

**Economics 3373**  
**Impact Evaluation in Developing Countries**

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<b>Office:</b>	Maloney Hall, 342
<b>Office Hours:</b>	M 10 AM-noon; Wed 10-11 AM or by appt.
<b>Class Meetings:</b>	T-TH 3:00-4:15 PM; Gasson 307

**Course Description**

This course will help you understand the rationale for many government programs and non-government organization (NGO) interventions and how to properly determine the extent to which such programs have succeeded. Specifically, you will learn to better identify market failures, recognize incentive structures embedded within programs intended to overcome such market failures, and properly evaluate the impact of such policy interventions. Examples will come from developing country settings, though the skills are equally transferable to interventions in the United States. The course will cover fixed effects, difference-in-difference, propensity score, instrumental variable, natural experiment, and randomized experiment estimation techniques for evaluating program impacts across a variety of topic areas, including health, education, agricultural insurance and micro-finance programs.

**Course pre-requisite**

Students must have successfully completed EC 2228: Econometrics in order to take this course.

**Readings**

Required text:

Ray, Debraj, 1998, *Development Economics*, Princeton University Press, Princeton.  
(Available on Reserve at O'Neill Library.)

Other required readings are available on blackboard. Required readings should be completed prior to class so that you may be an active participant in the class discussions. (Recommended readings are denoted with an asterisk (\*) on the syllabus.)

Readings include both conceptual/theoretical readings and empirical papers. **You should try to understand the empirical work and results.**

### **Course Grade**

There will be four problem sets, two group assignments/presentations, and a final exam. Students are also expected to read all of the required readings before each class. They are also expected to actively participate in class discussion and blackboard discussion of papers.

#### Writing assignments and presentations (58% grade):

1. Written summaries and follow up comments (8% grade)

Individual assignment

=> Starting September 25th, assigned students will prepare a summary of one of the articles to be read. (You may choose from either the required readings or the optional readings listed for a given topic.) Reviews are due at 2 PM, the Saturday BEFORE the article is listed on the syllabus so that others may comment on your review before class. The summary should be no more than two pages (usually just one page) and should include: a review of the main points of the articles; a discussion of how the article relates to the themes of the course; a brief description of the key technical techniques used (particularly empirical techniques); and any other comments useful to guide our discussion. Each student will write a summary at least twice this semester. You are also expected to comment on at least one article summary each week.

2. Four or five econometric problem sets (16% grade)

You can work in groups of two, but each person must submit their own problem set.

=> Due dates vary: You will have at least one week to complete the problem set.

3. Analysis and presentation of a development success-story (10% grade)

Group assignment

=> Due date varies: Each group will be assigned a topic. The presentations will be due at 6 pm on the Sunday before the specific topic is to be covered in class.

4. Grant proposal for evaluation of a development project (24% grade)

Group assignment

Note: You will make a formal written proposal for funding to analyze a government or NGO program/policy of your choice. A complete and specific methodology will need to be specified. Detailed instructions will be provided.

=> Due at 9 pm on Sunday December 2<sup>nd</sup> for all students. (In-class presentations and discussion begin on Tuesday, December 4<sup>th</sup>.)

Scheduling conflicts with presentation dates must be cleared with the instructor at least three weeks in advance of the scheduled date.

#### Class participation (12% grade)

You will receive grades for class participation after the September 27<sup>th</sup>, October 30<sup>th</sup>, and December 6<sup>th</sup> classes.

#### Final exam (30% of grade)

### **Tentative Schedule**

An asterisk (\*) denotes an optional reading

#### August 28: Introduction to Economic Development

**Ray, chapter 1 (Introduction), chapter 2 (Economic Development: Overview).**

- \* Bardhan, Pranab, 2005, "History, Institutions, and Underdevelopment", Chapter 1 in *Scarcity, Conflicts and Cooperation: Essays in the Political and Institutional Economics of Development*, MIT press.
- \* UNDP, 2001, "Human development – Past, Present and Future," *Human Development Report*, Oxford University Press, pp. 9-25.
- \* Lindauer, David and Lant Pritchett, 2002, "What's the Big Idea? The third generation of policies for economic growth", *Economica*. 3(1), pp 1-28.

#### August 30: Indicators of Poverty and Inequality

**Schaffner, J., 2014, "Chapter 5. Poverty, Inequality, and Vulnerability" in *Development Economics*, Wiley, USA.**

**United Nations, 2015. *Millennium Development Goals Report, 2015*, New York. pp. 3-37 only.**

**Handout on poverty and inequality indicators**

- \* Banerjee, Abhijit, and Esther Duflo, 2006, "Economic Lives of the Poor", *Journal of Economic Perspectives*, 21(1): 141-168.
- \* <https://www.un.org/sustainabledevelopment/development-agenda/>
- \* World Bank, 2001, "The Nature and Evolution of Poverty," *World Development Report 2000-2001*, Oxford University Press, pp 15-29.
- \* Ray, Chapter 8 (Poverty and Undernutrition) and Chapter 6 (Economic Inequality)

#### September 4 & 6: Econometrics Review: OLS, SEs, Conditional Mean and Omitted Var. Bias

**Wooldridge, J. M., 2013, Chapters 3 and 4 in *Introductory Econometrics: A Modern Approach (5th edition)*, Mason, OH: South-Western Cengage Learning.**

#### September 11 & 13: Introduction to Empirical Policy Analysis

**Duflo, Esther, Rachel Glennerster, and Michael Kremer, 2006, Sections 1 and 2 in "Using Randomization in Development Economics Research: A Toolkit," NBER Technical Working Paper 333. pp. 3 – 19.**

**Angrist, J.D. and Pischke, J. 2009. Chapters 1 and 2 in *Mostly Harmless Econometrics: An Empiricist's Companion*. Princeton University Press. pp. 3 – 24.**

**Deaton, Angus, 1997, Chapter 1 (1.1-1.3) in *The Analysis of Household Surveys. A Microeconomic Approach to Development Policy*, Johns Hopkins University Press, Baltimore, pp 7-40. (pp.13-38 in the online version)**

- \* Martin Ravallion, 2001, "The Mystery of the Vanishing Benefits: An Introduction to Impact Evaluation", *World Bank Economic Review*, 15: 115-140.

Sept. 18 & 20: Econometrics # 1 OLS: Fixed Effects and Difference-in-Difference Approaches  
**Wooldridge, J. M., 2013, Chapter 13.2-13.5, 14.1-14.3 in *Introductory Econometrics: A Modern Approach (5th edition)*, Mason, OH: South-Western Cengage Learning.**

September 25 & 27: Asymmetric Information, Incentives and Capture of Resources

**Platteau, Jean-Philippe, 2003, “Decentralized Development as a Strategy to Reduce Poverty?” paper presented at the AFD-EUDN conference, November 13, Paris.**

**Reinikka, Ritva, and Jakob Svensson, 2004, “The Power of Information: Evidence from a Newspaper Campaign to Reduce Capture of Public Funds”, mimeo, Stockholm University.**

**Besley, Timothy, Rohini Pande, Lupin Rahman, and Vijayendra Rao, 2004, The Politics of Public Good Provision: Evidence from Indian Local Governments, *Journal of the European Economic Association Papers and Proceedings*, 2(2-3): 416-426.**

\* <http://voxddev.org/topic/health-education/power-information-improving-school-performance>

\* Ferraz, Claudio and Fred Finan, 2008, “Exposing Corrupt Politicians: The Effects of Brazil’s Publicly Released Audits on Electoral Outcomes.” *Quarterly Journal of Economics*, 123(2): 703-745.

\* Svensson, Jacob and Martina Bjorkman, 2009, “Power to the People: Evidence from a Randomized Field Experiment on Community-Based Monitoring in Uganda.” *Quarterly Journal of Economics*, 124(2): 735-769.

October 2 & 4: Econometrics # 2: Instrumental Variables (2SLS) and Natural Experiments

**Wooldridge, J. M., 2013, Chapter 15 in *Introductory Econometrics: A Modern Approach (5th edition)*, Mason, OH: South-Western Cengage Learning.**

**Murray, Michael P., 2006, “Avoiding Invalid Instruments and Coping with Weak Instruments”, *Journal of Economic Perspectives*, 20(4): 111-132.**

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

**Duflo, Esther, Rachel Glennerster, and Michael Kremer, 2006, Sections 6 in “Using Randomization in Development Economics Research: A Toolkit,” NBER Technical Working Paper 333. pp. 47-61.**

\* Meyer, Bruce D., 1995, “Natural and Quasi-Experiments in Economics”, *Journal of Business and Economic Statistics*, 13(2): 151-161.

\* Bound, John, David Jaeger and Regina Baker, 1995, “Problems with Instrumental Variables Estimation when the Correlation Between the Instruments and the Endogenous Explanatory Variable is Weak”, *Journal of the American Statistical Association*, 90(430): 443–50.

October 11 & 16: Insurance, Risk and Vulnerability

**Ray, Chapter 11 (Markets in Agriculture) & Chapter 15 (Insurance).**

**Jensen, Robert, 2000, "Agricultural Volatility and Investments in Children", *American Economic Review*, 90(2): 399-404.**

**Miguel, Edward, 2005, "Poverty and Witch Killing", *Review of Economic Studies*, 72(4): 1153-1172.**

+ Dercon, Stefan, 2001, "Income Risk, Coping Strategies and Safety Nets", background paper prepared for the World Development Report 2000-2001. Section 1 (pp. 1-7) and 4 (pp. 19-24) required. (The rest is optional.)

October 18 & 23: Credit Markets and Microfinance Institutions pt. 1

**Ray, Chapter 14 (Credit).**

**Burgess, Robin and Rohini Pande, 2005, "Can Rural Banks Reduce Poverty? Evidence from the Indian Social Banking Experiment", *American Economic Review*, 95(3): 780-795.**

**Murdoch, Jonathan, 1999, "The Microfinance Promise", *Journal of Economic Literature*, 37(4): 1569-1614.**

\* Besley, Timothy, 1994, "How Do Market Failures Justify Interventions in Rural Credit Markets", *World Bank Research Observer*, 9(1): 27-48.

\* Banerjee, Abhijit V., Esther Duflo, and Kaivan Munshi, 2003, "The (Mis)allocation of Capital." *Journal of the European Economic Association Papers and Proceedings*, 1(2/3): 484-494.

\* Fafchamps, Marcel, 2000, "Ethnicity and Credit in African Manufacturing", *Journal of Development Economics*, 61: 205-235.

Oct. 25 & 30: Econometrics #3: Propensity Score and Randomized Experiments

**Martin Ravallion, 2001, "The Mystery of the Vanishing Benefits: An Introduction to Impact Evaluation", *World Bank Economic Review*, 15: 115-140.**

**Duflo, Esther, Rachel Glennerster, and Michael Kremer, 2006, Sections 3-8 in "Using Randomization in Development Economics Research: A Toolkit," NBER Technical Working Paper 333. pp. 19-75. (Note: We read Section 6 (pp. 47-61) previously.)**

**Duflo, Esther and Raghavendra Chattopadhyay, 2004, "Women as Policy-Makers: Evidence from a India-wide Randomized Policy Experiment", *Econometrica*, 72(5): 1409-43. (skim Section 3)**

\* Barrett, Christopher B. and Michael R. Carter, 2011, "The Power and Pitfalls of Experiments in Development Economics: Some Non-random Reflections," *Applied Economic Perspectives and Policy* 32(4): 515-548.

\* Imbens, Guido W., and Jeffrey M. Wooldridge, 2009, "Recent Developments in the Econometrics of Program Evaluation", *Journal of Economic Literature*, 47(1): 5-86.

- \* The *Journal of Economic Literature* (June 2010) and the *Journal of Economic Perspectives* (Spring 2010) have special editions dedicated to the controversy over the dominant role randomized experiments have gained in policy circles in recent years. They are interesting reads in fleshing out the bounds such experimental approaches can play in policy analysis. There is a desire among many leading critics that such experiments attempt to identify underlying structural parameters guiding outcomes (not just program impacts).

November 1 & 6: Credit Markets and Microfinance Institutions pt. 2

**Banerjee, Abhijit and Esther Duflo, 2010, “Giving Credit Where it is Due”, *Journal of Economic Perspectives* 24(3): 61-80.**

**Karlan, Dean S., 2007, “Social Connections and Group Banking” *Economic Journal*. 117: F52-84.**

**Banerjee, Abhijit, Esther Duflo, Rachel Glennerster, and Cynthia Kinnon, 2013, “The Miracle of Micro-finance? Evidence from a Randomized Evaluation”, NBER Working Paper No. 18950.**

**McKenzie, David, “Impact Assessments in Finance and Private Sector Development: What Have We Learned and What Should We Learn?”, *World Bank Research Observer* 25: 209-233.**

- \* Banerjee Abhijit, Dean Karlan, and Jonathan Zinman, 2015, “Six Randomized Evaluations of Microcredit: Introduction and Further Steps”, *American Economic Journal: Applied Economics*, 7(1): 1-21. <http://dx.doi.org/10.1257/app.20140287>
- \* Morduch, Jonathan, 1999, “The Microfinance Promise”, *Journal of Economic Literature*, 37(4): 1569-1614.
- \* McKenzie, David, and Chris Woodruff, 2007, “Returns to Capital in Microenterprises: Evidence from a Field Experiment”, *Quarterly Journal of Economics*, 123(4): 1329-1372.
- \* Dupas, Pascaline and Jonathan Robinson, 2009, “Savings Constraints and Microenterprise Development: Evidence from a Field Experiment in Kenya.” NBER Working Paper No. 14693. Cambridge, MA.
- \* Karlan, Dean S., and Jonathan Zinman, 2009, “Expanding Microenterprise Credit Access: Using Randomized Supply Decisions to Estimate the Impacts in Manila”, <http://www.poverty-action.org/>
- \* Pitt, Mark M., Shahidur R. Khandker and Jennifer Cartwright, 2003, “Does Micro-Credit Empower Women? Evidence from Bangladesh” *World Bank Policy Research Working Paper* 2998.

November 8 & 13: Health and Nutrition, Part 1

**Kremer, Michael, 2002, “Pharmaceuticals and the Developing World”, *Journal of Economic Perspectives*, 16(4), 67-80.**

**Das, Jishnu, and Jeffrey Hammer, 2007, “Money for Nothing: The Dire Straits of Medical Practice in Delhi, India,” *Journal of Development Economics* 83: 1-36.**

\* John Strauss, and Duncan Thomas, 1998, “Health, Nutrition, and Economic Development”, *Journal of Economic Literature*, 36(2): 766-817.

November 15 & 20: Health and Nutrition, Part 2

**Gertler and Boyce, 2001, “An Experiment in Incentive-Based Welfare: The Impact of PROGRESA on Health in Mexico”, mimeo, University of California at Berkeley.**

**Michael Kremer and Edward Miguel, 2007, “The Illusion of Sustainability”, *Quarterly Journal of Economics*. 122(3) 1007-1065.**

\* Miguel, Edward, and Michael Kremer, 2004, “Worms: Identifying Impacts on Education and Health the Presence of Treatment Externalities”, *Econometrica*, 72(1): 159-217.

\* <http://blogs.worldbank.org/impactevaluations/worm-wars-review-reanalysis-miguel-and-kremer-s-deworming-study>

\* Cohen, Jessica, and Pascaline Dupas, 2010, “Free Distribution or Cost-Sharing? Evidence from a Randomized Malaria Prevention Experiment”, *Quarterly Journal of Economics*, 125(1): 1-45.

\* Thornton, Rebecca, 2008, “The Demand for, and Impact of, Learning HIV Status”, *American Economic Review*, 98(5): 1829-1863.

November 27: Regression Discontinuity (time permitting)

**Lee, David S. and Thomas Lemieux, 2010, “Regression Discontinuity Designs in Economics”, *Journal of Economic Literature* 48: 281–355. (Read Sections 1-3, 281-308, well. Then, skim through the rest.)**

**Kanz, Martin, 2016, “What Does Debt Relief Do for Development? Evidence from India’s Bailout for Rural Households”, *American Economic Journal: Applied Economics* 8(4): 66-99.**

\* Chay, Kenneth Y., Patrick J. McEwan, and Miguel Urquiola, 2005, "The Central Role of Noise in Evaluating Interventions that use Test Scores to Rank Schools", *American Economic Review* 95(4): 1237-58.

November 29: Education

**Duflo, Esther, 2001, “Schooling and Labor Market Consequences of School Construction in Indonesia: Evidence from an Unusual Policy Experiment”, *American Economic Review*, 91(4): 795-813.**

**Duflo, E., R. Hanna, and S. P. Ryan. 2008. “Incentives Work: Getting Teachers to Come to School.” Don’t read the article, just focus on the short summary at <http://www.povertyactionlab.org/evaluation/encouraging-teacher-attendance-through-monitoring-cameras-rural-udaipur-india?pid=9>**

**Banerjee, Abhijit V., Shawn Cole, Esther Duflo, and Leigh Linden, 2007, “Remedying Education: Evidence from Two Randomized Experiments in India”, *Quarterly Journal of Economics*, 122(3): 1235-1264.**

\* Schultz, Paul T., 2004, “School subsidies for the poor: evaluating the Mexican Progresa poverty program”, *Journal of Development Economics*, 74(1): 199-250.

\* Kremer, Michael, Edward Miguel, and Rebecca Thornton, 2009, “Incentives to Learn”, *Review of Economics and Statistics*, 91(3): 437-456.

\* Duflo, Esther, 2004, “The Medium Run Effects of Educational Expansion: Evidence from a Large School Construction Program in Indonesia”, *Journal of Development Economics*, 74(1): 163-97. (Skim Section 5)

\* Edmonds, Erik and Nina Pavcnik, 2005, “The Effect of Trade Liberalization on Child Labor”, *Journal of International Economics*, 65(2). 401-19.

December 4

Presentations

December 6

Presentations/Review for final

December 18 (3 hours)

**FINAL EXAM, 12:30 pm to 3:30 pm**

Academic Integrity

Cheating on any exam will result in

(1) an automatic failure in the course and

(2) reporting the incident to the College of Arts and Sciences as required by the University.

See <http://www.bc.edu/offices/stserv/academic/integrity.html> for a full discussion of the university’s policies and procedures regarding academic integrity.

Accommodations for Learning Disabilities

If you have a learning disability, you are strongly encouraged to request accommodations for this course. Exams are lengthy and have some time pressure. Please register with either Kathy Duggan ([dugganka@bc.edu](mailto:dugganka@bc.edu)) Director, the Connors Family Learning Center (learning disabilities and ADHD) or Rory Stein ([rory.stein@bc.edu](mailto:rory.stein@bc.edu)), Assistant Dean for Students with Disabilities (all other disabilities). Advance notice and appropriate documentation are required for accommodations.