

Econometrics 120CH

Instructor

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Office hour: Fr, 2:30-4:00pm (Office 228 or Office 216).

Course Information

Class location: SEQUO 244

Time: Mo, 9:00-9:50am

1 Intended Audience

The intended audience of the course are students who are willing to commit themselves to a deeper understanding of econometrics, especially causal inference. The course is not for students who just want to have one more honor course on their transcripts. This class is especially recommended for students who are planning for graduate school.

2 Preexisting Knowledge

A good understanding of the material taught in the ECON120 sequence is required (ECON120C can be taken concurrently).

3 Course Outline

Econ 120CH covers microeconomic methods for causal inference. The material is divided into the following sections:

1. Potential outcomes
2. Experiments
3. Regression
4. Instrumental variables
5. Regression discontinuity

4 Assignment and Grading Policy

The assignment consists of two parts. You should work in groups of two students (both will get the same grade).

4.1 Empirical Project (50%)

The empirical project is based on an empirical paper of your choice (please get my approval before you start working). You are asked to replicate the main findings and to summarize your results in a short article. The required structure is as follows:

1. Briefly state the research question and discuss the dataset (max. 1 page of text)
2. Discuss the identification strategy and the critical assumptions (max. 1 page of text)
3. Replicate (selected) main findings (description max. 1/2 page of text)
4. Critically discuss and assess the results of the paper and your replication with a focus on the strengths and weaknesses of the identification strategy

The overall article should not contain more than 5 pages of text (letter, 12pt font) and maximum of 3 pages with tables and figures. You will be asked to submit dataset and codes together with the paper.

Please let me know if you are more interested in econometric theory. You may alternatively write a referee report for a theoretical paper.

4.2 Presentation (50%)

You will present your project in class. The exact schedule will be determined as a function of the number of students in the class. The presentation should follow the same structure as the short paper. Please prepare a set of slides to be distributed to the class before your presentation.

5 Course Material

The course material will be available online via TritonEd.

6 References and Textbook

The course is based on the textbook *Mastering Metrics, The Path From Cause To Effect* by J.D. Angrist and J.-S. Pischke, 2015, Princeton University Press. More information on the book (incl. datasets and do-files for the major applications) can be found here: <http://masteringmetrics.com>