

Course Syllabus

Syllabus for Econ120CH

Professor [Yixiao Sun](http://www.econ.ucsd.edu/~yisun)  (<http://www.econ.ucsd.edu/~yisun>), Economics, UC San Diego

Prerequisites: Econ120A, B

Course Objective: The course will cover some chapters in the required textbook. It will introduce students to the main methods that are widely used for causal inference. At the end of the course, students will be able to choose appropriate empirical methods to address practical questions in both the public and private sectors.

Intended Audience: The intended audiences 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 honors course on their transcripts. This class is especially recommended for students who are planning for graduate school.

Required Textbook:

[Mastering 'Metrics by Angrist and Pischke. Princeton University Press, 2015.](http://masteringmetrics.com) 
(<http://masteringmetrics.com>)

Teaching and learning methods: The course will consist of lectures, students' individual studying of the required book, and students' presentation.

Possible topics (Depending on students' interest)

1. Randomized trials
2. Regression
3. Instrumental Variables
4. Regression Discontinuity
5. Differences-in-Differences

Grading:

For those who are concurrently enrolled in Econ120C, grading will be based on the following:

1. (40%) two assignments.
2. (30%) take-home final exam (just another assignment)
3. (30%) grade in Econ120C.
4. (Bonus, 20%) class presentation: read and present one of the main research papers referenced in the book. You can also present your own research.

For those who took Econ120C in a previous quarter, grading will be based on the following:

1. (60%) two assignments
2. (40%) take-home final exam (just another assignment)
3. (Bonus, 20%) class presentation: read and present one of the main research papers referenced in the book. You can also present your own research