

SOSC 4110: Capstone Project

Spring 2023

Wed & Fri, 1:30-2:50pm
Room 2303, Lift 17-18

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1 Course Description

The purpose of this course is to prepare students for conducting independent research in social science, using quantitative data analysis. You will develop a research question, find or construct a relevant data set, analyze the data to answer the question, and write up and present the results.

To support continued progress on your project, you need to find a faculty member to be your advisor, who may offer advice on how to better design your analysis and how to convey data-backed arguments clearly in written format.

2 Advisor

Students need to find a faculty member in the Division of Social Science to supervise their Capstone Project. Once you have found a faculty member who has agreed to supervise your project, please inform the course coordinator to keep a record.

If you are not sure which faculty member fits as potential advisor, please visit the Division's website (<https://sosc.hkust.edu.hk/people/faculty>) to check out their research fields, topics and regional focus. Please do not get caught up in the research methods they use for their own research. A good advisor will not only help you with how to handle and analyze data, but will also help you develop a deeper understanding of your research topic based on existing literature.

If you want to choose a faculty member from other departments as your advisor, please discuss with the course coordinator first.

3 Tick@lab Submission (*If applicable*)

If your research project involves **human participants, animals, artefacts, and safety issues**, you are required to obtain approval from the relevant review committee/panel (Animal Ethics Committee, Human and Artefacts Research Ethics Committee and Safety Panel) at the proposal stage or before the commencement of the research via **Tick@Lab**.

Tick@lab is a system developed by the University to help streamline the approval-seeking process. A guideline is available at <https://bit.ly/3J84T7z>. You can also find some training videos there. For more specific questions, please contact the Tick@Lab Help Desk (ext. 5985; Email: crphelpdesk@ust.hk).

Specifically, research that involves the following will need to seek the approval from the aforementioned review committee **before its commencement**:

- The collection of data on living individuals;
- The use of non-anonymous or non-public data on living individuals;
- The collection of new data on individuals or contact with research subjects.

Research that employs existing secondary data that is aggregated, public or whose subjects are all deceased will normally *NOT* need to obtain university approval.

Please consult with your advisor and/or the course coordinator if you may need to obtain approval via Tick@lab. **The submission deadline is March 3 in Week 4.**

4 Presentation

At the end of this semester, you will make a **8-10 minute** presentation on your final project. Your presentation slides are required to be submitted by **April 25**.

Specific arrangements will be announced later.

5 Final Paper

Write your paper as if it were to be used as a writing sample for an application to a postgraduate program or even submitted for formal review at a professional journal. It must be your own work. Even if the topic is part of your advisor's ongoing research project, the paper should reflect a distinct line of your own ideas. Make clear how your paper is related to your advisor's research.

It is *NOT* acceptable to submit the same work for credit more than once. It is fine for a Capstone Project to build on previous work, but that needs to be disclosed and there has to be a clear distinction between the Capstone Project and the other work. If the work is related to anything you are doing in another class in which you are concurrently enrolled, this needs to be disclosed so that we can coordinate with your instructor of the other class.

The paper needs to follow the specific structure and format required by a major journal in the field that is mostly relevant to your topic. Usually, a published research paper includes abstract, introduction, background, hypothesis/estimation method, data, results, conclusion and references.

Many social science journals require articles with a word count between 6000 and 8000 words. It includes the main body of text, footnotes, references, and the headers of tables and figures. It does *NOT* include the title page, abstract or supporting information.

Following the structure and format of a typical social science journal article, the Final Paper should include the following elements:

Title and Your Name

The title on the title page should convey your key point by summarizing clearly your argument. A good title is *NOT* a list of topics or "the effect of A on B."

Do not forget to write your name. A footnote with your contact information and acknowledgments can be inserted after your name.

Abstract

An abstract of 150 words or fewer should provide a concise descriptive summary of your research question, the data and methods, results, and the implications of your findings.

Introduction

- First of all, state your research questions clearly and concisely.
- Justify the importance and significance of examining the questions.
- Briefly discuss how you examine your research questions, i.e. data and estimation strategy.
- Provide an overview of the rest of the paper (optional).

Background

- Keep in mind that the main purpose of this section is to convince readers the importance of your research questions.
- Only include *necessary information* for this purpose, i.e. the theories and literature that are directly related to the keywords in your research questions.
- Make clear how your study is different from the previous ones.
- Also explain why the difference from previous studies is important for readers.

Hypotheses

- Provide a clear logic that connects your dependent variable and key independent variables. The logic can be explained descriptively or mathematically.
- Explain how the logic would be consistent with different possible theories or explanations relevant to the topic.

Data

- Briefly introduce the source of your sample data and how they are collected.
- Present the summary statistics of the sample used in your empirical analysis.
- Explain about your dependent and key independent variables in more details and how you measure them.

Method(s)

- Briefly summarize the method(s) you employ.
- Explain why the method(s) employed are appropriate to address the research questions.
- Discuss how you address the issues of validation of evidence. This may involve the inclusion of more control variables, robustness checks, and comparisons with findings from other published research.

Results

- Interpretations should always be related to your research questions.
- Begin with discussing the coefficient estimates of your interest.
- You have to check all the sign, statistical significance, and magnitude of the coefficient estimates of your interest. But for control variables, checking signs would be enough.
- Focus on discussing what your empirical results actually show, i.e. objective discussion using statistical terminologies. Leave the discussions about the implications and importance of your findings to the Conclusion section.

Conclusions

- Present a summary of what you did and found in your paper.
- Clearly answer your research questions based on your empirical findings. The answers must be brief and written in "English", not in "Statistics". This is a key difference from the Results section.
- Discuss how important your findings can be and the possibilities that your findings may imply.

References

- Every work cited in the text, notes, tables, and figures must appear in the References; conversely, every work listed in the References should be cited in the text or elsewhere in the article.
- Use the same referencing style throughout your paper. You can refer to the styles of your favorite academic journals.

Appendices

- **Journal:** You should keep a weekly record of your progress on your Capstone Project, noting major developments, and meetings with your advisor.
- **Code:** Include all the R or other code that you used to produce any tables or figures included in the paper, as well as any code used to prepare the data for analysis.
- Other supporting information

6 Timeline

You are responsible for keeping in contact with your Capstone Project advisor to report on your progress. You should also keep a **project diary** recording your work on the project. The diary should be available in case your advisor or the course coordinator want to look at it.

- **3rd week (Feb 24):** Submit a **project proposal** endorsed by your advisor via Canvas. This could be the one developed in **SOSC 4100 Research Pro-seminar** but may reflect modifications suggested by your advisor. If the advisor agrees that the proposal for SOSC 4100 is adequate, it may be submitted earlier than the third week.
 - The proposal should follow the format of the one developed for SOSC 4100. It should include a specification of the topic, the data, and the methods. It should also indicate whether the data have already been acquired, have not yet been acquired but are readily available, or still need to be collected.

- **4th week (Mar 3):** Deadline for Tick@lab submission (*if applicable*).
- **8th week (Mar 31):** Submit a **mid-term progress report** endorsed by your advisor via Canvas. In a few paragraphs, you should report on the analysis you have conducted so far.
- **11th week & 12th week:** We will have **four** class meetings for your **presentations**. Presentation slides are required to be submitted. Specific arrangements will be announced later.
- **12th week (May 5):** Submit your **final paper** via Canvas. Your advisor will receive your paper, review and make a brief evaluation, and then forward it to the course coordinator.

7 Tentative Schedule

Key Date	Topic	Meeting	Submission
Feb 3	Course Introduction	Yes	
Feb 24	Project Proposal	Individually (if needed)	Proposal
Mar 3	Tick@lab submission	Individually (if needed)	(If applicable)
Mar 31	Mid-term Progress Report	Individually (if needed)	Progress Report
Apr 25			Presentation Slides
Apr 26	Project Presentation	Yes	
Apr 28	Project Presentation	Yes	
May 3	Project Presentation	Yes	
May 5	Project Presentation	Yes	Final Paper