

SOSC 3700B Quantitative Social Analysis Practicum

Spring 2022

Friday, 4:30-5:20pm

Rm 1027, LSK Bldg

Instructor: Dr. WANG, Hongbo (hbwang@ust.hk)

Office: Academic Building, Room 2372 (Ext. 7804)

Office Hours: By appointment

TA: Alice CHEN (xchenen@connect.ust.hk)

Office: Academic Building, Room 4016

Office Hours: By appointment

TSANG, Mitch Yau (mitchtsang@ust.hk)

Office: Academic Building, Room 3005 (Lift 4), Ext.: 7809

Office Hours: By appointment

Description and Objectives

This course is intended to help students gain practical, real-world experience with the skills that they have learned in their QSA methods courses. The goal is to give students practice independently choosing a topic, identifying a dataset, selecting a method, carrying out analysis, and reporting results outside of a methods class where the final paper or project is highly structured. It is also intended to help students develop ideas for their capstone project.

Students will conduct a small project that involves quantitative analyses of social data. Under the supervision of the instructor, students will choose a topic, locate suitable data, and design and conduct an analysis.

The work done for the project should be above and beyond any work done for the QSA topical elective. Any work that is going to be submitted or has been submitted for credit in another class should not be submitted for the credit of 3700.

Students should apply basic techniques that they have learned in their methodological courses for managing and analyzing datasets, and would acquire independent working experiences that are necessary for their capstone projects. Students will probably find it easiest to work with a well-documented dataset that is publicly available and can be downloaded from a site like ICPSR or IPUMS. However, they are certainly welcome to construct their own dataset and analyze it.

Students are encouraged to use the opportunity afforded by 3700 to explore different sources of data that they might use for their Capstone Project and conduct analysis with it.

Students may work in groups. For a group project to be approved by the instructor, it must be more ambitious than an individual project, with expectations set according to the size of the group. The roles of group members will need to be specified in the proposal, and contributions to the final project will need to be documented in the final report.

The class will meet on an occasional basis during the term. A detailed schedule can be found later in this syllabus. At these meetings, students will be required to present progress on their projects and participate in discussions of other students' projects.

Prerequisites

SOSC 2400. This is intended primarily for QSA students in their third year.

Projects

The following types of projects are consistent with the goals of the course:

- 1) Project/research involving quantitative analyses for a concurrent SOSC topical class that is currently enrolled by a student. For example, a student taking Gender and Society might follow up on that class by locating surveys or census datasets and examining gender differences in some outcome of interest. A student should present the analyses in tables or figures and interpret them in light of what they learned in the class.
- 2) Partial replication of an analysis from a published paper, possibly one that you have read in a SOSC topical class. This should be possible if the paper relied on publicly available data, or the authors made their data available. How much of the analysis you can replicate would depend on the methods used in the published paper. For a paper that used very advanced methods that you have not yet learned, it may be sufficient to do a similar analysis with the simpler methods you have used.
- 3) Exploration of a variety of datasets to identify a question that could be used in a capstone project on a topic of interest. This can be preparatory to SOSC 4100, providing an opportunity to narrow down to one or two datasets that could be used for the capstone project, allowing for SOSC 4100 to focus on literature review or preliminary analysis in preparation for SOSC 4110.

Your project should make use of what you have learned in your methods classes, especially 1100 and 2400, and hopefully other methods classes you have taken. At the very least, it should demonstrate that you can load a dataset, transform variables via categorization and create new ones, filter the data to work on subsets according to the needs of the analysis, carry out different kinds of analysis including univariate tabulations, cross-tabulations, histograms, and scatterplots. It should not repeat anything you have done in a previous 3700 offering or in any of your methods classes.

Written Submissions

In addition to attending all scheduled meetings (See "Schedule" below), you will need to complete the following over the course of the term.

(1) Work plan (Presentation)

The presentation should provide a description of your topic that also specifies the dataset(s) and methods (s) that you will use. You should also explain how you chose your topic and what it is interesting to you. If you are doing a group project, the names of all group members and division of work should be included.

(2) Progress Reports

Please keep a diary of your work on the project that describes all related activities, including exploration of literature and data, downloading and processing of data including data that you decided not to use, any calculations you are doing, including ones that didn't work out. This should document that you have spent the expected amount of time on the project, including on data and calculations that are not reflected in the final report.

Each individual/group is required to submit two brief reports based on the diary (See "Schedule" for the deadlines). The reports serve to update the instructor on the progress of the project.

(3) Final output (Presentation)

This presentation should summarize the topic and your findings, but it is not expected to be a fully-developed report or research paper. More important is that it demonstrates that you have mastered the preparation and analysis of data and the interpretation and presentation of results.

The presentation should include a series of visually appealing and appropriately titled and labeled tables and figures, with appropriately chosen axis ranges, symbols, and color schemes. They should be suitable for use in a business or academic presentation.

It should include all the details on how you prepared your dataset and produced your tables and figures, among other things.

Grading

P/F 1 credit

To earn a P, students must attend class meetings, submit all materials required by the instructor, make a project presentation, and submit a final written report. For group projects, the report must describe the contributions of each member. The presentation and report must include a description of the steps taken as part of the analysis, including the statistical package used and the code or scripts used to transform the data.

The project will be evaluated regarding merits in design, analysis and interpretation. Feedback will be given regarding prospects for development into a Capstone Project.

Schedule (Subject to adjustment)

Calendar Week	Topic	Meeting	Submission
Week 1 (2/11)	Introduction	√	
Week 2			
Week 3 (2/25)	Work Plan	√	√
Week 4			
Week 5			
Week 6			
Week 7			
Week 8 (4/1)	Progress Report I (Presentation)	√	√ (PPT)
Week 9			
Week 10			
Week 11 (4/22)	<i>Progress Report II</i>		√ (PPT)
Week 12 (5/6)			
Week 13 (5/6)	Final output (Presentation)	√	√ (PPT)