

# **SOSC 5110**

## **Social Science Research Design and Methods**

### **Fall 2017**

Tuesdays, 4:30pm-6:20pm, 4503 (Lifts 25-26)

[Links to class related resources](#)

This syllabus may be updated. Please check back to make sure you have the most recent version.

Updated 6 September 2017

### **INSTRUCTOR**

Cameron Campbell  
Academic Building 3387  
Office Hours: Noon-1pm on Tuesdays, and by appointment

### **EMAIL**

[Camcam+5110@ust.hk](mailto:Camcam+5110@ust.hk)

I have programmed my mailer to bring emails addressed to [camcam+5110@ust.hk](mailto:camcam+5110@ust.hk) to my attention.

Please send ALL class related email to that address, not to [camcam@ust.hk](mailto:camcam@ust.hk).

In the subject line of every email, please also include your name as it appears in the roster.

When you email me, please use the official UST email account that is connected to the ID associated with you on the roster. I will not respond to emails from non-UST accounts because I have no way to verify the identity of the sender.

### **COURSE LEARNING OUTCOMES**

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 quantitative analysis that are commonly used by researchers in economics, education, political science, psychology, and sociology.

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.

MPhil students are encouraged to use the final project to refine their plans for their thesis or PhD dissertation. MA students planning to apply to research-based postgraduate programs (RPG) are encouraged to use it to help refine their plans for applying to

By the time the course is complete, you should have a basic understanding of:

- The relationship between theory, hypothesis, data collection, and analysis in the pursuit of social science knowledge.
- How the focus on the production of generalizable knowledge distinguishes social science from the humanities.
- How the capacity for autonomous, deliberate behavior on the part of individuals, families, and the other social units that are the objects of study is the key challenge to social science research, and the most important distinction between social science research and life and natural science research.
- The respective strengths and limitations of quantitative and qualitative approaches to social science research.
- The importance of the choice of level of analysis in social science research, and the risks associated with generalizing from relationships at a higher level to relationships at a lower level (the ecological fallacy)
- The basic features of an experimental design, and the distinction between an experiment and an observational study.
- The criteria for claiming that an observed relationship is causal.
- The ethical issues that commonly arise in the course of conducting social science research.
- How selection bias can affect the composition of a sample, and the conclusions drawn from the analysis
- The differences between the major social science disciplines, including sociology, economics, anthropology, and political science.
- The most common methodologies for social science research, most notably ethnography, questionnaire-based surveys, analysis of secondary and administrative data, and archival research.
- Sampling and questionnaire design for survey research
- Principles for case or site selection in ethnographic or archival research
- Major sources of publicly accessible data for use in quantitative analysis
- Commonly used techniques for assessing whether observed relationships reflect causal influences
- Basic techniques for approximating an experimental design with analysis of observational data, including natural experiments, instrumental variables, and the inclusion of control variables.

## **INTENDED AUDIENCE**

This is intended as an introductory course on social research design and methodology for postgraduate students in social science who did not have a systematic introduction and

overview as an undergraduate. It is certainly relevant for postgraduate students whose undergraduate major was not in the social sciences. RPG students with an undergraduate degree in one of the social science disciplines should consult with me and/or their advisor as to whether this course would repeat what they have already learned.

## **COURSE FORMAT**

This course will be taught in partially blended/flipped format. The lectures are already all available online, and there will be assigned viewing each week. Students are expected to have completed viewing before class. Before each class, students will be asked to suggest topics for detailed discussion, and each week I will select some of the topics

## **ONLINE LECTURES**

Lectures are online:

[https://learn.hkmooc.hk/courses/course-v1:HKUST+SOSCAPP+2017\\_Q3\\_R1/about](https://learn.hkmooc.hk/courses/course-v1:HKUST+SOSCAPP+2017_Q3_R1/about)

Please see the Canvas site for information about registering to view the lectures.

## **TEXTBOOK (OPTIONAL)**

Previously I have used a textbook. This year I am making it optional because I am moving the class away from the content in the textbook. It may be useful for students seeking more background on the topics covered in class, and more detailed discussions of terminology.

Babbie, Earl. *The Practice of Social Research with CourseMate 13th Edition*. Cengage Learning. Note that several of the chapters are only available electronically. Please follow the instructions in your text to access the ebook.

Or

Babbie, Earl. *The Practice of Social Research, International Edition 13e*. Cengage Learning. (May still be available in the bookstore, and will work just as well.)

## **ASSESSMENT**

The grade will be calculated as follows:

- Research proposal – interim assignments
  - Aims – 5%
  - Significance – 5%
  - Background and previous research – 5%
  - Hypotheses – 5%
  - Data – 5%
  - Methods – 5%
  - Work plan – 5%
- Short responses to online discussion prompts -10%

- Research proposal - final submission - 10%
- Research proposal - final presentation - 10%
- Proposal feedback to classmates – 5%
- Lecture attendance and participation - 15%
- Tutorial attendance and participation - 15%

## **SUBMITTING ASSIGNMENTS**

For each assignment, turn in hard copy to the TA during tutorial of the specified week, and upload to Turnitin before lecture that week.

Late assignments will be penalized 1 for every week they are late. Thus an essay that would have scored a 5 but which was turned in up to one week after the due date would receive a 4. If it was turned in up to two weeks after the due date, it would receive a 3.

## **SHORT RESPONSES TO ONLINE DISCUSSION PROMPTS**

Every week, you will be prompted to post an idea for discussion during lecture. This could be 1) a question about the material in the assigned viewing for that week, 2) a link to a *relevant* news article, journal article, or website that you would like the class to discuss, 3) a suggestion for a specific topic for class discussion. I will review the prompts before class and announce a selection and ask everyone to come to class prepared to say something about the topic. Your response should be roughly one paragraph. It should not only specify the proposed topic for discussion, and offer some ideas, but also include some explanation of why it is relevant to the class.

## **RESEARCH PROPOSAL**

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.

You will write the proposal in separate parts. Individual parts will be due over the course of the semester. You will have an opportunity to discuss each part with your classmates in tutorial. The parts will be graded and returned to you in time for you to revise and incorporate into the final version of proposal that will be due at the end of the semester.

You will have one assignment which consists of providing brief written feedback to two of your classmates on their proposal drafts.

**Proposal parts – to be submitted as interim assignments over the course of the semester.**

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 discuss 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 parts – to be included in final version submitted at the end of the semester.**

The final version submitted at the end of the semester should reflect revisions made in response to feedback on parts submitted earlier in the semester.

1. Abstract. 400 words bringing together the key points from the 7 sections, written for non-experts.
2. References.
3. Summary of changes made in response to feedback on the individual parts submitted earlier in the semester, and feedback from classmates on the complete draft proposal.

## **TUTORIALS**

Tutorials will be used for questions, discussion, and presentation of supplementary material. Attendance is required.

## **LECTURE ATTENDANCE/PARTICIPATION**

Lecture attendance and participation is important. There will be a sign-in at every lecture and tutorial. Up to one lecture and one tutorial can be missed without penalty. For any additional absences to be excused, they need to be for valid, documented reasons.

## **GRADING RUBRIC**

All written work will be graded on a scale of 1-5:

1. Substantially incomplete. Many or most elements specifically requested in the prompt are missing. This roughly corresponds to an F.
  2. Partially incomplete. Some of the elements specifically requested in the prompt are missing, or the content suggests substantial misunderstanding of many or most key concepts. This roughly corresponds to a D.
  3. Adequate. The written work reflects a reasonable attempt to respond to the prompt, and all requested elements are present. This roughly corresponds to a C.
  4. Good. Not only are all requested elements present, but the content clearly reflects understanding of key concepts, and there is some effort at independent, creative thinking. This roughly corresponds to a B.
  5. Excellent. The content reflects mastery of all important concepts, and includes substantial evidence of independent, creative thinking. This roughly corresponds to an A. This will be given out only rarely.
- Grading will focus primarily on content.
  - I recognize that for many students, English is a second language. We may flag problems with writing but normally this will not affect the grade, unless problems are so severe that they make it difficult to understand the written work.

## **TURNITIN**

- Written work will be submitted as hard copy to the TA, and uploaded to TurnItIn.
- I will provide instructions for TurnItIn once the semester starts. You may upload your file at the TurnItIn page, or copy and paste it to a window at the TurnItIn page.
- Remember to save your work frequently. Software and hardware problems that cause your work to vanish after you have completed it but before you have had a chance to send it are not acceptable as excuses for turning in late work.
- If TurnItIn is inaccessible at the time you are trying to upload your assignment, email a copy of your essay to me before the deadline so that I have a record that you completed it on time, and submit to TurnItIn as soon as possible after it is accessible again. We will only grade essays submitted via TurnItIn. We will not grade emailed essays. We will use them only as proof that the essay was completed by the due date. An emailed essay that is not eventually uploaded to TurnItIn will not be graded.
- Problems with the recording of scores must be brought to our attention within one week of the grade being posted. It is your responsibility to confirm that scores posted to the LMES are correct.
- Similarly, any questions about grading must be raised within one week of the time the score is posted. Once a grade has been posted for one week, we will consider it final.

## 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. If you have any questions about how to attribute sources, how to use quotations, etc., ASK! Do not put yourself in jeopardy by submitting an essay that includes material that appears to be plagiarized. Keep in mind that I have complete files of every essay submitted in this class since I began teaching it and electronically compare essays with those submitted in previous years.

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>

If you discuss the assignments with classmates, or otherwise work together, be mindful of the boundary between collaboration and academic dishonesty. I certainly encourage you to discuss the homework with each other, but the work you turn in must be your own, and reflect that you completed the assignment on your own. Paraphrase instead of quoting. By successfully paraphrasing, you demonstrate your understanding of the material. By providing quotations, you just demonstrate that you can type. If your assignment has too many quotations, it will be penalized.

If you make a claim or assertion that is not clearly based on material from lecture or the reading, and the validity of it is not self-evident, you must provide evidence to back it up, in the form of a citation or a brief argument. If you can't do that, you at least must clarify that what you are saying represents a personal opinion by prefacing the claim with "I believe that..." or something equivalent.

## SCHEDULE

Week	Topic	Viewing/Tutorials
1	5 September 2017  What is Social Science? <ul style="list-style-type: none"><li>• What is scientific about social science?</li><li>• Theory and evidence in social science</li><li>• The origins of social science</li><li>• Social science as a new way to study society, the economy, and politics</li><li>• Differences between social science and other disciplines</li><li>• The social science disciplines: Sociology, Political Science, Anthropology, Economics, Geography</li></ul>	<i>Viewing</i> 1.1 and 1.4  <i>Tutorials</i> Self-introductions

2	<p>12 September 2017</p> <p>The Big Questions</p> <ul style="list-style-type: none"> <li>• Inequality</li> <li>• Family</li> <li>• Social Context and Individual Outcomes</li> <li>• Political and Social Transformation</li> <li>• Divergence and Convergence</li> <li>• China: Aging, Migration, Family, Education, Health</li> </ul>	<p><i>Viewing</i> 1.2 and 1.3</p> <p><i>Tutorials</i> Library tours</p>
3	<p>19 September 2017</p> <p>Study designs</p> <ul style="list-style-type: none"> <li>• What is a study?</li> <li>• Experiments and observational studies</li> <li>• Cross-sectional studies</li> <li>• Longitudinal studies</li> <li>• Quantitative and qualitative</li> <li>• Levels of analysis</li> </ul>	<p><i>Viewing</i> 1.5</p> <p><i>Tutorials</i> Aims and Research Significance</p>
4	<p>Challenges</p> <ul style="list-style-type: none"> <li>• Representativeness</li> <li>• Selection bias</li> <li>• Omitted variables</li> <li>• Reverse causality</li> <li>• The ecological fallacy</li> <li>• Validity of measures</li> </ul>	<p><i>Viewing</i> 1.6</p> <p><i>Tutorials</i> Study designs</p> <p><i>Assignment</i> Aims and Research Significance due</p>
5	<p>Cause and effect</p> <ul style="list-style-type: none"> <li>• Experimental designs</li> <li>• Cause and effect in observational data</li> <li>• Control and treatment</li> <li>• Natural/quasi- experiments</li> <li>• Matching approaches</li> <li>• Summary</li> </ul>	<p><i>Viewing</i> 1.7</p> <p><i>Tutorials</i> Challenges Discuss background</p>



6	<p>Evidence and Data</p> <ul style="list-style-type: none"> <li>• Cross-sectional surveys</li> <li>• Longitudinal surveys <ul style="list-style-type: none"> <li><b>a. China</b> <ul style="list-style-type: none"> <li><b>i.</b> Cross-sectional surveys: CGSS</li> <li><b>ii.</b> Longitudinal aging surveys: CHARLS</li> <li><b>iii.</b> Longitudinal family and household surveys: CFPS</li> <li><b>iv.</b> Longitudinal education and employment surveys</li> <li><b>v.</b> Longitudinal health studies: CHNS</li> <li><b>vi.</b> The China Multigenerational Panel Datasets</li> </ul> </li> <li><b>b. Overseas</b> <ul style="list-style-type: none"> <li><b>i.</b> Major longitudinal studies</li> <li><b>ii.</b> ICPSR</li> </ul> </li> </ul> </li> <li>• IPUMS</li> <li>• Administrative and archival microdata</li> <li>• Published statistics and aggregated data</li> <li>• Qualitative data</li> <li>• New sources</li> </ul>	<p><i>Viewing</i> 2.2, 2.4</p> <p><i>Tutorials</i> Cause and effect</p>
7	<p>Sampling and Questionnaire Design</p> <ul style="list-style-type: none"> <li>• The origins of modern sampling</li> <li>• Probability sampling</li> <li>• Approaches to sampling</li> <li>• Clustered sampling</li> <li>• Questionnaire design</li> <li>• Conducting a longitudinal survey</li> <li>• Limitations of surveys</li> </ul>	<p><i>Viewing</i> 2.3</p> <p><i>Tutorials</i> Evidence and Data Hypotheses</p> <p><i>Assignment</i> Background</p>
8	<p>Measurement</p> <ul style="list-style-type: none"> <li>• Translating Concepts into Indices and Measures</li> <li>• Dimensions</li> <li>• Validity</li> <li>• Reliability</li> <li>• Sources of Measurement Error</li> <li>• Consequences of Measurement Error</li> <li>• Correlated Errors</li> <li>• Repeated Measures</li> </ul>	<p><i>Tutorials</i> Sampling and questionnaire design</p> <p><i>Assignment</i> Hypotheses</p>

9	<p>Analysis</p> <ul style="list-style-type: none"> <li>• Tables</li> <li>• Graphs</li> <li>• Visualization</li> <li>• Correlation and Bivariate Regression</li> <li>• Multiple Regression</li> <li>• Control Variables</li> <li>• Discrete Outcomes</li> <li>• Hierarchical Models</li> <li>• Instrumental variables</li> </ul>	<p><i>Viewing</i> 2.5</p> <p><i>Tutorials</i> Measurement</p>
10	<p>Research Ethics</p> <ul style="list-style-type: none"> <li>• The protection of research subjects in social science research</li> <li>• Anonymity and confidentiality of research subjects</li> <li>• Vulnerable research subjects</li> <li>• International research</li> <li>• Issues in the protection of subjects specific to China</li> </ul>	<p><i>Viewing</i> 2.6</p> <p><i>Tutorials</i> Analysis</p> <p><i>Assignment</i> Data</p>
11	<p>Professional Issues</p> <ul style="list-style-type: none"> <li>• Authorship</li> <li>• Data sharing</li> <li>• Peer review</li> <li>• Research Funding</li> <li>• Mentor/student relations</li> </ul>	<p><i>Viewing</i> 2.6</p> <p><i>Tutorials</i> Research Ethics</p> <p><i>Assignment</i> Methods</p>
12	<p>Presentations</p>	<p><i>Tutorials</i> Presentations</p> <p><i>Assignment</i> Draft of Final Proposal</p>
13	<p>Presentations</p>	<p><i>Tutorials</i> Presentations</p> <p><i>Assignment</i> Feedback</p>