Econ 539 Microeconometrics

Instructor: Ben Ost

Ben's office hours: by appointment at calendly.com/bensost

Prerequisites: Graduate core of econometrics and microeconomics.

Course Overview

This course focuses on applied econometric methods for analyzing microeconomics topics. A complete list of topics is at the end of the syllabus on the calendar. While lectures will be important for learning the material, the most important portion of the course is the completion of regular problem sets in which you will use statistical software to implement the methods covered in the course.

Problem sets

You should turn in the do file for all problem sets. For the most part, you can work with your peers on problem sets, but you are never allowed to copy and paste any portion of another person's do file. You should independently write up every problem set, even if you worked with someone else. You are allowed to use the internet in working on problem sets, but only within reason.

When writing up the problem set, you should include your do file and any necessary output. Do not turn in log files or gross looking output. Many problem sets have questions embedded in the do file. You can answer the questions right in the do file. Never turn in 20 pages of output – I mainly want to see the do files and in some cases, I'll ask you for output too.

All problem sets can be turned in via email.

Grading

Problem Sets: 80%
Participation: 20%

Late Work Policy

Work is considered late if it is turned in after class. Unless you ask me ahead of time, late work will only get half credit.

Cell phones and Computers

I find computer and phone use in class to be disrespectful. Please don't do this.

Cheating Policy

Please do not cheat. You are welcome to work with your peers on out of class work, but you should write up assignments individually. Plagiarism of any assignment will result in a zero for the assignment as well as having your semester grade lowered by one full letter grade (e.g. A to B.

Attendance Policy

You should attend all classes. If you cannot attend a class, please let me know ahead of time.

Academic accommodations

If you have a documented learning disability, please provide me with an accommodation letter from Student Disability Services as soon as possible. Students are expected to give at least two weeks' notice of the need for accommodations. If you need immediate accommodations, please arrange to meet with me within the first two class meetings. I encourage you to meet with me early in the term so that we can discuss strategies for a successful experience in this course.

If you have a disability and have not registered with Student Disability Services, I encourage you to do so.

Stata do files in shared folder

Any do file used in class comes from the shared folder so you don't need to copy the code during class.
In addition to the material from class, this folder has various do files labelled "optional". These are just in case you are interested, and you are not directly responsible for that material for 539.

I will not stick to this schedule exactly so this is meant just as an overview.

Date	In Class Topic	Due
8/27 (T)	OLS interpretation	Read PS 9 on data integrity (nothing to turn in yet, but you should start working on it)
8/29 (Th)	Identifying variation and FWL	PS 1 on coefficient interpretation
9/3 (T)	Standard errors / Bootstrapping	
9/5 (Th)	Sample selection and missing data	PS 2 on FWL
9/10 (T)	Buffer / Functional form	
9/12 (Th)	Propensity score matching day 1	PS 3 on standard errors
9/17 (T)	Propensity score matching day 2	
9/19 (Th)	Selection on observables specification tests	PS 4 on sample selection
9/24 (T)	Selection on observables specification tests	
9/26 (Th)	Fixed effects	
10/1 (T)	Fixed effects day 2	PS 5 on PS matching
10/3 (Th)	Buffer	
10/8 (T)	DID day 1	
10/10 (Th)	DID day 2	PS 6 on FE
10/15 (T)	DID, DIDID and synthetic control	

10/17 (Th)	Buffer	
10/22 (T)	IV day 1	PS 7 on specification tests
10/24 (Th)	IV day 2	
10/29 (T)	IV day 3	
10/31 (Th)	IV day 4	PS 8 on DID
11/05 (T)	RD day 1	
11/7 (Th)	RD day 2	
11/12 (T)	RD day 3	PS 9 on data integrity
11/14 (Th)	RK /Machine learning	
11/19 (T)	Machine learning	PS 10 on IV
11/21 (Th)	Thinking about identifying variation	
11/26 (T)	Thinking about identifying variation	PS 11 on RD
11/28 (Th)	No class -- thanksgiving	
12/3 (T)	Thinking about identifying variation	
12/5 (Th)	Review	PS 12 on thinking about identifying variation