Introduction to Applied Empirical Methods

Paul Goldsmith-Pinkham

February 1, 2021

Assumed Background

- This class is targetted towards researchers interested in empirical work
- The course assumes quite a bit of exposure to econometrics material already
 - I assume the first year sequence here at Yale
- This is not because the material is deeply technical, but because I want to be able to assume some basic fluency in statistical concepts

Requirements

- There are no exams, I will be assigning problem sets on a (hopefully) weekly basis.
- You can use any computer package you wish to use. Solutions will be handed out written in R.
 - See syllabus for details
- There are no required readings, but the papers that I have listed in the syllabus are relevant to the material we will cover in class.
- I also highly recommend the following texts:
 - Angrist and Pischke, Mostly Harmless Econometrics
 - Cunningham, Causal Inference: The Mixtape, https://mixtape.scunning.com/
 - Miller and Aronow, Foundations of Agnostic Statistics

Important caveat

- This is my first time teaching this course
 - There will be growing pains!
 - Especially with homeworks
- In the end, this is a graduate course targetted at making you a good empirical researcher
- My goal is to exposed to a wide range of empirical methods, and understand how they connect.
 - We will not drill down deeply into some material
 - I am happy to discuss it more outsie of class
- I will also emphasize how to communicate the econometrics underlying your research ideas
 - This inclues good graphic design!

Structure of the course

- Six parts, first three are "structure" (12 lectures), second three parts are on different "bespoke" methods (12 lectures)
- We will begin with an overview on the structure for causal inference
- N.B. I am keeping everything on the github repo and will update you via Canvas notifications!