

SYA 6317 Social Research Quantitative Methods II
Spring 2023
Thursday 5:00 -7:40 PM
PC 441

Instructor: Qing Lai

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Zoom Office Hours: Thursday 2:00 -4:00PM

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Description:

This course introduces methods commonly used in quantitative social research. Basic statistical knowledge (i.e., ISS 6317 or equivalent) is assumed. The main focus is on various procedures under the regression framework, including linear models and categorical data analysis. In addition to those listed in the course outline, more topics (e.g., factor analysis, quantile regression) can be discussed depending on students' research needs. We may also briefly introduce some more advanced methods such as multilevel modeling and event-history analysis. Students are not required to master all technical details of the methods covered. The goal is to become sufficiently informed of the methods that are useful to their own research projects.

In addition to the lectures on methods, we will devote a proportion of the class time to workshopping the students' own research projects. As this is a small-size seminar, we will comment on each other's work in a developmental (rather than evaluative) manner. The goal is to help each participant prepare for a set of statistical results for a publishable paper or a dissertation chapter. The computing software is Stata, which can be accessed via FIU's elab server.

Textbook:

(DT) Treiman, Donald J. 2008. *Quantitative data analysis: Doing social research to test ideas*. ISBN-13: 978-0470380031

Recommended Resources:

Wooldridge, Jeffrey M. 2012. *Introductory Econometrics: A Modern Approach*. ISBN-13: 978-1111531041 (Earlier or newer editions are okay.)

<http://www.ats.ucla.edu/stat/stata/default.htm>

Requirements & Grading:

Attendance is required. Students should provide proper documentation if absence is unavoidable. If you cannot attend on the days of your presentation, make sure to ask another student to take your place.

You are required to read the assigned chapters (see course outline) before each class. As our class time is very limited, we can only afford a brief introduction to each method. The assigned readings, even if they do not appear to be the methods of your choice, provide us common ground for effective communication in our classroom and your future career.

Each student will sign up for 3-4 presentations. These do not have to be formal presentations with perfect results, but all presentations should be facilitated with PPT slides. The purpose of doing so is to help me workshop your paper projects in an instructive manner, which means your presentations will be interrupted from time to time. When your turn comes, be ready to talk for 15-20 minutes about your research question, potential/actual data sources, analytic plans, and expected/actual findings. Also, feel free to ask questions and make mistakes—presentations will not be graded. Ideally, the 4 presentations should follow the order below:

1. [Q&H] Research question; hypotheses
2. [D&V] Data and variables
3. [M&F] Methods and findings
4. [Final] Overall presentation

The only item to be evaluated for the course grade is the final statistical results. The results have to be produced with one or more methods learned in this course. I do not expect the results to be publishable by the time of submission, but it should be crafted in that direction. Also, it should integrate the feedbacks you will receive over the semester. Your grade will be based on the strength of the data analysis, meaning you do not have to include any theory or literature review besides the tables, figures, and the interpretation of the results. Note that the “strength” of data analysis refers not to statistical complexity but conceptual sophistication and methodological appropriateness. Please submit at Assignments on Canvas as one single Word document by 11:59pm on 4/27 and keep a copy for your own record.

Email:

Always use Canvas Message. I am usually also teaching multiple large undergrad classes, too. It is easier for me to manage things at Canvas. If I fail to respond in 24 hours, send your message again. If you feel you have questions but are not sure how to ask them, trust me you are not the only one. In that case, the most efficient mode of

communication is face-to-face conversation. Feel free to talk to me whenever you see me in my office, but try to make an appointment if it will be an extended discussion.

Tentative Course Outline:

- 1/12 Introduction; Stata Basics
- 1/19 Cross-Tabulations (DT1-4)
- 1/26 Linear regression I: introduction (DT 5-7)
- 2/2 Linear regression II: examples (DT 5-7)
- 2/9 Linear regression III: fixable problems Part I (DT 5-7)
- 2/16 Linear regression IV: fixable problems Part II (DT 5-7)
- 2/23 Linear regression V: not-so-fixable problems (DT 5-7)
- 3/2 Spring Break, no class
- 3/9 Scale Construction (DT 11)
- 3/16 Binomial Logit Models (DT 13)
- 3/23 Ordinal & Multinomial Logit Models (DT 14)
- 3/30 Discrete-time Event-History Models
- 4/6 Final Presentation and Advanced topics (DT 15)
- 4/13 Final Presentation and Advanced topics (DT 16)
- 4/20 Final Presentation and Advanced topics
- 4/27 No class; Final results due via Canvas