

Syllabus “Advanced Econometrics” ECON-355, Fall 2010

Instructor: Tobias Pfutze
Office: Rice Hall 215
Phone: (440) 775-8927
Email: tpfutze@oberlin.edu
Office hours: Tue 3:00-4:30pm, Wed 12:00-1:30pm or by appointment.

Time: Tue, Thu 11:00-12:15pm
Location: King 227

Course Objectives: The course aims to provide the student with a solid knowledge of the most common reduced form econometric estimation techniques used in the empirical micro literature. The emphasis is on endogeneity problems in linear models and how panel data methods, instrumental variables and simultaneous equations models can be employed in the identification of a causal effect. Towards the end, the course touches briefly on non-linear binary dependent variables models (probit and logit).

Course requirements and grading schemes: Letter grades will only be given at the end of the semester, not on individual assignments. There will be two problem sets and an exam at the end of the course. The final grade will consist of the following:

20% Participation
20% Problem sets
60% Exam

Textbook & Readings: The principal textbook for the course is

Introductory Econometrics: A Modern Approach by Jeffrey M. Wooldridge, South Western College Publishing, 2009, 4th Edition. **(W)**

I will post a chapter from the following book on Blackboard:

Introduction to Econometrics by James H. Stock and Mark W. Watson, Addison Wesley 2003. **(SW)**

In addition, we will go over a number of empirical papers which employ the methods discussed in class:

Pritchett, Lant; “*Where Has All the Education Gone?*” Policy Research Working Paper #1581, The World Bank 1996

Acemoglu, Daron; Johnson, Simon; Robinson, James A.; “*The Colonial Origins of Comparative Development: An Empirical Investigation*”; AER 2001 (AJR 01)

Clemens, Michael; “*Do visas kill? Health effects of African health professional emigration*”; CGD Working Paper #114, 2007

Yang, Dean; “*International Migration, Remittances and Household Investment: Evidence From Philippine Migrants’ Exchange Rate Shocks*”; EJ 2008

Duflo, Esther; “*Schooling and Labor Market Consequences of School Construction in Indonesia: Evidence From an Unusual Policy Experiment*”; AER 2001

Albouy, David; “*The Colonial Origins of Comparative Development: An Investigation of the Settler Mortality Data*”, NBER Working Paper #W14130, 2008

Miguel, Edward; Kremer, Michael; “*Worms: Identifying Impacts on Education and Health in the Presence of Treatment Externalities*”, *Econometrica* 2004

Chattopadhyay, Raghavendra; Duflo, Esther; “*Women as Policy Makers: Evidence from a Randomized Policy Experiment in India*”, *Econometrica* 2004

Bertrand, Marianne; Djankov, Simeon; Hanna, Rema; Mullainathan, Sendhil; “*Obtaining a Driving License in India: An Experimental Approach to Studying Corruption*”; QJE 2007 (BDHM 07)

Honor code: The Oberlin College Honor Code applies to all assignments for this course. You can access complete information on the Honor Code via Blackboard (go to the tab Lookup/Directories>Honor Code). Before turning in each of your exams and your problem sets, you need to write the honor pledge and sign it. The pledge is as follows: “*I affirm that I have adhered to the Honor Code in this assignment.*” The exams are all closed book and closed notes. For the exams signing the honor pledge signifies that you have abided by those restrictions and neither given nor received aid during the exams.

You are encouraged to work on your problem sets in groups. However, if you do so each of you is required to clearly state with who you worked on that particular problem set. A failure to do so will be considered a violation of the Honor Code.

Students with Disabilities: If you have specific physical, psychiatric or learning disabilities that require accommodations (such as a note taker or special testing arrangements), please let the instructor know early in the semester so your learning needs can be appropriately met. You will need to provide documentation of your disability to Ms. Jane Boomer, Coordinator for Services for Students with Disabilities. Her office is in Peters G-38A and her phone number is x58464.

Course outline:

Week 1: Introduction, Causes of Endogeneity

- W: Chapter 3.3: pgs. 89-94
- W: Chapter 9.4
- W: Chapter 16.1 & 16.2
- Pritchett 96, pgs.6-14
- AJR 01: up to pg. 1377
- Clemens 07: pgs. 1-4 & 12-13

Week 2: Simple Panel Data Methods

- W: Chapter 13
- Yang 08
- Duflo 01

Week 3: Advanced Panel Data Models

- W: Chapter 14
- SW: Chapter 8

Problem Set 1

Week 4: IV Estimation

- W: Chapter 15
- AJR 01
- Albouy 08
- Pritchett 96: pgs. 1-14
- Clemens 07

Week 5: Experimental vs. Non-Experimental Approaches, Regression Discontinuity Models

- SW: Chapter 11
- Miguel, Kremer 04
- Chattopadhyay, Duflo 04
- BDHM 07

Problem Set 2

Week 6: Binary Dependent Variable Models (Probit & Logit)

- W: Chapter 17.1

Week 7: Buffer Week & Review

FINAL EXAM: Sun, Dec 19, 9:00-11:00am