

**Fletcher EIB E216 / Economics 191-1**

**Program Evaluation with Applications to Development and Labor**

**Department of Economics and the Fletcher School**

**Time Tuesday 2-4 (Mugar 200)**

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Description:

This course discusses statistical and econometric methods for program evaluation and the application of these methods to research in labor and development economics. The goals of the course are to learn to think critically about empirical research in program evaluation and to provide students with a starting point for their own research. The course is focused on impact evaluation, and does *not* discuss process evaluation, a non-statistical method of evaluating the implementation of programs.

Who should take the course and why:

The course is intended for masters levels students with an interest in empirical research in development economics and in public policy. The course will help students to become intelligent consumers and producers of such research. As consumers, the course will develop students' critical capacity in thinking about policy claims and causal effects more generally. We have all been taught that "correlation is not causation" but the full range of implications of this maxim are underappreciated in empirical research. As producers, the course will provide students with a simple, but powerful toolkit that they can use in their own work. This is a seminar class. The instructor will occasionally lecture, but substantial student participation in the presentation and discussion of material will be the norm.

Prerequisite:

The prerequisite for this course is EIB E213 (Econometrics) or other advanced econometrics approved by the instructor.

Grading:

The grade will be based on: participation in class (20%), participation in four in-class debates (three of which will be graded for each student at 20% each), and two written submissions (10% each). For the in-class debates, topics are outlined in the syllabus, with a more precise proposition given in class. There are four roles that each student will fulfill once: arguing for the proposition, arguing against the proposition, floor debate, and adjudication. For the first three roles students will be graded at 20% per debate, and for the fourth role (adjudication) students are graded via the class participation grade. When students present for or against in a debate, they are required to submit an individual write up summarizing the issue debated with arguments both for and against (10% each).

Readings:

This syllabus contains two types of readings. Students are recommended to read at least the introduction of starred articles prior to the lecture. Non-starred articles are either applications that will be discussed in class or supplemental references.

Session 1: What is causality? Introduction to randomized trials. Where does program evaluation fit into cost-benefit analysis?

\*Holland, P. (1986), "Statistics and Causal Inference" (with discussion), *Journal of the American Statistical Association*, 81, 945-970.

\* James Heckman, "Causal Parameters and Policy Analysis in Economics: A Twentieth Century Perspective," *Quarterly Journal of Economics*, February 2000.

James Freedman, "Statistical Models and Shoe Leather," *Sociological Methodology*, Volume 21 (1991), pp. 291-313.

Session 2: Using a randomized trial to evaluate of welfare-to-work initiatives

\*Cox, *The Planning of Experiments*, selected chapters.

David Card and Philip Robins, "Do Financial Incentives Encourage Welfare Recipients to Work? Evidence from a Randomized Evaluation of the Self-Sufficiency Project," NBER Working Paper No. 5701.

Charles Michalopoulos, et al., "Making Work Pay: Final Report on the Self-Sufficiency Project for Long-Term Welfare Recipients", Social Research Demonstration Corporation, July 2002.

Supplemental Material on Field Experiments

Joshua Angrist and Victor Lavy, "The Effect of High School Matriculation: Evidence from Randomized Trials," NBER Working Paper No. 9389.

Esther Duflo and Emmanuel Saez, "The Role of Information and Social Interactions in Retirement Savings Decisions: Evidence from a Randomized Experiment," *QJE*, August 2003.

Session 3: Class Debate: The Ethics and Economics of Randomized Trials

See Alliance for Human Research Protection (<http://www.ahrp.org>) and NIH news (<http://www.nih.gov/news/pr/jan2006/niaid-18.htm>) inter alia.

Session 4: Evaluating the causes and consequences of child labor (part 1). Looking for "natural experiments"

\*International Labor Organization, "The End of Child Labor: Within Reach," [http://www.un.org/aroundworld/unics/english/ilo\\_childlabor\\_2006.pdf](http://www.un.org/aroundworld/unics/english/ilo_childlabor_2006.pdf).

\*Kathleen Beegle, Rajeev Dehejia, Roberta Gatti, "Child Labor and Agricultural Shocks," *Journal of Development Economics*, 2005.

Donald Parsons and Claudia Goldin, "Parental Altruism and Self-Interest: Child Labor Among Late 19<sup>th</sup> Century American Families," *Economic Inquiry*, Volume 27 (October 1989), pp. 637-659.

Session 5: Evaluating the causes and consequences of child labor (part 2). Applying the method of instrumental variables.

\*Beegle, Kathleen, Rajeev Dehejia, and Roberta Gatti, "Why Should We Care About Child Labor? The Returns to Schooling vs. the Returns to Experience in Vietnam".

\*Imbens, Guido, and J. Angrist, "Identification and Estimation of Local Average Treatment Effects," *Econometrica*, Vol. 62, 467-75.

\*Angrist, J., G. Imbens, and D. Rubin, "Identification of Causal Effects Using Instrumental Variables" (with discussion), *Journal of the American Statistical Association*, 91, 444-72.

James Heckman, "Instrumental Variables: A Study of Implicit Behavioral Assumptions", *Journal of Human Resources*.

Joshua Angrist and Guido Imbens, "Comment on 'Instrumental Variables: A Study of Implicit Behavioral Assumptions,'" *JHR*.

James Heckman, Reply to previous, *JHR*.

Session 6: Class Debate: Is Child Labor Good or Bad?

Supplemental material, Eric Edmonds, Should we boycott child labor?, *Ethique économique/ Ethics and Economics* 1(1), December 2003, [http://mapage.noos.fr/Ethique-economique/html\\_version/Edmonds.pdf](http://mapage.noos.fr/Ethique-economique/html_version/Edmonds.pdf)

Session 7: Evaluating the Efficacy of Microcredit. Applying the method of difference in differences

Rajeev Dehejia, Jonathan Morduch, Heather Montgomery, "Do Interest Rates Matter? Credit Demand in the Dhaka Slums,"

Dean Karlan and Jonathan Zinman, "Credit Elasticities in Less-Developed Economies," manuscript.

Session 8: Class Debate: Is Microcredit a Revolution or a Fad?

Marianne Bertrand, Dean Karlan, Sendhil Mullainathan, et al., "What's Psychology Worth? A Field Experiment in the Consumer Credit Market," Working Paper, 2005.

Other useful readings: <http://www.nyu.edu/projects/morduch/microfinance/index.html>

Session 9: Lecture: Are unions bad? The method of regression discontinuity

\*John DiNardo and David Lee, "Economic Impacts of New Unionization," *QJE*, 2004.

Session 10: Anti-corruption experiments in the developing world

Raymond Fisman, "Estimating the Value of Political Connections," *AER*, 2001.

Marianne Bertrand, Simeon Djankov, Rema Hanna, and Sendhil Mullainathan, Driving Licenses in India: An Experimental Approach to Studying Corruption, [http://economics.uchicago.edu/pdf/Bertrand\\_032706.pdf](http://economics.uchicago.edu/pdf/Bertrand_032706.pdf)

Ben Olken, "Monitoring Corruption: Evidence from a Field Experiment in Indonesia" October 2005. NBER Working Paper #11753.

Session 11: Education experiments in the developing world

Michael Kremer, "[Randomized Evaluations of Educational Programs in Developing Countries: Some Lessons](#)," *American Economic Review* 93(2), May 2003, pp. 102-106. [http://www.economics.harvard.edu/faculty/kremer/papers/Randomized\\_Evaluations.pdf](http://www.economics.harvard.edu/faculty/kremer/papers/Randomized_Evaluations.pdf)

[Schools, Teachers, and Education Outcomes in Developing Countries](#)," (with Paul Glewwe), forthcoming in *Handbook on the Economics of Education*, Elsevier. <http://www.economics.harvard.edu/faculty/kremer/papers/EconEducationHandbook.pdf>

A. Banerjee, S. Cole, E. Duflo and L. Linden, [Remedying Education: Evidence from Two Randomized Experiments in India](#), October 2006, forthcoming, QJE, [http://econ-www.mit.edu/faculty/download\\_pdf.php?id=677](http://econ-www.mit.edu/faculty/download_pdf.php?id=677)

Esther Duflo and Rema Hanna, [Monitoring Works: Getting Teachers to Come to School](#) [http://econ-www.mit.edu/faculty/download\\_pdf.php?id=1238](http://econ-www.mit.edu/faculty/download_pdf.php?id=1238)

Session 12: Class Debate: The Role of Program Evaluation in the Policy Debate  
Kennedy School Case Study 978.4, "Public Sector Program Evaluation"

Session 13: Experiments in the Field, Experiments in Practice  
Kennedy School Case Study 979.4, "Public Sector Program Evaluation"

Esther Duflo, "Field Experiments in Development", [http://econ-www.mit.edu/faculty/download\\_pdf.php?id=1265](http://econ-www.mit.edu/faculty/download_pdf.php?id=1265).

Session 14: Non-experimental Evaluation Methods

\*Rajeev Dehejia and Sadek Wahba, "Causal Effects in Non-Experimental Studies: Re-Evaluating the Evaluation of Training Programs," *Journal of the American Statistical Association*, Volume 94, Number 448 (December 1999), pp. 1053-1062.

\*Rajeev Dehejia and Sadek Wahba, "Propensity Score Matching Methods for Non-Experimental Causal Studies," *Review of Economics and Statistics*, Volume 84 (February 2002), pp. 151-161.