Causal Inference in Education Policy Research: Postsecondary Public Policy 713/Education 714 Winter 2017 Professor Susan Dynarski

Professor Jeffrey Smith

Course Overview

Course Syllabus

This course explores methods for causal inference in research on postsecondary education. The focus is on topics relevant to education policy, including student aid, debt, college-match quality, attainment, and the labor-market returns to schooling.

We will read and discuss papers that use instrumental variables, regression discontinuity, propensity score matching, differences-in-differences, panel data, and randomized trials. We will practice the use of these techniques in problem sets.

Prerequisites

The course assumes assume mastery of regression analysis, including fixed effects and limited dependent variables. The course is part of a two-part sequence with Public Policy 712; mastery of the content of that course is also assumed, including regression discontinuity and randomized trials. Facility with a statistical programming language is also assumed.

Grading

Data Analysis Exercises (2)

You will reproduce and extend analyses that use the quantitative methods of the course. You will work singly or with one classmate; if you work with a classmate you will submit a single product.

Take-Home Final Exam

A take-home exam will be due on the day of the scheduled final (April 25. 17, 3:30 pm) and provided 48 hours earlier.

Doctoral students can (and IES fellows are required to) instead complete a research product that will be defined in consultation with faculty. Drafts of this research product will be due on specified dates.

Reading Questions

We will post questions about some of the readings, which you will complete before class.

Class Participation

We expect active questioning in class. To further widespread participation we will randomly call on students. The randomness is intended not to intimidate but to keep participation evenly distributed.

40%

30%

20%

10%

Readings

You are expected to complete the assigned reading before class. There will typically be one or two articles assigned for each class.

These papers must be read closely in order to understand what is going on. Read actively: circle what is unclear, highlight what you find most interesting, peruse the bibliography for useful sources, read the footnotes and tables especially closely. It is very useful to write a summary of the paper for your own files.

There is no course packet. Readings consist of articles and working papers that are available online. Assignments will be listed under the relevant lecture at least a week in advance. We provide links and/or PDFs but you are ultimately responsible for obtaining the readings. If a link is broken or a file corrupted, find the article yourself.

Laptop Policy/Taking Notes

To keep us focused on the class and on each other, we will keep laptops and other devices put away. Please bring copies of the relevant papers to class.

We will distribute handouts of our lecture material for you to take notes on. If you want to store all class material on your laptop, transcribing your handwritten notes after lecture is a great a way to nail the material. We will post PDFs of the handouts after lecture to facilitate this process.

Academic Expectations & Resources

We expect students to be familiar with all of the expectations and resources described herein:

http://fordschool.umich.edu/academics/expectations (Links to an external site.) (Links to an external site.) site.)

Course Outline

- 1. Introduction and Overview of Trends in Postsecondary Education (2 classes)
- 2. Human Capital Model & Effects of Student Aid on College Attendance & Graduation (5 classes)
- 3. College Quality (6 classes)
- 4. Policies to Reduce Dropout and Increase Graduation Rates (6 classes)
- 5. College Mismatch (6 classes)
- 6. Catch-Up and Wrap-Up (2 classes)