



THE UNIVERSITY OF CHICAGO
THE IRVING B. HARRIS GRADUATE SCHOOL
OF PUBLIC POLICY STUDIES

PUBLIC POLICY 346:
PROGRAM EVALUATION

Winter 2018: Mondays 3 – 5:50pm, Room TBD

Instructor: Rupa Datta
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312-759-4219
Office Hours: Mondays 2-3 pm

TAs: TBD

Course goals: To introduce students to program evaluation and provide an overview of current issues and methods for estimating treatment impacts.

Prerequisites: PP31000 and PP31100 or equivalent coursework in statistics and economic theory. Students lacking these prerequisites should seek permission from the instructor.

Requirements and grading: Grades will be based on class-participation, four assignments, a midterm, and a final exam. Class participation will count for 10 percent, assignments will count for a total of 20 percent; the midterm will count for 30 percent, and the final exam will count for 40 percent.

Problem sets: Late problem sets will not be accepted. Each assignment will receive an equal weight of 5 percent each. You may work together with up to 4 students and should submit one assignment per group. Your problem sets must be typed.

Exams: For both the midterm and final exams, you will read a set of evaluation articles and then critique them according to a set of question with which you will be provided. You must do your own work and may not discuss the exams with anyone in writing your responses. Your exams must be typed.

Readings: There is no required textbook for this class, but you may find it useful to refer to a standard econometrics text such as *Introductory Econometrics: A Modern Approach*, by Jeffrey Wooldridge. Each lecture will make reference to a number of relevant research articles which are listed below. They will be made available through the course website.

Tentative List of Lecture Topics and Deadlines (subject to adjustments):

1/8	Evaluation and selection problems Treatment parameters	
1/15	No class (MLK Day)	
1/22	Social Experiments I	Assignment #1 due W 1/24
1/29	Social Experiments II	
2/5	Panel Data	Assignment #2 due M 2/5
2/12	Critiquing Evaluations	
2/19	Instrumental Variables	Assignment #3 due M 2/19
		Take-home Midterm Available M 2/19; Submit F 2/23
2/26	Regression Discontinuity	
3/5	Matching	Problem Set #4 due M 3/5
		Take-home Final Available Th 3/8; Submit W 3/14

Reading List

1. Evaluation and Selection Problems

Paul W. Holland, "Statistics and Causal Inference" *Journal of the American Statistical Association*, Vol. 81, No. 396 (Dec., 1986), pp. 945-960

Charles F. Manski. "Identification Problems in the Social Sciences and Everyday Life," *Southern Economic Journal* 2003, 70(1), 11-21.

Robert Moffitt. 1991. "Program Evaluation with Nonexperimental Data," *Evaluation Review* 15 (June):291-314.

2. Treatment Parameters

James J. Heckman, Robert J. Lalonde and Jeffrey A. Smith, "The Economics and Econometrics of Active Labor Market Programs" in *Handbook of Labor Economics*, Volume 3, eds. Orley Ashenfelter and David Card. Amsterdam: North-Holland Chapter 3, sections 1 through 3.

3. Social Experiments

Julian Cristia, Ana Santiago, Santiago Cueto, Pablo Ibarra, and Eugenio Severio "Technology and Child Development: Evidence from the One Laptop per Child Program" (February, 2012) *IDB Working Paper Series* 304

James Heckman, Neil Hohmann, Jeffrey Smith, Michael Khoo. "Substitution and Dropout Bias in Social Experiments: A Study of an Influential Social Experiment" *Quarterly Journal of Economics*, Vol. 115, No. 2 (May, 2000), pp. 651-694.

Alan B. Krueger "Experimental Estimates of Education Production Functions" *The Quarterly Journal of Economics*, Vol. 114, No. 2. (May, 1999), pp. 497-532.

James Heckman and Jeffrey Smith. "Assessing the Case for Social Experiments" *Journal of Economic Perspectives* (9:2) Spring 1995 85-110.

4. Panel Data

Bruce D. Meyer. "Natural and Quasi-Experiments in Economics," *JBES* (13:2) April 1995 151-162.

David Card and Alan Krueger. "Minimum Wages and Employment: A Case Study of the Fast-Food Industry in New Jersey and Pennsylvania", *American Economic Review*, 1994 84(4) 772-793.

Susan Dynarski (2003) “Does Aid Matter? Measuring the Effect of Student Aid on College Attendance and Completion” *American Economic Review* Vol. 93(1): 279-288

Claudia Goldin and Larry Katz, “The Power of the Pill: Oral Contraceptives and Women’s Career and Marriage Decisions,” *Journal of Political Economy* 110 (August 2002), 730-770.

Louis Jacobson, Robert Lalonde, and Daniel Sullivan (1993) “Earnings Losses of Displaced Workers” *American Economic Review* 83(4): 685-709.

Orley Ashenfelter and Alan Krueger (1994) “Estimates of the Economic Return to Schooling for a New Sample of Twins” *American Economic Review* 84(5): 1157-1173.

5. Evaluation of Evaluations

Robert J. LaLonde. “Evaluating the Econometric Evaluations of Training Programs with Experimental Data,” *American Economic Review* 76(4): 604-620.

6. Instrumental Variables

Joshua D. Angrist and Alan B. Krueger. “Instrumental Variables and the Search for Identification: From Supply and Demand to Natural Experiments” *Journal of Economic Perspectives* (15:4) Autumn, 2001 69-85.

Joshua Angrist, Guido W. Imbens, and Donald B. Rubin. “Identification of Causal Effects using Instrumental Variables” *Journal of the American Statistical Association* 91 1996 444-72.

Joshua Angrist and William Evans. “Children and Their Parents' Labor Supply: Evidence from Exogenous Variation in Family Size” *American Economic Review* (88:3) June 1998 450-77.

Card, David (1995) “Using Geographic Variation in College Proximity to Estimate the Return to Schooling.” in *Aspects of Labor Market Behaviour: Essays in Honour of John Vanderkamp*. (eds. L.N. Christofides, E.K. Grant, and R. Swidinsky) Toronto: University of Toronto Press

Janet Currie and Enrico Moretti (2002) “Mother’s Education and the Intergenerational Transmission of Human Capital: Evidence from College Openings and Longitudinal Data” *Quarterly Journal of Economics* Vol. 118(4): pp. 1495-1532

7. Regression Discontinuity

Thomas Cook. “‘Waiting for Life to Arrive’: A History of Regression-Discontinuity Design in Psychology, Statistics, and Economics” *Journal of Econometrics* (142:2) 636-54.

Ofer Malamud and Cristian Pop-Eleches “Home Computer Use and the Development of Human Capital,” *Quarterly Journal of Economics* (2011) 126 (2): 987-1027.

Joshua Angrist and Victor Lavy “Using Maimonides' Rule to Estimate the Effect of Class Size on Scholastic Achievement,” *Quarterly Journal of Economics*, (1999) Vol. 114 (2)

Miguel Urquiola and Eric Verhoogan “Class-Size Caps, Sorting, and the Regression-Discontinuity Design” in *American Economic Review* 2009, 99:1, 179–215

8. Matching

Rajeev Dehejia and Sadek Wahba. 1999. “Causal Effects of Nonexperimental Studies: Reevaluating the Evaluation of Training Programs,” *Journal of the American Statistical Association* 94(448) (December): 1053-1062.

Jeffrey A. Smith and Petra Todd. 2005. “Does Matching Overcome LaLonde’s Critique of Non-experimental Estimators,” *Journal of Econometrics* 125(1-2): 305-353.