Economics 8379
The George Washington University
Fall 2013

Professor: Benjamin Williams
Office – Monroe Hall/Hall of Government, Room 309
Office Hours – Wednesday 3-4, Thursday 4-5, and by appointment
Contact – bdwilliams@gwu.edu
Time & Place: Th, 7:10-9:40, Rome 351
Website: I will use Blackboard quite a bit so check the site often for updates.

Required Text(s)

1. Cameron, A. C. and Pravin K. Trivedi (2005). Microeconometrics: Methods and Applications. Cambridge University Press. (This will be referred to as CT in the reading list.)
3. Angrist, J. D., and Pischke, J. S. (2008). Mostly Harmless Econometrics: An Empiricist’s Companion. Princeton University Press. (This will be referred to as MHE in the reading list.)
4. Arellano, M. (2003). Panel Data Econometrics. Oxford University Press. (This will be referred to as Arellano in the reading list.)

Some other useful textbooks that are not required:
5. Hsiao, C. Panel Data Econometrics.
Course Description

This is a course in econometric methods and practice for applied microeconomists. The course will begin with a discussion of various philosophies of economic methodology and causality. This discussion will serve as a foundation for the rest of the course. We will compare the “reduced form” approach to the “structural” approach. We will also consider recent work that aims to find a middle ground. The majority of the course will cover the actual business of empirical work within both paradigms.

Learning Objectives

The primary objective of the course is for you to improve (the empirical component of) your dissertation research. By the end of the course, (1) you should be able to assess the identification strategy and causal claims of empirical research, including your own, (2) you should have an expanded toolkit of identification strategies and estimators, and (3) you should understand how to address practical issues in your research, such as measurement error, specification, robustness checks, external validity, and small sample bias and (4) you should have a better understanding of when to pursue a research idea and when to move on.

Assessments

The majority of your grade – 60% – will be determined by an empirical paper (see below). Homework exercises assigned roughly once every two weeks will count for another 20%. The remaining 20% will be for active course participation.

Paper

The paper will take the whole semester to complete. There will be three deadlines associated with it. The first assignment will be to present your research idea in class on September 19th. Your presentation should last about 3 minutes and you must state your research question, discuss the data source you plan on using, and cite some related literature. Prior to 9/19 you must meet me briefly to discuss your idea. This presentation will count for 10% of your total grade.

The second assignment associated with the paper will be due November 7th. This will be a first take on answering your research question. You must submit a 4-5 page report that consists of a description of your proposed research project, a description of the dataset, some preliminary empirical results, and a discussion of the results. These reports will be posted online for the rest of the class to read and discuss. The
goal will be for you to leverage the expertise of your classmates to improve your paper. I will establish an incentive scheme to make sure every student’s paper is discussed. *It is important that these discussions remain positive and that you respect your classmates’ work.* This report will be 20% of your total grade.

The final draft of your paper will be due during finals week. The final paper should be no longer than 10 pages, excluding tables, figures, and bibliography. You will also be required to provide a 10 – 15 minute presentation of your paper. I will schedule a meeting time during finals week for this. This will be 30% of your total grade.

**Auditors**

There will be a hard cap of 15 on the number of students that can participate fully in the class. These spots will go first to students who register. If there is any free space then you may audit the class as a full participant if (1) you are maxed out on your credit hours *and* (2) you have a note written to me from someone on your dissertation committee stating that completion of this course is necessary for your dissertation research *and* (3) you agree to remain an active participant in the course throughout the semester. Anyone else who wishes is free to sit in on the class. All students are encouraged to participate in class discussions and I will make sure all course materials are available to everyone. However I will only be able to grade the work for the 15 students under the cap. Please talk to me if you are confused by the policy. I apologize for any changes from the policy described in an earlier version of this syllabus.

**Reading List**

The readings in *italics* are optional and will either be ancillary to the lecture and class discussion or are listed as further reading for the interested student. All other readings are required.

**Lecture 1. Course Overview. Economic methodology, causality, policy analysis**


Journal of Economic Perspectives Symposium, June 2010

Cartwright, N. The Dappled World: A Study of the Boundaries of Science.

Hacking, I. The Taming of Chance.

Harcourt, B. Against Prediction.

Lecture 2. Review of the Basics

MHE, Sections 3.1, 3.2, 3.4.1, and 8

Bootstrap Handout


Deaton, pp. 1-70

Lecture 3. Developing Interesting (and Feasible!) Topics in Empirical Micro Research (Tim Moore)

Don Davis’ advice about finding research topics.

David Laibson’s advice for graduate students.
http://economics.harvard.edu/files/economics/files/david_laibson_tips_0.pdf

Deirdre McCloskey. Other Things Equal: How to be a good graduate students.

Deirdre McCloskey. Other Things Equal: Aunt Deirdre’s letter to a graduate student.

Deirdre McCloskey. Other Things Equal: Economic Tourism.

Robert Frank. (Introduction to) An Economic Naturalist

Lecture 4. IV, Roy Model and “Essential Heterogeneity”

CT, Sections 4.8,4.9, 6.4,6.5,6.9,6.10

MHE, Chapter 4


Lecture 5. Matching

MHE, section 3.3


Lecture 6. Structural Methods I - Extremum Estimators, Simulation Methods, Moment Inequalities

CT, Chapters 5-6, 12


Lecture 7: Practical Issues in Microeconometric Research (Tim Moore)

Lecture 8. Structural Methods II – Semiparametric and Nonparametric Methods


Lecture 9. Regression Discontinuity/Kink Design and more on Econometric Evaluation


Kasy M. Partial identification, distributional preferences, and the welfare ranking of policies. 2013.

Lecture 10. Diff-in-Diff, Repeated Measurements, Fixed Effects
MHE, Chapter 5
CT, Section V

Lecture 11. Panel Data
CT, Section V
Arellano, Chapters 2,3,6,7, and 8


Lecture 12. Measurement error and factor Models
CT, Chapter 26
Arellano, Chapter 4
