SOSC 2140: Research Methods in the Social Sciences

Class Hours: TU & TR 12:00-13:20 p.m.

Spring 2022

Instructor: Wen WANG

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Class Room: 5619

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Course Description

This course offers a broad overview of principles in research design and introduces some fundamental research methods. The course covers the logic of research question, framing of research story, and selection of research techniques such as survey, experimentation, and quantitative analysis. The course serves as a introduction to research, helping translate general research interests into a well-defined research question, design a study to investigate it, and interpret the results to give research/political inferences.

The purpose of this class is:

to provide students guidance on research design including story framing, data collection and data analysis, empirical design and empirical analysis.

Course Format

This course will be taught in a blended/flipped format. You are encouraged to view the online lectures to prompt your understanding of social science research:

- Video P1: Social Science Approaches to the Study of Chinese Society Part 1 (https://www.coursera.org/learn/social-science-study-chinese-society)
- Video P2: Social Science Approaches to the Study of Chinese Society Part 2 (https://www.coursera.org/learn/social-science-research-chinese-society)

Course Policy

Assessments

Assessments of this course include both individual work and group work. We will split the class into 8-10 groups. Students can choose their group members. The size of the groups will depend on total enrollment. The groups should have a roughly equal number of students. Please go to the link to complete your group information before **March 1st**.

For the group project, your team will collaborate to write a research proposal using what you have learned in class to carry out promising research. Each group will give two presentations to collect feedback and promote their research. For the individual work, you are required to develop a reading report on three assigned papers.

- 10% of your grade will be determined by your participation in class. 1
- 40% of your grade will be determined by a reading report. This is **individual work**. You read three papers chosen from the **reading list** under the same topic to write a **three-page** reading report (i.e., table, chart and reference excluded). Some guidelines for the referee report:
 - Format: A4 size, 1-inch margins, 12-point, Times New Roman font, 1.25 spaced
 - **Structure:** 1. summarize the paper, including its research question, contribution, data, methods, and conclusion; 2. verify how the data/method help address the problem 3. thinking about the reasons for choosing the methods in the paper (i.e., data limitation, story related reasons) and whether other methods are applicable using same data for the same research question.
 - April 15th is the deadline for submitting the reading report.
- 50% of your grade will be determined by a research proposal (25%) and two presentations (25%) as a group project.

Research Proposal:

- **Format:** up to 20 pages including reference, tables and charts; A4 size, 1-inch margins, 12-point, Times New Roman font, 1.25 spaced. (*You can use the Manuscript Template in the Resources section*)

- Structure:

<u>Abstract</u>: (1 page, 100-150 words) summary of key points to inform the non-experts audience of the nature of the research

 $^{^{1}}$ we randomly select 20 classes to calculate attendance. You have probability to get free absence.

<u>Research Question</u>: (1 pages) research question, its background and significance (i.e., Why is the research worth doing?)

<u>Previous Research</u>: (1-2 pages) a review of the relevant literature and a discussion of previous studies to reveal contributions of your research

Hypothesis: (1 page) your expected answer to the research question

<u>Data</u>: (1-2 pages) data collection process, variables of interest, summary statistics of available data

Research Design: (2-3 pages) your plan to analyze the data, discuss features (i.e., variations, statistics) in data and possible quantitative methods that would address the research question and verify your hypothesis.

Reference: see referencing guide for reference format

- <u>Tables and Charts</u>: put all the tables and charts to the end of your proposal, number them properly and quote them in the body of the proposal
- May 20th is the submission date of the final draft of research proposal.

Presentation:

Your team will give two presentations in this course. You may decide the presenters by yourselves. When one group is presenting, the other group will act as discussants, i.e. stopping and asking the presenters questions. Students need to submit the presentation slides through their email to the TA one day before the presentation. I will take a note of each group's performance for grading.

- Presentation 1: 15 min presentation + 3 min discussion (Tentative)
 <u>Time</u>: March 29 and March 31;
 <u>Aim</u>: introduce the preliminary idea, its significance, and your research plan
 <u>Schedule</u>: assign your presentation time using the Canvas Page before Mar 10.
- Presentation 2: 20 min presentation + 5 min discussion (Tentative)
 <u>Time</u>: May 3, May 5, and May 10;
 <u>Aim</u>: introduce your research question, data, and promising research design
 <u>Schedule</u>: assign your presentation time using the Canvas Page before Apr 20.

Peer Evaluation Form:

Each group member is required to download the anonymous peer evaluation form from Canvas, fill it and send it to me after submission of the research proposal and before **May 23rd**. **20%** of your grade from the group works will be determined by the peer evaluations. **80%** will be determined by the works' quality.²

²The group works includes two group presentations and one research proposal, which count for 50% of your grade.

Grading Policy

- Late submission: late delivery of due items will **NOT** be accepted.
- **Re-grade policy:** if you want to ask for regrading, please submit your argument in writing along with your assignment. We will reassess your entire assignment using the copies we saved for regrading. The answer to "grade grubbing" is "no" and your grade may end up lower after reassessment.

E-mail Policy

I am usually quick to respond to student emails. To avoid missing your emails, I prefer you answer my email in 2 days. I will not respond to certain emails students sent including emails for missed class for which there was no presentation, emails to request an extension on an assignment for which the syllabus already established the deadline.

Free-rider Policy

- Guidance to avoid or deal with the free-rider issue
- I will not define anybody to be "free rider" directly. If all the other team members agree that they don't want to keep collaborating with one person, please comply the following rules to split the team: 1. each group member need to send an email to TA to justify their request. 2. the peer evaluation (10% of total score) will not be split. 3. the student who leaves the group must find a new proposal & presentation topic.

Academic Dishonesty Policy

HKUST is committed to high standards of academic honesty. Cheat and plagiarism are not acceptable. According to guidelines of the university, plagiarism/cheat cases typically resulted in at least the failure of a course. If you have any concern about this, include a proper citation/quotes and use web-based software(i.e., turnitin, iThenticate) to detect plagiarism.

Special Notice for Teaching during Pandemic

Covid-19 raises stress for both students and instructors. If you have any mental or physical difficulties in taking academic responsibility, HKUST provides Special Education Needs (SEN) support, which can work out an accommodation plan for you and notify me of the eligible accommodations.

To protect personal information and team registration information, hyperlinks (i.e, highlighted in blue and red) cannot be got through in a publicly available syllabus. Please go to Canvas to download the syllabus with hyperlinks.

Class Schedule (Tentative)

Please check the class schedule for updates as class contents are subject to change, contingent on enrollment size, mitigating circumstances and the progress we make as a class.

Week	Topic	Date	Notes	Due
1	Introduction	Feb 8	Course Overview	-
		Feb 10	Research Example	
2	Research	Feb 15	Research Question	
		Feb 17	Research Proposal	
3	Data	Feb 22	Types of Data	-
		Feb 24	Data Collection	
4	Measurement	Mar 1	Sampling	Form a Team
		Mar 3	Measurement	(Mar 1)
5	Causality	Mar 8	Quantitative Analysis	-
		Mar 10	Causality	
6	Treatment	Mar 15	Treatment	-
		Mar 17	Treatment Effect	-
7	TA's Lecture	Mar 22	Counterfactuals	
		Mar 24	TA's Lecture	
8	Analysis	Mar 29	Presentation 1	-
		Mar 31	Presentation 2	-
9	Experiment I	Apr 5	Public Holiday	-
		Apr 7	Experiment	-
10	Experiment II	Apr 12	Confounders	Reading Report
		Apr 14	Midterm Break	(Apr 15)
11	Experiment III	Apr 19	Randomized Experiment	-
		Apr 21	Natural Experiment	
12	Regression	Apr 26	Regression	
		Apr 28	Review	-
13	Presentation	May 3	Presentation 1-3	
		May 5	Presentation 4-6	-
14	Final Presentation	May 10	Presentation 7-9	-
		May 20	Proposal	Submission

Recommended Textbooks and Readings (Optional)

Ethridge, Don. Research Methodology in Applied Economics 2nd edition, Wiley-Blackwell

Babbie, Earl. *The Practice of Social Research*, International Edition 13th edition. Cengage Learning

Greenlaw, Steven. Doing Economics: A Guide to Understanding and Carrying out Economic Research Boston, MA: Houghton Mifflin

Babbie, Earl. *The Basics of Social Research* Belmont, CA: Wadsworth Publishing/Thomson Learning

Resources

Reading

- Reading Guide
- A Review of the Literature

Writing

- Structure of Research Proposal
- How to Write an Effective Research Proposal
- Manuscript Template
- Writing Tips For Economics Research Papers

Research sources

- Introduction to Data Visualization
- References on Doing Research

Course sources

- Reading Report List of Paper (see in Canvas)
- Grading Anonymous Peer Evaluation Form