

DEPARTMENT OF ECONOMICS
UNIVERSITY OF MISSOURI-COLUMBIA

**Economics/Public Affairs 9446
Advanced Empirical Methods**

Fall 2019 – Class Meetings Days/Times: Tues/Thurs 11-12:15, Middlebush Hall 206
Professor Cory Koedel
Email: koedelc@missouri.edu
Office hours: Tuesday, 12:45-2, Professional Bldg #318

Prerequisites: 8451, 8473 (concurrent enrollment acceptable), 9473 is recommended.

OBJECTIVES:

The objective of this course is to provide a comprehensive toolkit for the evaluation of key economic policy questions in the areas of applied economics including labor economics, public economics, education economics, health economics and social welfare. The course will cover the most current and relevant empirical techniques in these fields, and provide context and examples of applications.

Grading:	Assignments:	30 percent
	Midterm Exam:	15 percent
	Final Exam:	25 percent
	Research Paper Proposal:	5 percent
	Research Paper & Presentation:	25 percent

Assignments: There will be three empirical assignments over the course of the semester. The assignments will involve the practical application of the empirical tools that you will learn about in the course.

Exams: The midterm will be given between weeks 7 and 9 of the semester. The final exam will be given during final exam week at the university-specified time.

Papers: The paper assignment will be discussed during the first week of class. The requirement will be a paper that is between 8 and 15 pages in length. Papers are to be submitted in hard-copy form.

Topics and Reading List (Rough Guide)

Methodological Overview

Mostly Harmless Econometrics: An Empiricist's Companion, Joshua D. Angrist and Jörn-Steffen Pischke, 2009. Princeton University Press.

(This book will be a useful reference for the entire course. Chapters 1-5 will be most relevant)

Experimental Research Designs

Doleac, Jennifer L., and Luke C.D. Stein, (2013). "The Visible Hand: Race and Online Market Outcomes." *The Economic Journal* 123, F469-F492.

Cullen, Julie Berry, Brian A. Jacob, and Steven D. Levitt, (2006) "The Effect of School Choice on Participants: Evidence from Randomized Lotteries," *Econometrica*.

Multiple Regression Methods

Clotfelter, C.T., H.F. Ladd and J.L. Vigdor, (2006). "Teacher-Student Matching and the Assessment of Teacher Effectiveness." *Journal of Human Resources* v.41 n.4 pp.778-820.

Fixed Effects

Jeffrey M. Wooldridge, *Econometric Analysis of Cross Section and Panel Data*, (2010). Chapter 10.

Blau, David M (1999). "The Effect of Income on Child Development," *The Review of Economics and Statistics*.

Ashenfelter, Orley and Alan Krueger (1994). "Estimates of the Economic Return to Schooling from a New Sample of Twins," *American Economic Review*. (Note: This paper uses both instrumental variables and fixed effects. IV methods will be covered in detail later in the course.)

Babcock, Philip (2010). "Real Costs of Nominal Grade Inflation? New Evidence from Student Course Evaluations," *Economic Inquiry* 48(4).

Aaronson, Daniel, Lisa Barrow and William Sander (2007). "Teachers and Student Achievement in the Chicago Public High Schools," *Journal of Labor Economics*.

Differences-in-Differences

Card, David and Alan B. Krueger (1994). "Minimum Wages and Employment - A Case Study of the Fast Food Industry in New Jersey and Pennsylvania", *American Economic Review*, (84:4), September.

Bertrand, M., E. Duflo, and S. Mullainathan (2004). "How Much Should We Trust Differences-in-Differences?" *Quarterly Journal of Economics*.

Butcher, Kristin F., Patrick J. McEwan, and Akila Weerapana (2014). The Effects of an Anti-grade-Inflation Policy at Wellesley College. *Journal of Economic Perspectives* 28(3), 189-204.

Doleac, Jennifer L., and Benjamin Hansen (2017). The Unintended Consequences of "Ban the Box": Statistical Discrimination and Employment Outcomes When Criminal Histories are Hidden. Working Paper available at <http://jenniferdoleac.com/research/> [be sure to download the draft dated October 2017].

Instrumental Variables

Jeffrey M. Wooldridge, *Econometric Analysis of Cross Section and Panel Data*, (2010). Chapter 5.

Murray, Michael P. (2006). Avoiding Invalid Instruments and Coping with Weak Instruments, *Journal of Economic Perspectives*

Parente, Paulo M.D.C. and J.M.C. Santos Silva, (2012). A Cautionary Note on Tests of Overidentifying Restrictions. *Economics Letters*, 115(2), 314-317.

Levitt, Steven D. (1997). Using Electoral Cycles in Policy Hiring to Estimate the Effect of Police on Crime, *American Economic Review*

Angrist, Joshua and Alan B. Krueger (1991). "Does Compulsory School Attendance Affect Schooling?" *Quarterly Journal of Economics*, 106, 979-1014.

Figlio, David N. (2007). "Boys Named Sue: Disruptive Children and their Peers," *Education Finance and Policy* 2(4), pp 376-394.