of adequate funding. It should not be trivial. Nor should it be impossible, implausible, or require infinite resources. The object should be generalizable social science knowledge. Case studies, whether of specific places, firms, organizations, or other entities, are only acceptable insofar as the goal is generalizable knowledge. Thus, for example, marketing studies, or highly focused opinion studies are not acceptable.

Interim report You will write the proposal in separate parts. By the mid-term, you will submit an interim report that summarizes your progress. The report serves an important purpose in setting out what you are hoping to achieve and how far you have got in achieving this. Although the interim report is significantly shorter than the final proposal, it should not be vague. Interim report requirements:
Broad and up-to-date understanding of the literature: Although your interim report won't contain your full literature review, it should show depth and breadth. The reader will want to be able to see you understand the field.
Relevance of literature to your project: Your interim report, like other reports and essays, needs to connect the literature clearly to your project. The danger when writing a literature review is that it contains a series of paraphrases or summaries, but lacks the analysis that develops the argument to show why this is relevant to your project.
Progress to date and next steps: You need to show the reader what you have achieved and how you plan to complete the project. Be specific so that the reader can assess whether your progress and plan are reasonable.

Proposal presentation The last week of the class **November 24ᵗʰ** will be reserved for you to present your research proposal in class. Students need to submit the presentation slides through their email to TA the day before the presentation. We will take a note of each student's performance (the extent of preparation, the clarification of the presentation, the Question and Answer session), in order to give fair grades. You may incorporate the comments received during your talk into the final revisions.

Proposal parts
1. Aims. What is the overall goal of this research? 350-500 words.

2. Research Significance. Why is the research important? 350-500 words.

3. Background. This should be a review of the relevant literature and a discussion of previous relevant studies. The background should make clear why your proposed research differs from previous studies, and identify the gaps in the previous research that you seek to fill. 800-1000 words.

4. Hypothesis. What specific question do you seek to address? What theory do you seek to test? What expectations do you have about patterns or relationships you will observe? This may be a formal specification of hypotheses, or if your study is more exploratory and descriptive, you may present this as a discussion of the trends, patterns, or relationships you hope to examine, and your expectations for what you will find, based on the background summarized in 2. 350-500 words.

5. Data. Provide details on the data collection process, including site, time frame, target population, procedures for sampling/randomization/obtaining access. If you plan to make use of public datasets, or archival or administrative data, this is where you would introduce these data, and discuss their properties. Make sure to explain why these data are the best suited for your proposed research. 350-500 words.

6. Methods. How do you plan to analyze the data? This is where you would specify the models you would estimate if you were running a regression, or describe the tables and figures you plan to produce if you are focusing on tabulations and other descriptive statistics. Make sure to discussion what types of relationships or other results would be consistent with confirming or refuting your hypotheses or expectations. 350-500 words.

7. Work plan and outputs. Provide details on how you will carry out the work related to the study, including a timeline. Describe the intended outputs from the study. If you plan to present at conferences or submit manuscripts to journals, identify the conferences and journals and explain why they are the appropriate ones. 250-300 words.

Proposal write up and final submission The final version of the proposal submitted at the end of the semester should reflection revisions made in response to feedback received during your presentation and also include the following parts.
1. Abstract. 400 words bringing together the key points from the 7 sections, written for non-experts.

2. References.

The submission date of the final proposal: **December 18th, 2021**.

Academic Integrity

The work you submit must be your own. Unattributed use of the work of others is plagiarism, and is not acceptable. If you do feel the need to include text from another source, set it off in quotes and include a proper citation. Do not put yourself in jeopardy by submitting an essay that includes material that appears to be plagiarized. We will use a web-based software turnitin http://www.turnitin.com/ to check the originality of your submitted work.
The Office of the Provost offers resources to help you avoid plagiarism and copying. Please read all of the materials here: http://tl.ust.hk/integrity/student-1.html

Schedule

Week	Date	Topic
1	Sept 1st	Course Overview and Introductions
2	Sept 9th	Research Question and Ethics
3	Sept 15th	
4	Sept 22nd	Public Holiday, No lecture
5	Sept 29th	Concepts and Measurement
6	Oct 6th	Sampling and Questionnaire Design
7	Oct 13th	Evidence and Data (+) New Discovery: Machine Learning and Data Science
8	Oct 20th	Literature Review, Theory Development and Hypothesis Generation
9	Oct 27th	Causal Mechanism
10	Nov 3rd	Quasi-natural Experiments I
11	Nov 10th	Quasi-natural Experiments II
12	Nov 17th	Field Experiments
13	Nov 24th	Research Proposal Presentations

Note: Course contents may change; any changes will be announced in class and on the course website.